



MCQ

CMA INTER

MANAGEMENT ACCOUNTING



CA SATISH JALAN

YOU MAKE US LOOK GOOD!

ALL INDIA RANKER'S LIST : CMA- FINAL

NAME	RANK	TERM	NAME	RANK	TERM
Kanhaiya Kumar	2	Dec - 22	Aditya Mogra	27	Dec - 22
Savya Sureka	2	Dec - 23	Sahil Mogra	27	Dec - 22
Sunaina Khemka	3	Jun - 22	Sumeet kumar Saha	28	Jun - 17
Taruna Mittal	5	Jun - 23	Narayan Bajaj	28	Jun - 22
Jibendra Sonthalia	5	Jun - 24	Amiya maiti	28	Dec - 23
Pratistha Jaiswal	6	Dec - 17	Arindom Chakroborty	29	Dec - 23
Raksha Chhajed	6	Jun - 22	Krishna Dwivedi	32	Jun - 17
Vishal Jain	7	Dec - 22	Hardik Punatar	32	Jun - 18
Vinay Kumar Singh	8	Dec - 18	Adarsh Solanki	32	Jun - 23
Gourav Sanghai	9	Jun - 22	Suraj Vishwakarma	32	Dec - 23
Prerna	10	Dec - 22	Vaibhav Sachdeva	32	Jun- 24
Chhavi Gupta	10	Dec - 23	Pratik Panchal	34	Dec - 21
Khushi Jain	12	Jun - 23	Richa Agarwal	35	Jun - 23
Chandra Prakash Y	15	Jun - 22	Niket Bhushan	37	Dec - 19
Hrithik Sony	16	Dec - 17	Rajeev Ranjan Prasad	37	Dec - 20
Ashish Kumar Pandey	16	Dec - 23	Kishan Kumar Agarwal	37	Dec - 23
Pratham Sharma	17	Jun - 22	Md Talib Quraishi	38	Dec - 17
Nageswara Indraj Gujju	17	Dec - 22	Jay Kishan Agarwal	38	Jun - 23
Om Naresh	17	Jun - 24	Kunal Lunia	39	Jun - 18
Harikiran M	18	Jun - 22	Nitesh Kumar Agarwal	43	Jun - 22
Nazish Imtiyaz Khan	18	Dec - 23	Priya Prasad	44	Dec - 21
Rangesh Badrinath	19	Dec - 21	Deepak Kumar	44	Jun - 23
Aditya Jain	21	Dec - 21	Rahil Kumar Singhal	44	Jun - 24
Sourav Kothari	23	Dec - 21	Akshay Yadav	47	Dec - 20
Bhaskar Sadhukhan	23	Jun - 22	Bansika Khetan	47	Jun - 22
Palash Das	24	Dec - 18	Vaishnavi Vaish	47	Jun - 23
Karan Garg	24	Dec - 21	Pratima Kumari	48	Jun - 23
Rishav Choudhary	24	Jun - 23	Keshav Jha	48	Dec - 23
Mayanka Periwal	25	Jun - 18	Himani Garg	48	Dec - 23
Raju Kumar Yadav	25	Jun - 22	Yogesh Sharma	49	Dec - 20
Pawan Kumar	27	Dec - 18	Amaresh Maji	49	Jun - 23
Madhavi Tripathi	27	Dec - 19	Vishal Subhash Zambare	50	Dec - 23



YOU MAKE US LOOK GOOD!

ALL INDIA RANKER'S LIST : CMA- INTER

NAME	RANK	TERM	NAME	RANK	TERM
Pooja Chhatwani	1	Dec - 20	Jibendra Sonthalia	30	Dec - 21
Sarvesh Saboo	1	Dec - 21	Teresa Agarwal	33	Jun - 19
Gourav Sanghai	2	Dec - 19	Chetan Sharma	33	Jun - 23
Bhawna Jain	3	Dec - 20	Nitesh Maheshwari	37	Dec - 20
Sourav Thapa	5	Dec - 21	Mohit Sahu	37	Jun - 23
Sourav Kothari	11	Dec - 19	Arman Ansari	38	Dec - 22
Sandip Ghosh	15	Dec - 23	Shyam Jain	43	Dec - 20
Ankita Chhaparia	16	Dec - 20	Richa Agarwal	47	Dec - 21
Minita Choudhary	19	Jun - 19	Chhavi Gupta	47	Dec - 22
Aadil Irfan Shaikh	22	Dec - 20	Ayush Kumar Pandey	50	Dec - 19
Rishav Choudhary	27	Dec - 19	Rushikesh Shridharrao Salunke	50	Dec - 23
Nabanita Chakraborty	28	Dec - 23			

YOU ARE THE NEXT...

Management Accounting MCQ

For CMA - Inter

Name :

Address :

.....

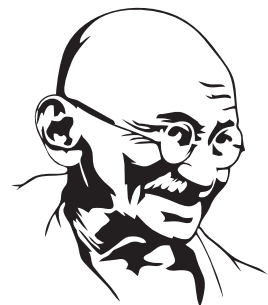
.....

Contact No.

S J C Registration No. :

"Live as if you were to die tomorrow. Learn as if you were to live forever."

Mahatma Gandhi



© SJC Institute LLP

This book shall not be reproduced or shared by photocopying, recording, or otherwise by any unauthorised person without prior written permission from the publisher.

All disputes are subject to Kolkata Jurisdiction







Our Aim

is to Gift CA/CMAs to Every Family

Welcome Abroad To Our Goal





Contents

Sl. No.	Module Name	Page No.	Weight
1.	ICMAI Study Material Objectives	1	
	a. Introduction to Management Accounting	3	
	b. Activity Based Costing	8	
	c. Marginal Costing	21	
	d. Applications of Marginal Costing in Short Term Decision Making	28	
	e. Transfer Pricing	38	
	f. Standard Costing and Variance Analysis	44	
	g. Forecasting, Budgeting and Budgetary Control	53	
	h. Divisional Performance Measurement	62	
	i. Responsibility Accounting	69	
	j. Decision Theory	76	
2.	BIT Questions	87	
3.	MCQ Bank	115	
4.	MQP Objectives	159	
5.	Termwise Objectives	183	
6.	Postal Test Papers Objectives	197	



ICMAI Study Material Objectives

Introduction to Management Accounting

1. Multiple Choice Questions:

- (1) Management Accounting
 - (a) Accumulates, summarizes and analyses the available data. ✓
 - (b) Is primarily concerned with the requirements of the management. ✓
 - (c) Makes Corporate Planning and Strategy effective. ✓
 - ✓ (d) All of the above
- (2) Management accounting can be viewed as .
 - (a) Marketing-oriented Accounting ✗
 - ✓ (b) Management-oriented Accounting
 - (c) Accounting-oriented Management
 - (d) Manager-oriented Accounting
- (3) The main objective of management accounting is
 - (a) To maintain the accounting records ✗
 - (b) To know the amount due from customers and suppliers ✗
 - ✓ (c) To ascertain analyse and interpret the results of business operations
 - (d) To record all the business transactions
- (4) _____ is the study of managerial aspects of financial accounting
 - (a) Cost accounting
 - (b) Financial accounting
 - ✓ (c) Management accounting
 - (d) Business accounting
- (5) The purpose of management accounting is to help _____ make decisions
 - ✓ (a) Managers
 - (b) Investors
 - (c) Marketers

- (d) Banks
- (6) Management accounting assists the management in _____
 - (a) Planning
 - (b) Directing
 - (c) Controlling
 - (d) All of the above
- (7) 'Period of lost relevance' is the _____ of the evolution of management accounting.
 - (a) 1st stage
 - (b) 2nd stage
 - (c) 3rd stage
 - (d) 4th stage
- (8) Creation of value through effective use of resources is the focus area of the _____
 - (a) 1st stage
 - (b) 2nd stage
 - (c) 3rd stage
 - (d) 4th stage
- (9) Just in time management and Activity based costing developed during the _____
 - (a) 1st stage
 - (b) 2nd stage
 - (c) 3rd stage
 - (d) 4th stage
- (10) Management accounting deals with _____ data
 - (a) Qualitative
 - (b) Quantitative
 - (c) Both qualitative and quantitative
 - (d) Non-financial
- (11) Which personnel of a financial firm play a key role in management accounting?
 - (a) Investors
 - (b) Managers
 - (c) Suppliers
 - (d) Customers
- (12) What are the instruments/ tools related to management accounting?
 - (a) Marginal costing

- (b) Standard costing ✓
 - (c) Budget control ✓
 - ✓ (d) All of the above
- (13) Where is management accounting applied?
- (a) Small trading organisations
 - (b) NPOs
 - (c) Cooperative societies
 - ✓ (d) Large industrial and trading organizations
- (14) Which of the following options is not characteristic of management accounting?
- (a) Future-oriented ✓
 - (b) Accounting information ✓
 - ✓ (c) Compulsory accounting.
 - (d) Management oriented
- (15) Who stated the definition of management accounting as "Management Accounting is concerned with accounting information which is useful to management"?
- ✓ (a) Robert Anthony
 - (b) Michael Porter
 - (c) J. Batty
 - (d) James H Bliss
- (16) Management accounting is used as _____
- (a) Compulsory
 - ✓ (b) Optional
 - (c) Mandatory
 - (d) Any of the above

Answer:

1	D	3	C	5	A	7	C	9	C	11	B	13	D	15	A
2	B	4	C	6	D	8	D	10	C	12	D	14	C	16	B

2. State True or False

- (1) Management Accounting is primarily ~~not~~ concerned with the requirements of the management. *False*
- (2) One of the main characteristic of Management Accounting is cause and effect analysis *True*
- (3) Management accounting is mainly ~~past~~ oriented. *False*
future

→ planning, controlling, decision making

- (4) The primary objective of management accounting is to manage company account and improves sales. False
- (5) Key success factors- also known as competitive emphasis. True
- (6) Benchmarking is a process of measuring the performance of a company's products, services, or processes against those of another business considered to be the best in the industry. True
- (7) In organizations, there are typically three levels of management: top-level, middle-level, and first-level. True
- (8) Management accounting concentrates on post-mortem analysis. False
- (9) Management Accounting is concerned with the adjustment in the value of assets, and of profit in the light of changes in the price level. True
- (10) Management accounting furnishes useful accounting data and statistical information for the decision - making process. True
- (11) Management Accounting is not based on double - entry system. True
- (12) Evaluation and control of performance is not a limitation of Management accounting. True
- (13) Deregulation- the act or process of removing legislative controls or restrictions from an industry, commodity, etc. True

Answer:

1	False
2	True
3	False
4	False
5	True
6	True
7	True
8	False
9	False
10	True
11	True
12	True
13	True

3. Fill in the blanks

- (1) Lean manufacturing systems that seek to reduce waste by implementing JIT production systems and focussing on Advanced Manufacturing Technologies
- (2) There has been a paradigm shift in the role of the management accountant in the era of globalisation. The focus shifted to strategic analysis

- (3) Management accounting ensued with the simple aspect of cost determination and financial control
- (4) Strategic management accounting provides the financial analysis to support the formulation of successful strategies
- (5) ESG criteria are a set of standards for a company's behaviour used by socially conscious investors to screen potential investments
- (6) Financial management ensures effective utilization of available financial resources in the long period.
- (7) The important objective of management accounting is to organize the accumulated financial data into meaningful information.

Answer:

- (1) just-in-time (JIT) production systems, advanced manufacturing technologies (AMTs),
- (2) strategic analysis
- (3) Cost determination and financial control,
- (4) competitive strategies,
- (5) Environmental, social, and governance (ESG)
- (6) Management,
- (7) Management.

Activity Based Costing

1. Multiple Choice Questions

- (1) Which of the following is a correct definition of activity-based management?
- (a) An approach to the costing and monitoring of activities which involves tracing resource consumption and costing final outputs. Resources are assigned to activities and activities to cost objects based on consumption estimates. The latter utilize cost drivers to attach activity costs to outputs. ✗
 - (b) The identification and evaluation of the activity drivers used to trace the cost of activities to cost objects. It may also involve selecting activity drivers with potential to contribute to the cost management function with particular reference to cost reduction. ✗
 - (c) A method of budgeting based on an activity framework and utilizing cost driver data in the budget- setting and variance feedback processes. ✗
 - ✓ (d) A system of management which uses activity based cost information for a variety of purposes including cost reduction, cost modeling and customer profitability analysis.
- (2) Which of the following characteristics would be an indicator that a company would benefit from switching to activity based costing?
- (a) Only one homogenous product is produced on a continuous basis ✗
 - (b) The existing cost system is reliable and has produced excellent results ✗
 - ✓ (c) Overhead costs are high and increasing and no one seems to know why
 - (d) The costs of implementing ABC out-weigh the benefits
- (3) According to the Chartered Institute of Management Accountants (CIMA), cost attribution to cost units on the basis of benefits received from indirect activities e.g. ordering, setting up, and assuring quality is known as:
- (a) Absorption costing
 - (b) Marginal costing
 - ✓ (c) Activity-based costing
 - (d) Job costing
- (4) In an ABC system, which of the following is likely to be classified as a batch level activity?
- ✓ (a) Machine set-up ✓

- (b) Product design
 - (c) Inspection of every item produced
 - (d) Production manager's work
- (5) Activity based costing:
- (a) Uses a plant wide overhead rate to assign overhead ✗
 - (b) Is not expensive to implement ✗
 - (c) Typically applies overhead costs using direct labour hours ✗
 - ✓ (d) Uses multiple activity rates
- (6) Which of the following activities is not a batch level activity?
- (a) Processing purchase orders ✗
 - ✓ (b) Designing products
 - (c) Receive raw materials from suppliers
 - (d) Setting up equipment
- (7) Which of the following is not included in batch level activities?
- (a) Material ordering cost ✗
 - (b) Machine set-up cost ✗
 - (c) Inspection cost ✗
 - ✓ (d) Designing the product
- (8) Assigning overhead using ABC often:
- ✓ (a) Shifts overhead costs from high-volume products to low-volume products
 - (b) Shifts overhead costs from low-volume products to high-volume products
 - (c) Provides the same results as traditional costing
 - (d) Requires one predetermined overhead rate
- (9) In Activity Based Costing:
- (a) Non-manufacturing costs may not be assigned to products ✗
 - ✓ (b) Some manufacturing costs may be excluded from product costs
 - (c) Allocation bases are the same as those used in traditional costing methods
 - (d) Similar to traditional costing, ABC only uses one overhead cost pool
- (10) In an ABC system, the allocation bases that are used for applying costs to services or procedures are called:
- (a) Cost Pool
 - ✓ (b) Cost Driver
 - (c) Cost Absorption

- (d) Cost Object
- (11) Which of the following would not be deducted from sales in a management report prepared using ABC?
- (a) Direct materials
 - (b) Direct labour
 - (c) Variable selling and administration costs
 - ✓ (d) Shipping costs → *charged different from different customers*
- (12) an item for which cost measurement is required e.g. product, job or a customer
- (a) Cost Pool
 - (b) Cost Driver
 - (c) Cost Absorption
 - ✓ (d) Cost Object
- (13) Which of the following is different in ABC when compared to traditional costing?
- (a) Traditional costing and ABC costing usually yield very similar product costs ✗
 - ✓ (b) In an ABC costing system, costs are only assigned to products that actually required work that gave rise to a particular cost
 - (c) In ABC, batch-level costs are applied to products using unit-level bases
 - (d) Under traditional costing, batch-level costs are shifted from high-volume products to low-volume products
- (14) Process of Cost allocation under Activity Based Costing is
- (a) Cost of Activities—Activities—Cost Driver – Cost allocated to cost objects
 - (b) Cost Driver — Cost of Activities— Cost allocated to cost objects – Activities
 - ✓ (c) Activities— Cost of Activities—Cost Driver – Cost allocated to cost objects
 - (d) Activities—Cost Driver – Cost allocated to cost objects — Cost of Activities
- (15) Cost of maintaining a building is
- (a) Unit Level Cost
 - (b) Batch Level Cost
 - (c) Product Level Cost
 - ✓ (d) Facility Level Cost
- (16) should be subtracted from net product revenues instead of an arbitrary and illogical apportionment.
- (a) Facility Level Cost
 - (b) Product Level Cost
 - ✓ (c) Organizational Level Cost

- (d) High Level Cost
- (17) The basis of apportionment of overheads which takes into account the profitability of various departments is called:
- (a) FIFO basis
 - (b) LIFO basis
 - (c) Ability to pay basis
 - (d) Activity basis
- (18) Which of the following is the main cost driver of customer order processing activity?
- (a) Flow of the product from the assembly line ✗
 - (b) Order value
 - (c) Number of problem suppliers
 - (d) Number of machine charges
- (19) Painting the product would be an example of which activity level groups
- (a) Facility-level activity
 - (b) Product-level activity
 - (c) Unit-level activity
 - (d) Batch-level activity
- (20) Which of the following tasks is not normally associated with an activity-based costing system?
- (a) Calculation of cost application rates ✓
 - (b) Identification of cost pools ✓
 - (c) Preparation of allocation matrices
 - (d) Identification of cost drivers
- (21) All of the following are examples of batch level activities except:
- (a) Purchase order processing ✓
 - (b) Setting up equipment ✓
 - (c) The clerical activity associated with processing purchase orders to produce an order for a standard product ✓
 - (d) Worker recreational facilities
- (22) Plant depreciation is an example of which activity-level group?
- (a) Unit-level activity
 - (b) Facility-level activity
 - (c) Batch-level activity

- (d) Product-level activity
- (23) Under activity-based costing, 'material ordering' is considered as —
- (a) Unit-level activity
 - ✓ (b) Batch level activity
 - (c) Product level activity
 - (d) Facility level activity
- (24) Samsung an appliance manufacturer is developing a new line of ovens that uses controlled-laser technology. Research and testing costs associated with the new ovens is said to arise from a:
- (a) Unit Level Activity
 - (b) Competitive Level Activity
 - (c) Facility Level Activity
 - ✓ (d) Product Sustaining Activity
- (25) The salaries of a manufacturing plant's management are said to arise from:
- (a) Unit Level Activities
 - (b) Batch Level Activities
 - (c) Product Sustaining Activities
 - ✓ (d) Facility Level Activities
- (26) The division of activities into unit level, batch level, product sustaining level, and facility level categories is commonly known as a
- (a) Cost Object
 - (b) Cost Application Method
 - ✓ (c) Cost Hierarchy
 - (d) Cost Estimation Method
- (27) The main reason for the usage of Activity Based Costing, by replacing the traditional costing system is that:
- (a) The overhead recovery rates used in traditional costing systems are inappropriate for decision-making. ✗
 - ✓ (b) The companies deal with more number of products at present
 - (c) No scope for cause and effect relationship in traditional costing
 - (d) The new manufacturing technology needs information for feedback of performance even the product is in progress.
- (28) Costs that are caused by a group of things being made or processed at a single time are referred to as:
- (a) Product-level costs

- (b) Cost pool
- (c) Organizational-level costs
- ✓ (d) Batch level costs
- (29) The following statements have been made in relation to activity-based costing:
- (1) A cost driver is a factor which causes a change in the cost of an activity True
- (2) Traditional absorption costing tends to ~~under~~^{over}-estimate overhead costs for high volume products Which of the above statements is/are true? False
- ✓ (a) 1 only
- (b) 2 only
- (c) Neither 1 nor 2
- (d) Both 1 and 2
- (30) Which of the following statements is true about activity-based costing (ABC)?
- ✓ (a) ABC is a costing method designed to provide managers with cost information for strategic and other decisions that potentially affect capacity and therefore "fixed" costs
- (b) ABC is an ordinary a replacement, rather than a supplement for, the company's usual costing system
- (c) Most organizations that use ABC have only one costing system that serves the needs of external reports and internal decision-making
- (d) In practice, ABC can only be done one way correctly, meaning that different "flavors" are not allowed
- (31) To calculate activity rates, all of the following are necessary except:
- (a) Determine the total activity for each cost pool that would be required to produce the current product mix ✓
- (b) Determine the total activity for each cost pool that would be required to serve present customers ✓
- (c) Calculate activity rates by dividing the total cost for each activity by its total activity
- ✓ (d) Calculate activity rates by dividing the total cost for each activity by the percentage of the activity allocated to the product
- (32) Activity-based costing:
- (a) Uses a plant-wide overhead rate to assign overhead ✗
- (b) Is not expensive to implement ✗
- (c) Typically applies overhead costs using direct labor-hours ✗
- ✓ (d) Uses multiple activity rates

- (33) Cost attribution to cost units on the basis of benefit received from indirect activities, such as ordering, setting-up, assuring quality is known as:
- (a) Allocation
 - (b) Activity-based costing
 - (c) Always better control
 - (d) Absorption
- (34) In activity-based costing, the allocation basis used for applying costs to services or products is called—
- (a) Cost driver
 - (b) Cost object
 - (c) Allocation
 - (d) Application
- (35) In activity-based costing, an item for which cost measurement is required is called —
- (a) Cost driver
 - (b) Cost object
 - (c) Allocation
 - (d) Cost pool
- (36) A homogeneous cost pool is one that:
- (a) Does not change over time ✗
 - (b) Needs many activity drivers to be allocated to a cost object ✗
 - (c) Can be explained with a single activity driver
 - (d) Has only one type of material assigned to it
- (37) Review cost of commercial loan applications is cost.
- (a) Unit level
 - (b) Facility level
 - (c) Batch level
 - (d) Product sustaining
- (38) In Traditional absorption costing system cost are first traced to:
- (a) Activities
 - (b) Organizational unit
 - (c) Products
 - (d) Cost centers

- (39) An Activity-Based Costing, an inspection of the product is a _____ level activity:
- (a) Unit
 - (b) Batch
 - (c) Product
 - (d) Facility
- (40) ABC is defined as cost attribution to _____ on the basis of benefit received from indirect activities.
- (a) Cost units
 - (b) Cost objects
 - (c) Cost centres
 - (d) Production units
- (41) Which of the following is not a correct match?
- | Activity | Cost Drivers |
|--|-----------------------------|
| (a) Production scheduling | Number of production runs ✓ |
| (b) Dispatching | No. of Dispatch orders ✓ |
| (c) Goods receiving | Goods received order ✓ |
| <input checked="" type="checkbox"/> (d) Inspection | Machine hours ✗ |
- (42) Basic types of cost pool allocations include:
- (a) Allocation of costs to segments, products, and services
 - (b) Determining inputs for CVP models
 - (c) Establishing cash flows for capital budgeting analyses
 - (d) Reallocation of costs among service departments
- (43) Activity based cost systems would probably provide the greatest benefits for organizations that use
- (a) Job order costing
 - (b) Process costing
 - (c) Standard costing
 - (d) Historical costing
- (44) Under a traditional costing system, which of the following costs would likely be classified as indirect with respect to the various products manufactured?
- (a) Plant maintenance
 - (b) Factory supplies
 - (c) Machinery depreciation
 - (d) All of the above

- (45) PKS Ltd. is changing from a traditional costing system to an activity based system. As a result of this action, which of the following costs would likely change from indirect to direct?
- (a) Direct materials, factory supplies ✗
 - (b) Production setup, finished-goods inspection & direct materials ✗
 - ✓ (c) Production setup, finished-goods inspection and product shipping
 - (d) All of the above
- (46) Which of the following statements about activity based costing is false?
- ✓ (a) Activity based costing cannot be used by service businesses.
 - (b) In comparison with traditional costing systems, activity based costing tends to use more cost pools and more cost drivers.
 - (c) In comparison with traditional costing systems, activity based costing results in less cost averaging of various diversified activities.
 - (d) In comparison with traditional-costing systems, activity based costing results in more costs being classified as direct costs.
- (47) Which of the following is least likely to be classified as a batch level activity in an activity based costing system?
- (a) Quality assurance ✓
 - (b) Receiving and inspection ✓
 - ✓ (c) Property taxes → facility level
 - (d) Production set-up

Answer:

1	d	7	d	13	b	19	c	25	d	31	d	37	a	43	a
2	c	8	a	14	c	20	c	26	c	32	d	38	b	44	d
3	c	9	b	15	d	21	d	27	b	33	b	39	b	45	c
4	a	10	b	16	c	22	b	28	d	34	a	40	a	46	a
5	d	11	d	17	d	23	b	29	a	35	b	41	d	47	c
6	b	12	d	18	b	24	d	30	a	36	c	42	a		

2. State True or False

- (1) The purpose of moving from a traditional costing system to an ABC system must therefore be based on the premise that the new information provided will lead to action that will increase the overall profitability of the business. True
- (2) Traditional product costing systems were designed when most of the companies manufactured a narrow range of products. True
- (3) Activities comprise of units of work or tasks. True

- (4) Unit-level activities (also known as volume-related activities) are performed each time a unit of the product or service is produced. *True*
- (5) The term cost pools are used to describe a location to which overhead costs are initially assigned. *True*
- (6) An ABC analysis ~~cannot~~ *can* reveal the cost of each activity within an organization. *False*
- (7) ABC recognizes the increased complexity of modern businesses with its multiple cost drivers, many of which are transaction based rather than volume based. *True*
- (8) ABC tends to burden low-volume (new) products with a punitive level of overhead costs and hence threatens opportunities for successful innovation if it is used without due care. *True*
- (9) ABC is ~~not~~ a complement to Total Quality Management (TQM) and it provides quantitative data that can track the financial impact of improvements implemented as part of the TQM initiative. *False*
- (10) Activity based costing is ~~not~~ expensive to implement. *False*

Answer:

1	True
2	True
3	True
4	True
5	True
6	False
7	True
8	True
9	False
10	False

3. Fill in the Blanks

- (1) Designing products activity is not a Batch level activity
- (2) LG an appliance manufacturer is developing a new line of ovens that uses controlled-laser technology. Research and testing costs associated with the new ovens is said to arise from a product sustaining activity
- (3) Costs that are caused by a group of things being made or processed at a single time are referred to as Batch level costs
- (4) Activity-based costing uses multiple activity rates
- (5) An item for which cost measurement is required in ABC is called cost object
- (6) A method of allocating indirect costs to cost objects that correlate a product's consumption of overhead resources with the number of units produced is known as volume based cost driver



- (7) A two-stage cost assignment assigns resource costs to activity cost pools and then to cost objects.
- (8) Value-added activities- for which customers are willing to pay.
- (9) Basic types of cost pool allocations include allocation to product, service, segment.
- (10) A product level activity supports the production of a specific product or service.

Answer:

- (1) Batch level activities
- (2) Product sustaining activities
- (3) Batch level cost
- (4) Multiple activity rates
- (5) Cost object
- (6) Volume based cost drivers
- (7) Cost pools, cost objects
- (8) Customers
- (9) Allocation of costs to segments, products & services
- (10) Product level.

4. Multiple Choice Questions:

- (1) A company makes two products using the same type of materials and skilled workers. The following information is available:

Particulars	Product A	Product B
Budgeted volume (units)	1,000	2,000
Material per unit (₹) (1 mat = 10)	10 1 mat	20 2 mat
Labour per unit (₹) (1 L.Hr = ₹5)	5 1 L.Hr	20 4 L.Hr

Fixed costs relating to material handling amount to ₹1,00,000. The cost driver for these costs is the volume of material purchased.

General fixed costs, absorbed on the basis of labour hours, amount to ₹1,80,000.

Using activity-based costing, what is the total fixed overhead amount to be absorbed into each unit of product B (to the nearest whole ₹)?

- (a) ₹113
- (b) ₹120
- (c) ₹40
- (d) ₹105
- volume of material purchased
 Material A = 1 × 1000 = 1000
 Material B = 2 × 2000 = 4000
 Total mat. purchased = 5000

- (2) A company uses traditional standard costing system. The inspection and set-up costs are actually ₹1,760 against a budget of ₹2,000. ABC system is being implemented and

Product A : 1 unit \rightarrow 1 labour hours
1000 uts \rightarrow $1 \times 1000 = 1000$ labour hours

Product B : 1 unit \rightarrow 4 labour hours
2000 units \rightarrow $4 \times 2000 = 8000$ labour hours
9000 labour hours

$$\text{FC relating to material} \rightarrow \frac{1,00,000}{8000} \times 4000 = \underline{50,000}$$

$$\text{general fixed costs} \rightarrow \frac{\text{£}1,80,000}{9000} \times 8000 = \underline{\underline{1,60,000}}$$

$$\text{per unit} = \frac{2,40,000}{2,000} = \underline{\underline{\text{£}120}}$$

Budgeted cost = £2000

Budgeted no. of Batch = 10

Budgeted cost / Batch = $\frac{2000}{10} = \text{£}200/\text{Batch}$

accordingly the number of batches is identified as the cost driver for inspection and set up. The budgeted production is 10,000 units in batches of 1,000 units whereas actually ~~9,000 units~~ were produced in 11 batches. The cost per batch under ABC system will be

- (a) ₹160
 (b) ₹200
 (c) ₹180
 (d) ₹220

$$\text{no. of Batches} = \frac{10,000}{1,000} = 10 \text{ Batch}$$

- (3) X Company uses activity-based costing for Product B and Product D. The total estimated overhead cost for the parts administration activity pool was ₹5,50,000 and the expected activity was 2000 part types. If Product D requires 1200 part types, the amount of overhead allocated to product D for parts administration would be:

- (a) ₹2,75,000
 (b) ₹3,00,000
 (c) ₹3,30,000
 (d) ₹3,45,000

$$\frac{550000}{2000} \times 1200 = ₹3,30,000$$

- (4) Fast Ltd. manufactures three types of products A, B, and C following ABC System. During a period, the company incurred ₹73,000 as inspection cost and it was worked for 10, 20 and 9 production runs respectively for producing products A, B, and C. The inspection costs for product B under the ABC system was:

- (a) ₹15,000
 (b) ₹40,000
 (c) ₹18,000
 (d) ₹24,000

$$39 \text{ production runs} \rightarrow ₹73,000$$

$$\frac{73000}{39} \times 20 = ₹37435$$

- (5) A company manufactures and sells packaging machines. It recently introduced activity-based costing to refine its existing system. Each packaging machine requires direct materials costs of ₹50,000; 50 equipment parts; 12 machine hours; 15 assembly line hours and 4 inspection hours. The details about the cost pools, allocation bases and allocation rates are given below:

Indirect cost pool	Cost allocation base	Budgeted allocation rate
Material handling	No. of component parts	₹8 per part $8 \times 50 = 400$
Machining	Machine hours	₹68 per machine hour $\times 12 = 816$
Assembly	Assembly line hours	₹75 per assembly hour $\times 15 = 1125$
Inspection	Inspection hours	₹104 per inspection hour $\times 4 = 416$

The company has received an order for 40 can-packaging machines from a customer. 2757
 Using activity-based costing, indirect costs allocated to the order of the customer would be:

- (a) ₹1,30,850

$$40 \text{ machines} = 2757 \times 40 = ₹1,10,280$$

- (b) ₹1,25,280
- (c) ₹1,15,050
- ✓ (d) ₹1,10,280

(6) A company operates an activity based costing (ABC) system to attribute its overhead costs to cost objects. In its budget for the year-ending 31st August, 2022. The company expected to place a total of 2000 purchase orders at a total cost of ₹1,00,000. This activity and its related costs were budgeted to occur at a constant rate throughout the budget year which is divided into 13 four week periods.

During the four-week period ended 30th June 2021, a total of 200 purchase orders were placed at a cost of ₹9,000. The over recovery of these costs for the four-week period was

- (a) ₹ 2,000
- (b) ₹ 3,000
- (c) ₹1,500
- ✓ (d) ₹ 1,000

cost per purchase order = $\frac{1,00,000}{2000} = ₹50$

cost absorbed for 200 orders = $200 \times 50 = ₹10,000$

cost incurred $\frac{₹9,000}{₹10,000}$

over recovery $\frac{₹1,000}{₹10,000}$

(7) The following information relate to ABC

Activity level	60% →	80%	
Variable costs (₹)	12,000	16,000	4000
Fixed costs (₹)	20,000	22,000	2000
			<u>6000</u>

The differential cost for 20% capacity is

- (a) ₹4,000
- (b) ₹2,000
- ✓ (c) ₹6,000
- (d) ₹5,000

(8) A company manufactures 500 units of product AX the material cost to manufacture is ₹ 1,50,000, Labour cost ₹2,65,000. Material reordering cost is ₹4,500, Material handling cost is ₹2,500 Material order – 35, Material movement – 20.

Total Material cost under Activity based costing is.

- (a) ₹554
- (b) ₹4,22,000
- ✓ (c) ₹1,57,000
- (d) ₹1,084

$150000 + 4500 + 2500 = \underline{157000}$

Answer:

1	b	4	b	7	c
2	b	5	d	8	c.
3	c	6	d		

1. Multiple Choice Question (MCQ)

- (1) To obtain the break-even point in rupee sales value, total fixed costs are divided by:
- (a) Variable cost per unit;
 - (b) Contribution margin per unit;
 - (c) Fixed cost per unit;
 - ✓ (d) Profit/volume ratio.
- (2) The break-even point is the point at which:
- ✓ (a) There is no profit, no loss;
 - (b) Contribution margin is equal to total fixed cost;
 - (c) Total revenue is equal to total cost;
 - (d) All of the above.
- (3) The primary difference between a fixed budget and a variable (flexible) budget is that a fixed budget:
- (a) includes only fixed costs, while a variable budget includes only variable costs.
 - (b) is concerned with only further acquisitions of fixed costs, while a variable budget is concerned with expenses which vary with sales.
 - (c) cannot be changed after the period begins, while a variable budget can be changed after the period begins.
 - ✓ (d) is a plan for a single level of sales (or other measure of activity), while a variable budget consists of several plans, one for each of several levels of sales (or other measures of activity).
- (4) Margin of safety is referred to as:
- (a) Excess of actual sales over fixed expenses; ✗
 - (b) Excess of actual sales over variable expenses; ✗
 - ✓ (c) Excess of actual sales over break-even sales;
 - (d) Excess of budgeted sales over fixed costs.

- (5) Contribution margin is known as
- (a) Marginal income
 - (b) Gross profit
 - (c) Net income
 - (d) Net profit
- (6) Fixed cost per unit decrease when
- (a) Production volume increases
 - (b) Production volume decreases
 - (c) Variable costs per unit decreases
 - (d) Prime costs per unit decreases
- eg: $FC = 100000$
no of units = 5000
 $FC/unit = \frac{100000}{5000} = ₹20$
- $FC = 100000$
units = 10000
 $FC/unit = \frac{100000}{10000} = \underline{\underline{10}}$
- (7) Within a relevant range, the amount of variable costs per unit
- (a) Differs at each production level
 - (b) Remains constant at each production level
 - (c) Increases as production increases
 - (d) Decreases as production increases
- (8) Margin of safety is referred to as
- (a) Excess of budgeted or actual sales over the variable expenses and fixed expense, at break-even.
 - (b) Excess of budgeted or actual sales revenue over the fixed expenses.
 - (c) Excess of actual sales over budgeted sales.
 - (d) Excess of sales revenue over the variable expenses.
- (9) Under marginal costing system, the contribution margin discloses the excess of
- (a) Revenue over fixed costs ~~X~~
 - (b) Projected revenues over the break-even point ~~X~~
 - (c) Revenues over variable costs
 - (d) Variable costs over fixed costs
- (10) A decrease in sales price
- (a) does not affect the break-even point
 - (b) lowers the fixed cost
 - (c) Increases the break-even point
 - (d) lowers the break-even point

Answer:

1	d
2	a
3	d
4	c
5	a
6	a
7	b
8	c
9	c
10	c.

2. State True or False

- (1) Marginal costing and absorption costing will report different profit figures if there is any change in the volume of inventory during the period. True
- (2) Another term for marginal costing is variable costing. True
- (3) For the marginal cost, the stock will be calculated on total cost. False
- (4) The P/V ratio will be equal to the ^{contribution} profits by the sale ratio. False
- (5) BEP in marginal costing is Break entity profit. False (Break even point)
- (6) The kind of cost which will not differ due to the volume of the production is called Fixed cost. True
- (7) Under High and Low Point method, the output at two different levels is compared with the amount of total costs incurred at these two points. True
- (8) In Analytical method of calculating marginal costing, it is determined on the basis of past records. False
- (9) Margin of safety will be ₹ 37,500 if Profit is ₹ 15,000 and P/V ratio is 40%. True
- (10) Differential cost is the economist's concept of marginal cost. True
- (11) Marginal Costing is the practice of charging all marginal costs to operations processes or products and deducting all fixed costs against the profits for a particular period in which they arise. True
- (12) Marginal cost may also be defined as the "cost of producing one additional unit of product." True
- (13) Addition of variable cost and profit to contribution is equal to selling price. False
- (14) Fixed costs remain unchanged or constant for the entire volume of production. True
- (15) Marginal cost remains the same per unit of output irrespective of the level of activity. True
- (16) Marginal cost per unit is not constant in nature and helps the management in production planning. False



- (17) Selling prices do not remain constant forever and for all levels of output due to competition, discounts for bulk orders, changes in the general price level, etc. True
- (18) Fixation of selling price in the long run can be done without considering fixed costs. False
- (19) Break-even analysis can be used to help management select an action when several alternatives exist. True
- (20) CVP analysis looks at the effect of sales volume variations on costs and operating profit. True

Answer:

1	True	5	False	9	True	13.	True	17.	True
2	True	6	True	10	True	14.	True	18.	False
3	False	7	True	11.	True	15.	True	19.	True
4	False	8	False	12.	True	16.	False	20.	True

3. Fill in the Blanks

- (1) If the total cost of 1000 units is ₹ 60,000 and that of 1001 units is ₹ 60,400, then the increase of ₹ 400 in the total cost is marginal cost
- (2) The costing method where fixed factory overheads are added to inventory is called Absorption costing
- (3) The marginal cost of change in the total cost when the quantity of product is increase by one unit
- (4) Contribution margin in marginal costing is also known as marginal revenue
- (5) Fixed cost is also referred to as period cost in the marginal costing technique.
- (6) An increase in the variable cost increases the break even point
- (7) Under marginal costing, the stock is valued at variable costs only
- (8) Marginal cost is equal to Prime cost + variable overheads
- (9) While computing contribution in marginal costing, Sales - variable cost
- (10) The marginal cost will be equal to prime cost + variable overheads
- (11) Graphical representation Break-even Chart is a graphical representation of the Break even analysis of cost and revenue data (breakeven charts) can be more easily understood by non-financial managers.
- (12) Differential cost is the result of an alternative course of action.
- (14) A management of any type of business organization is confronted with the problem of making appropriate decisions
- (15) Differential cost analysis is carried on using only relevant costs
- (16) The main point which distinguishes marginal cost and differential as that change in fixed cost when volume of production increases or decreases by a unit of production.
- (17) Fixed production overheads under absorption costing are charged to the product to be subsequently released as a part of goods sold.

- (18) The price to be charged for a product or service is often one of the most important decisions made by managers. price
- (19) When the conditions prevailed both internally and externally are favourable to the companies, they usually plan to earn some planned profit
- (20) The decision about whether to produce parts and components in-house, or to sub-contract work to external suppliers, is referred to as the Make or Buy

Answer:

- (1) Marginal cost,
- (2) Absorption costing,
- (3) increased by one unit.,
- (4) Marginal income,
- (5) Period cost,
- (6) Improves margin of safety,
- (7) Variable Cost,
- (8) Prime cost plus variable overheads,
- (9) The total marginal cost gets deducted from total sales revenue,
- (10) Prime cost plus all the variables overhead,
- (11) Break- Even Analysis,
- (12) Graphical representation,
- (13) Differential cost,
- (14) Decisions,
- (15) Relevant costs,
- (16) Marginal cost,
- (17) Absorption costing,
- (18) Price,
- (19) Favourable,
- (20) 'Make-or-buy decision'.

4. Multiple Choice Question (MCQ)

- (1) Determine Margin of safety if Profit is ₹15,000 and P/V ratio is 40%.
- (a) ₹37,500
- (b) ₹33,000
- (c) ₹38,000
- $$\frac{15000}{40\%}$$

(d) None of the above

(2) What is Margin of Safety if Sales is 20,000 units and B.E.P is 15,000 units?

(a) 15000 units

✓ (b) 5000 units

(c) 10000 units

(d) 20000 units

$$\begin{aligned} \text{MOS} &= \text{Sales} - \text{BEP sales} \\ &= 20000 \text{ uts} - 15000 \text{ uts} \\ &= 5000 \text{ uts} \end{aligned}$$

(3) Calculate margin of safety if sales is ₹3,00,000 and B.E.P is ₹ 4,50,000.

(a) ₹1,00,000

(b) ₹1,50,000

✓ (c) Amount of sales < B.E.P, therefore no margin of safety

(d) None of the above

$$\text{Contb}^n = 50,000 - 30,000 = 20,000$$

(4) Determine sales in rupees for desired profit if fixed cost is ₹10,000, Variable cost is ₹30,000, Sales is ₹50,000 and desired profit is ₹5,000.

(a) ₹73,500

(b) ₹75,000

(c) ₹5,000

✓ (d) ₹37,500

$$\text{PV ratio} = \frac{20000}{50000} \times 100 = 40\%$$

$$\text{Sales} = \frac{\text{FC} + \text{profit}}{\text{PV ratio}} = \frac{10000 + 5000}{40\%} = 37,500$$

(5) What will be sales in rupees for desired profit if fixed cost is ₹30,000, desired profit is ₹15,000 and P/V ratio is 30%?

✓ (a) ₹1,50,000

(b) ₹1,00,000

(c) ₹2,00,000

(d) None of the above

$$\begin{aligned} \text{Sales} &= \frac{30,000 + 15,000}{30\%} = \frac{45,000}{30\%} \\ &= ₹1,50,000 \end{aligned}$$

(6) Calculate sales in rupees for desired profit if fixed cost is ₹10,000, selling price is ₹20 per unit, Variable cost is ₹15 per unit and desired profit is ₹1 per unit.

(a) ₹20,000

✓ (b) ₹50,000

(c) ₹70,000

(d) ₹10,000

$$\text{PV ratio} = \frac{5}{20} \times 100 = 25\%$$

$$\text{no. of units} = \frac{\text{Sales}}{\text{Selling Price}}$$

(7) Determine sales in units for desired profit if Fixed cost is ₹15,000, desired profit is ₹5,000 Selling price per unit is ₹20 and Variable cost per unit is ₹16.

✓ (a) 5,000 units

(b) ₹5,000

(c) ₹10,000

$$\begin{aligned} \text{Contb}^n &= 20 - 16 = ₹4 \\ \text{Sales (units)} &= \frac{15000 + 5000}{4} = \frac{20000}{4} \\ &= 5000 \text{ uts} \end{aligned}$$

$$\text{Sales revenue} = \underline{\pounds 20 \times x} = 20x$$

$$\text{profit} = \pounds 1 \times x = x$$

$$20x = \frac{10000 + x}{25\%}$$

$$\underline{25\% \text{ of } 20x} = 10000 + x$$

$$5x = 10000 + x$$

$$5x - x = 10000$$

$$4x = 10,000$$

$$x = \frac{10,000}{4} =$$

$$\frac{2500 \text{ units} \times \pounds 20}{=} \underline{\underline{\pounds 50,000}}$$

(d) ₹10,000 units

(8) What will be sales in units if fixed cost is ₹50,000 Contribution per unit is ₹60 and desired profit per unit is ₹10.

(a) ₹6,000 units

(b) ₹1,000

✓ (c) ₹1,000 units

(d) ₹6,000

let no. of units sold = x → $50x = 50000$
 $x = \frac{50,000 + 10x}{60}$ $x = \frac{50000}{50}$
 $60x = 50000 + 10x$ $= 1000 \text{ uts.}$
 $60x - 10x = 50000$

(9) Determine B.E.P in units and amount if Units produced 10,000, Fixed cost is ₹40,000, Selling price is ₹50 per unit and Variable cost is ₹30 per unit. $\text{Cont}^n = ₹20$

(a) ₹40 per unit, ₹2,00,000

(b) ₹50 per unit, ₹10,00,000

(c) ₹20 per unit, ₹1,00,000

✓ (d) None of the above

$\text{BEP (units)} = \frac{\text{FC}}{\text{Cont}^n} = \frac{40000}{20} = 2000 \text{ units.}$
 $\text{Amount} = 2000 \times 50 = ₹1,00,000$

(10) Determine B.E.P if Sales is ₹1,00,000, Variable cost is ₹50,000 and Profit is ₹20,000.

✓ (a) ₹60,000

(b) ₹40,000

(c) ₹80,000

(d) None of the above

$\text{Sales} = 1,00,000$
 $- \text{VC} \quad \underline{50,000}$
 $\text{Cont}^n: \quad 50,000$
 $- \text{FC} \quad \underline{(30,000)} \quad (\text{BIF}) \checkmark$
 $\text{profit} \quad 20,000$

Answer:

1	a
2	b
3	a
4	d
5	a
6	b
7	a
8	c
9	c
10	a

$\text{PV ratio} = \frac{50,000}{100,000} \times 100 = 50\%$

$\frac{\text{FC}}{\text{PV ratio}} = \text{BEP}$

$\frac{30000}{50\%} = \underline{₹60,000}$

Applications of Marginal Costing in Short Term Decision Making

1. Multiple Choice Questions

- (1) If the total cost of 1000 units is ₹ 60,000 and that of 1001 units is ₹60,400, then the increase of ₹400 in the total cost is:
- (a) Prime cost
 - (b) All variable overheads
 - (c) Marginal cost
 - (d) None of the above
- (2) Which of the following statements are true about marginal costing?
- (a) In marginal costing, fixed costs are treated as product costs
 - (b) Marginal costing is not an independent system of costing.
 - (c) The elements of cost in marginal costing are divided into fixed and variable components
 - (d) Both b and c
- (3) The costing method where fixed factory overheads are added to inventory is called:
- (a) Activity-based costing
 - (b) Absorption costing
 - (c) Marginal costing
 - (d) All of the above
- (4) While computing profit in marginal costing:
- (a) The fixed cost gets added to the contribution
 - (b) The total marginal cost gets deducted from total sales revenue
 - (c) The total marginal cost gets added to total sales revenue
 - (d) None of the above
- (5) Which of the following assumptions are made while calculating marginal cost?
- (a) Total fixed cost is constant at all levels of output

$$\begin{array}{r}
 \text{Sales} - \text{VC} = \text{Contribution} \\
 \underline{\quad \quad} \\
 - \text{FC} \\
 \underline{\quad \quad} \\
 \text{Profit}
 \end{array}$$

- (b) Total variable cost varies according to the volume of output ✓
(c) All elements of cost can be divided into fixed and variable components
✓ (d) All of the above
- (6) Contribution margin in marginal costing is also known as:
(a) Net income
(b) Gross profit
✓ (c) Marginal income
(d) None of the above
- (7) The term 'Contribution' refers to the:
✓ (a) Excess of selling price over variable cost per unit
(b) Difference between the selling price and total cost
(c) Subscription towards raising capital
(d) None of the above
- (8) Which of the following techniques of costing differentiates between fixed and variable costs?
✓ (a) Marginal costing
(b) Standard costing
(c) Absorption costing
(d) None of the above
- (9) Fixed cost is also referred to as in the marginal costing technique:
(a) Total cost
(b) Product cost
✓ (c) Period cost
(d) None of the above
- (10) Variable cost is also referred to as in the marginal costing technique:
(a) Total cost
✓ (b) Product cost
(c) Period cost
(d) None of the above
- (11) The margin of safety, which is the difference between actual sales and break-even point, can be improved by:
✓ (a) Lowering variable costs
✓ (b) Lowering fixed costs

- (c) Increasing sales volumes
 (d) All of the above
- (12) The profit/volume ratio in marginal costing can be improved by:
 (a) Lowering fixed cost ✗
 (b) Increasing the selling price
 (c) Increasing variable cost
 (d) None of the above
- (13) Under marginal costing, the stock is valued at:
 (a) Total Cost
 (b) Fixed Cost
 (c) Variable Cost
 (d) None of the above
- (14) The profit at which total revenue is equal to the total cost is known as:
 (a) Margin of safety
 (b) Break-even point
 (c) Both a and b are incorrect
 (d) Both a and b are correct
- (15) The cost that does not fluctuate based on the volume of the production is known as:
 (a) Variable cost
 (b) Fixed cost
 (c) Semi-variable cost
 (d) None of the above
- (16) Fixed cost includes:
 (a) Property taxes ✓
 (b) Rent ✓
 (c) Insurance premium ✓
 (d) All of the above
- (17) Variable cost includes:
 (a) Cost of raw materials ✓
 (b) Salaries and wages
 (c) Electricity bills
 (d) All of the above

$$\text{Pv ratio} = \frac{\text{Contb}^n}{\text{Sales}} \times 100$$

- (18) Marginal cost is equal to:
- (a) Variable overheads
 - (b) Prime cost plus variable overheads
 - (c) Prime cost minus variable overheads
 - (d) None of the above
- (19) Marginal costing is also called:
- (a) Variable costing
 - (b) Total costing
 - (c) Marginal costing
 - (d) Activity based costing
- (20) What is the opportunity cost of making a component part in a factory given no alternative use of the capacity?
- (a) The variable manufacturing cost of the component
 - (b) The total manufacturing cost of the component
 - (c) The total variable cost of the component
 - (d) Zero
- (21) The difference in total cost that results from two alternative courses of action is called:
- (a) Relevant Cost
 - (b) Opportunity Cost
 - (c) Differential Cost
 - (d) Marginal Cost
- (22) Another name for 'Contribution' is:
- (a) Marginal Income
 - (b) Gross Profit
 - (c) Net Income
 - (d) None of the above
- (23) Relevant costs are:
- (a) unavoidable, future and measured by cash
 - (b) avoidable, future and measured by cash
 - (c) avoidable, future and measured by profit
 - (d) unavoidable, future and measured by profit
- (24) Which one of the following statements is true?
- (a) Non-cash costs are always relevant. ✗

- (b) Opportunity costs are always relevant.
- (c) Sunk costs are always relevant. ✗
- (d) Committed costs are always relevant. ✗
- (25) Which of the following costs would not be accounted for in a company's recordkeeping system?
- (a) an unexpired cost
- (b) an expired cost
- (c) a product cost
- (d) an opportunity cost
- (26) A fixed cost is relevant if it is:
- (a) uncontrollable.
- (b) avoidable
- (c) sunk.
- (d) a product cost.

Answers:

1	c	5	d	9	c	13	c	17	a	21	c	25	d
2	d	6	c	10	b	14	b	18	b	22	a	26	b
3	b	7	a	11	d	15	b	19	a	23	c		
4	b	8	a	12	b	16	d	20	d	24	b		

2. State True or False

- (1) Marginal costing is a ~~system~~ ^{Technique} of costing False
- (2) Key factor is important in ascertaining the profitability True
- (3) Under marginal-costing technique, fixed costs are charged off to revenue fully during the period in which they are incurred but not taken into account for valuing inventories True
- (4) Plant and machinery may depreciate more quickly when kept idle than when being used. True
- (5) When a new product is introduced in the market, the selling price is fixed below the marginal cost in order to make the new product more popular. True
- (6) Sometimes, the government allows import quota against foreign exchange earned. Profit t may be more in such cases. True
- (7) Maximum use or absorption of fixed costs will be the ultimate aim of any business. True
- (8) The problem whether to use a machine or produce by hand labour or use any combination of machine and labour can be best solved by the usage of marginal-costing technique. True
- (9) The management is often confronted with the problem of product pricing. True

- (10) Price under normal circumstances for a longer period should be based on the total costs. *True*
- (11) The decision on the closure of a department or discontinuance of a product or a section of a business can be made by applying marginal-costing technique. *True*
- (12) Marginal-costing technique is also used in planning the profit level of the business. *True*

Answers:

1	False
2	True
3	True
4	True
5	True
6	True
7	True
8	True
9	True
10	True
11	True
12	True

3. Fill in the Blanks

- (1) When there is no idle (unused) capacity and at the same time the component part is manufactured in (instead of buying) the factory by replacing the other work, the loss of contribⁿ from the displaced work has to be considered along with the marginal cost of production.
- (2) Quite often the management of a manufacturing company will face the problem whether a component or a product should be outsourced from an outside source (suppliers) or manufactured by the company itself
- (3) *on* If there is any limiting factor, care should be taken before arriving at a decision.
- (4) Contribution is the main criteria to decide the profitability of any business concern.
- (5) Costs are classified into fixed and variable in marginal costing.
- (6) The Income statement of each month will show the same amount of fixed costs irrespective of the volume of sales.
- (7) Differential Costing is also termed as Relevant Costing or Incremental Analysis.
- (8) Marginal costing does not provide any standard for the evaluation of performance which is provided by standard costing and budgetary control.
- (9) Decision making also known as decision model, is the process of evaluating two or more alternatives leading to a final choice, known as Alternative Choices Decisions.
- (10) Managerial decision making is a process of making choices.

Differential

- (11) Differential revenue is the amount of increase or decrease in revenue expected from a particular course of action as compared with an alternative.
- (12) Qualitative factors are difficult to quantify in monetary terms.
- (13) Make or buy decision is also referred to as outsourcing decision.
- (14) The decision to eliminate an unprofitable product is a special case of product profitability evaluation.
- (15) The decision whether a product should be sold at the split off point or processed further is faced by many manufacturers.

Answers:

- | | | |
|---------------------------|-----------------------|-------------------------------|
| (1) loss of contribution, | (6) income, | (11) Relevant (differential), |
| (2) Purchased, | (7) Differential, | (12) Qualitative, |
| (3) limiting factor, | (8) Marginal Costing, | (13) outsourcing, |
| (4) "Contribution", | (9) Decision-making, | (14) unprofitable, |
| (5) Costs, | (10) Managerial, | (15) split-off point. |

4. Multiple Choice Questions

- (1) PQR Ltd. manufactures a single product which it sells for ₹ 40 per unit. Fixed cost is ₹ 60,000 per year. The contribution to sales ratio is 40%. PQR Ltd.'s Break Even Point in units is _____
- (a) 3500
(b) 3700
(c) 3750
(d) 4000
- PV ratio $\text{cont}^n = 40\% \text{ of } 40 = 16$
- $$\text{BEP} = \frac{\text{FC}}{\text{cont}^n/\text{unit}} = \frac{60000}{16} = 3750 \text{ units}$$

- (2) The break-even point of a manufacturing company is ₹1,60,000. Fixed cost is ₹48,000. Variable cost is ₹12 per unit. The PV ratio will be: _____
- (a) 20%
(b) 40%
(c) 30%
(d) 25%
- $$\text{BEP} = \frac{\text{FC}}{\text{PVR}} \quad 160000 = \frac{48000}{\text{PVR}}$$
- $$\text{PV ratio} = \frac{48000}{160000} \times 100 = 30\%$$

- (3) Product A generates a contribution to sales ratio of 40%. Fixed cost directly attributable to Product A amounted to ₹60,000. The sales revenue required to achieve a profit of ₹15,000 is _____
- (a) ₹ 2,00,000
(b) ₹ 1,85,000
(c) ₹ 1,87,500
- $$\text{SR} = \frac{\text{FC} + \text{profit}}{\text{PVR}} = \frac{60000 + 15000}{40\%} = ₹ 187500$$

(d) ₹ 2,10,000

(4) XYZ Ltd. makes a special gadget for the car it manufactures. The machine for the gadget works to full capacity and incur ₹15 Lakhs and ₹40 Lakhs respectively as Variable and Fixed Costs. If all the gadgets were purchased from an outside supplier, the machine could be used to produce other items, which would earn a total contribution of ₹ 25 Lakhs. What is the maximum price that XYZ Ltd. should be willing to pay to the outside supplier for the gadgets, assuming there is no change in Fixed Costs?

- (a) ₹40 Lakhs
- (b) ₹65 Lakhs
- (c) ₹25 Lakhs
- (d) ₹15 Lakhs

$$\text{contribution generated} = \underline{15L} + 25L = \underline{40L}$$

(5) Zee Products Ltd. manufactures four products e.g. Product E, Product F, Product G and Product H using same raw materials. The input requirements for Products E, F, G and H are 1kg, 2kgs, 5kgs and 7kgs, respectively. Product-wise Selling Price and Variable Cost data are given hereunder:

Products	E	F	G	H
Selling Price (₹)	100	150	200	300
Variable Cost (₹)	50	70	100	125

Assuming raw material availability is a limiting factor, the correct ranking of the products would be:

- (a) E, F, G & H
- (b) E, F, H & G
- (c) F, E, G & H
- (d) F, E, H & G

(6) X Ltd. has 1000 units of an obsolete item which are carried in inventory at the original price of ₹ 50,000. If these items are reworked for ₹ 20,000, they can be sold for ₹ 36,000. Alternatively, they can be sold as a scrap for ₹6,000 in the market. In a decision model used to analyze the reworking proposal, the opportunity cost should be taken as

- (a) ₹16,000
- (b) ₹6,000
- (c) ₹30,000
- (d) ₹20,000

(7) The sales and profit of a firm for the year 2021 are ₹1,50,000 and ₹20,000 and for the year 2022 are ₹1,70,000 and ₹ 25,000 respectively. The P/V Ratio of the firm is

- (a) 15%
- (b) 20%

$$PV \text{ ratio} = \frac{\Delta \text{ profit}}{\Delta \text{ sales}} = \frac{5000}{20000} = 25\%$$

<u>Products</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>
Selling price	100	150	200	300
Variable cost	50	70	100	125
Contribution	50	80	100	175
Raw mat. used	1	2	5	7
contb ⁿ / kg of RM	£50	£40	£20	£25
Rank	I	II	IV	III
	E	F H	G.	

- (c) 25%
- (d) 30%

(8) A company has a break-even point when sales are ₹ 3,20,000 and variable cost at that level of sales are ₹ 2,00,000. How much would contribution margin increase or decrease if variable expenses are dropped by ₹ 30,000?

- (a) Increase by 27.5%

$$\text{BEP } TC = \frac{TR}{1} = 320000$$

- (b) Increase by 9.375%

$$\begin{array}{r|l} TC & = 320000 \\ - VC & \underline{200000} \\ \hline FC & \underline{120000} \end{array} \quad \Bigg| \quad \Bigg| \quad 0$$

- (c) Decrease by 9.375%

- (d) Increase by 37.5%

(9) A radio manufacturer finds that while it costs ₹ 16.25 per unit to make a component, the same is available in the market at ₹ 5.75 each. Continuous supply is also fully assured. The break-up of costs per unit is as follows:

Materials: ₹ 2.75 (CRC)

Labour: ₹ 1.75 (CRC)

Other variable expenses: ₹ 0.50 (CRC)

Depreciation & other fixed costs: ₹ 1.25 (FRC)

$$\text{PU ratio} = \frac{\text{Cont}^n}{\text{sales}} = \underline{\underline{0}}$$

The best option for the manufacturer will be

- (a) To make

Relevant costs

- (b) To buy

$$= 2.75 + 1.75 + 0.5$$

- (c) To sell

$$= \underline{\underline{ES}}$$

- (d) None of the above

$$\text{PU ratio} = \frac{30000}{320000} \times 100 = \underline{\underline{9.375\%}}$$

(10) Dec 2021: In a purely competitive market, 10,000 pocket transistors can be manufactured and sold and certain profit is generated. It is estimated that ~~20,000~~ 2000 pocket transistors need to be manufactured and sold in a monopoly market to earn the same profit. Profit under both conditions is targeted at ₹ 2,00,000. The variable cost per transistor is ₹ 100 and total fixed costs are ₹ 37,000. Unit selling price per transistor under monopoly condition will be:

- (a) ₹ 218.50

$$\text{TVC} = 2000 \times 100 = 200000 \quad \text{SP} = \frac{437000}{2000}$$

- (b) ₹ 234.50

$$\text{TFC} = \frac{37000}{2000}$$

- (c) ₹ 267.25

$$\begin{array}{r} TC \\ + \text{profit} \\ \hline \text{sales} \end{array} \quad \begin{array}{r} 200000 \\ 37000 \\ \hline 237000 \\ 200000 \\ \hline 437000 \end{array} \quad \begin{array}{r} 2000 \\ \hline = 218.50 \end{array}$$

- (d) ₹ 274.35

(11) Mr. Mahesh has a sum of ₹ 3,00,000 which invested in a business. He wishes for a 15% return on his fund. It is revealed from the present cost data analysis that the variable cost of operation is 60% of sales and fixed costs are ₹ 1,50,000 p.a. On the basis of this information, you are required to find out the sales volume to earn a 15% return.

- (a) ₹ 4.875 Lakhs

$$\text{Return} = 3L \times 15\% = \underline{\underline{45,000}}$$

VR ratio = 40%

FC = 150000 PVR = 40%
 profit = 45000 Applications of Marginal Costing in Short Term Decision Making

$$\frac{150000 + 45000}{40\%} = \underline{\underline{₹ 487500}}$$

- (b) ₹ 4.675 Lakhs
- (c) ₹ 4.775 Lakhs
- (d) ₹ 5.875 Lakhs

(12) A radio manufacturer finds that it costs ₹ 6.25 per unit to make component M-140 and the same is available in the market at ₹ 5.75 each. Continuous supply is also fully assured. The break-down cost per unit as follows: Materials ₹ 2.75, Labour ₹ 1.75 other variable expenses ₹ 0.50, Depreciation and other fixed cost ₹ 1.25. What would be your decision, if the supplier offered the component at ₹ 4.85 per unit?

- (a) Make
- (b) Buy
- (c) Sell
- (d) None of the above

Tax irrelevant

$$\text{Relevant cost} = 2.75 + 1.75 + 0.5 = \underline{\underline{₹ 5}}$$

$$\text{Supplier price} = \underline{\underline{₹ 4.85}}$$

(13) A firm has given the following data:

Fixed expenses at 50% ₹ 15,000, Fixed expenses when factory is close down ₹ 10,000, Additional expenses in closing down ₹ 1,000, Production at 50% capacity 5,000 units, contribution per unit ₹ 1. Advise whether to run the factory or close it down:

- (a) Close
- (b) Run
- (c) Continue
- (d) None of the above

$$\text{Total cost if Business is shut down} = 10000 + 1000 = \underline{\underline{₹ 11000}}$$

If shut down loss = 11000

(14) A company manufactures and sells three types of product namely A, B and C. Total sales per month is ₹ 80,000 in which the share of these three products are 50%, 30% and 20% respectively. The variable cost of these products is 60%, 50% and 40% respectively. The combined P/V Ratio will be:

- (a) 49%
- (b) 48%
- (c) 47%
- (d) 50%

If continued:

$$\text{At 5000 units contribution} = 1 \times 5000 = 5000$$

$$- \text{FC} \quad \underline{\underline{(15000)}}$$

loss: (10000)

Answers:

1	c	8	b
2	c	9	a
3	c	10	a
4	a	11	a
5	b	12	b
6	b	13	b
7	c	14	c

$$A = 80000 \times 50\% = 40,000$$

$$B = 80000 \times 30\% = 24,000$$

$$C = 80000 \times 20\% = 16,000$$

$$\underline{\text{VC ratio}} + \text{PV ratio} = 100\%$$

A	60%	+	40%	= 100%
B	50%	+	50%	= 100%
C	40%	+	60%	

Contribution \rightarrow PV ratio \times sales

$$A = 40\% \times 40000 = 16000$$

$$B = 50\% \times 24000 = 12000$$

$$C = 60\% \times 16000 = 9600$$

$$\text{Total contb}^n : \underline{\underline{37,600}}$$

$$\begin{aligned} \text{PV ratio (combined)} &= \frac{37600}{80000} \times 100 \\ &= \underline{\underline{47\%}} \end{aligned}$$

Chapter 5 Transfer Pricing

1. Multiple Choice Questions

- (1) Which one of the following is not considered as a method of Transfer Pricing?
- (a) Negotiated Transfer Pricing ✓
 - (b) Market Price Based Transfer Pricing ✓
 - ✓ (c) Fixed Cost Based Transfer Pricing
 - (d) Opportunity Cost Based Transfer Pricing
- (2) Method of pricing, when two separate pricing methods are used to price transfer of products from one subunit to another, is called:
- ✓ (a) Dual pricing
 - (b) Functional pricing
 - (c) Congruent pricing
 - (d) Optimal pricing
- (3) The Eastern division sells goods internally to the Western division of the same company. The quoted external price in industry publications from a supplier near Eastern is ₹200 per ton plus transportation. It costs ₹ 20 per ton to transport the goods to Western. Eastern's actual market cost per ton to buy the direct materials to make the transferred product is ₹100. Actual per ton direct labour is ₹50. Other actual costs of storage and handling are ₹ 40. The company president selects a ₹220 transfer price. This is an example of: *western*
- 100 + 50 + 40 = 190*
- ₹200 + ₹20 = ₹220/ton*
- Eastern → Western Division*
- (a) Negotiated transfer pricing.
 - (b) Cost plus 20% transfer pricing.
 - (c) Cost-based transfer pricing.
 - ✓ (d) Market-based transfer pricing.
- (4) Division P transfers its output to Division Q at variable cost. Once a year P charges a fixed fee to Q, representing an allowance for P's fixed costs. This type of transfer pricing system is commonly known as:
- (a) Dual pricing
 - (b) Negotiated transfer pricing
 - (c) Opportunity cost based transfer pricing

- (d) Two-part tariff transfer pricing
- (5) In which of the following circumstances is there a strong argument that profit centre accounting is a waste of time?
- (a) When the transferred item is also sold on an external market
- (b) When the supplying division is based in a different country to head office
- (c) If the transferred item is a major product of the supplying division
- (d) If there is no similar product sold on an external market and the transferred item is a major product of the supplying division
- (6) Popular method of transfer pricing is the _____.
- (a) Opportunity cost pricing
- (b) Negotiated pricing
- (c) Market based pricing
- (d) Cost based pricing
- (7) Division under transfer pricing system is treated as _____.
- (a) Profit centre
- (b) System centre
- (c) Investment centre
- (d) Cost centre
- (8) Which of the following is/are not method of transfer pricing?
- (a) Total cost method ✓
- (b) Marginal cost method ✓
- (c) Market price method ✓
- (d) Skimming price method

Answers:

1	c
2	a
3	d
4	d
5	d
6	c
7	a
8	d

2. State True or False

- (1) Transfer pricing technique is a major issue in the current business world. *True*
- (2) Transfer pricing plays a very important in international taxation also, as by fixing fair transfer prices one can avoid a lot of tax burden. *True*
- (3) Transfer prices should ~~not~~ help in the accurate measurement of divisional performance (profitability). *False*
- (4) Profit centre managers tend to put their own profit performance above everything else. *True*
- (5) The price of a comparable product or service in the market can be seen as an objective basis for the transfer price between divisions. *True*
- (6) Globalization and the rapid growth of international trade has made inter-company pricing an everyday necessity for the vast majority of businesses. *True*
- (7) There are two basic issues relating to transfer prices in case of multinational companies having divisions in different countries. *True (Compliance & Tax)*
- (8) ~~Cross training cannot~~ be helpful in proper utilization of work force. *False*
- (9) A Profit Centre is a company's department that is responsible for the profits of the company. *True*
- (10) Divisional Autonomy is the degree of freedom a division manager can exercise in decisions making. *True*

Answers:

1	True
2	True
3	False
4	True
5	True
6	True
7	True
8	False
9	True
10	True

3. Fill in the Blanks

- (1) Many firms use cost plus negotiated transfer prices even though they do not lead to optimal fixed cost results for individual products. (1)
- (2) Transfer Pricing is not considered as a method of Transfer Pricing
- (3) There are different Tax rates rates in different countries.

external market

- (4) In the absence of a _____ for the intermediate product, the theoretically correct transfer price can be established.
- (5) While _____ transfer pricing is concerned with fairly compensating an internal division for products it has produced and supplied to another division, _____ transfer pricing is usually set according to another purpose, such as lowering a company's worldwide taxes.
- (6) The _____ principle requires that compensation for any intercompany transaction conform to the level that would have applied had the transaction taken place between unrelated parties, all other factors remaining the same.
- (7) The _____ may deliberately declare low profits in an operating country to prevent local businesses setting up in competition.
- (8) _____ are therefore responsible for all operations (production, sales and so on) relating to their product, the functional structure being applied to each division.
- (9) _____ is a topic that one needs to know from both a theoretical standpoint and a numerical standpoint.
- (10) As managers become more proficient in _____ they become more qualified for higher management positions.
- (11) Market value as a transfer price has certain disadvantages:
- The market price might be _____, induced by adverse economic conditions, say.
 - There might be an _____ external market, so that if the transferring division tried to sell more externally, it would have to reduce its selling price.
 - Many products do not have _____.
- (12) Transfer prices based on full cost are appropriate if top management treats the divisions like _____.
- (13) Many firms base transfer prices on _____ since they are easy to understand and convenient to use.
- (14) When _____ is used to measure divisional performance, the objective is to maximize the total amount of _____, not to maximize the overall _____ figure.
- (15) A _____ transfer price is one agreed upon between the buying and selling divisions that reflects unusual or mitigating circumstances.
- (16) If the selling division has _____ a transfer price based on _____ would be an appropriate transfer price, although it would hurt the performance of the selling division.

Answers:

- Cost plus
- Fixed Cost Based
- Income tax
- Competitive market
- Domestic, International



- (6) arm's length
- (7) MNE
- (8) Divisional managers
- (9) Transfer pricing
- (10) Decision making
- (11) (A) temporary (B) imperfect (C) an equivalent market price
- (12) cost centers
- (13) cost
- (14) RI, residual income, profit
- (15) negotiated
- (16) excess capacity, variable cost

4. Multiple Choice Questions

- (1) M Group has two divisions, Division P and Division Q. Division P manufactures an item that is transferred to Division Q. The item has no external market and 6,000 units produced are transferred internally each year. The costs of each division are as follows?

	Division P	Division Q
Variable Cost	₹ 100 per unit	120 per unit
Fixed cost each year	₹1,20,000	90,000

Head Office management decided that a transfer price should be set that provides a profit of ₹ 30,000 to Division P. What should be the transfer price per unit?

(a) ₹ 145

✓ (b) ₹ 125

(c) ₹ 120

(d) ₹ 135

Div P → Div Q

$$\begin{array}{r}
 \text{TVC} = 100 \times 6000 = 600000 \\
 \text{TFC} = 120000 \\
 \text{profit} = 30000 \\
 \hline
 \frac{720000}{6000} = ₹ 120 \\
 \hline
 \frac{750000}{6000} = ₹ 125
 \end{array}$$

- (2) Minimax Ltd. fixes inter - divisional transfer prices for its products on the basis of cost plus a return on investment in the division. The budget for division X for 2022-23 appears as under -

Fixed Assets	₹ 8,00,000	} CE = 8L + 5L + 2L = 15L
Current Assets	5,00,000	
Debtors	2,00,000	
Annual fixed cost of the division	8,00,000	
Variable cost per unit of the product	10	

Budgeted volume 4,00,000 units per year

Desired ROI 28%

Transfer price for division X is

- ✓ (a) ₹ 13.05
 (b) ₹ 10.70
 (c) ₹ 8.70
 (d) ₹ 14.70

Answers:

1	b
2	a

$$TVC = 400000 \times 10$$

$$= 4000000$$

$$TFC = \underline{800000}$$

$$TC = \underline{4800000}$$

$$ROI = 28\% \text{ of } 156420000$$

$$\text{Total price} = \underline{52,20,000}$$

$$\begin{aligned} \text{price per unit} &= \frac{5220000}{400000} \\ &= \underline{\underline{13.05}} \end{aligned}$$

Standard Costing and Variance Analysis

1. Multiple Choice Questions

- (1) Which of the following is true of standards?
- (a) Standards represent a benchmark or a norm ✓
 - (b) Standards relate to input quantity ✓
 - (c) Standards relate to input cost
 - (d) All of the above
- (2) Standards that can be attained only under the best circumstances are referred to as:
- (a) Attainable standards
 - (b) Budget standards
 - (c) Ideal standards
 - (d) Practical standards
- (3) Who is most likely to be held responsible for a material price variance?
- (a) Line workers
 - (b) Production supervisors
 - (c) Purchasing managers
 - (d) Production schedulers
- (4) Cost variance is the difference between
- (a) The standard cost and marginal cost
 - (b) The standards cost and budgeted cost
 - (c) The standards cost and the actual cost
 - (d) None of these
- (5) Standard costing is a tool, which replaces the bottleneck of the _____ costing.
- (a) Present
 - (b) Future
 - (c) Historical
 - (d) None of the above

(6) If standard cost > actual, then it is

- (a) Not favourable
- (b) Favourable
- (c) Neither favourable nor not favourable
- (d) None of the above

$SC < \text{actual} \rightarrow \text{unfavourable}$
 $SC > \text{actual} \rightarrow \text{favourable}$

(7) From cost control point of view the standard most commonly used is:

- (a) Expected standard
- (b) Theoretical standard
- (c) Normal standard
- (d) Basic standard

(8) When more than one material is used in the manufacture of a product, which of the following variances arises:

- (a) Material yield variance
- (b) Material mix variance
- (c) Material price variance
- (d) Material usage variance

(9) Which of the following equations can be used to calculate a material quantity variance?

- (a) $(AQ \times AP) - (AQ \times SP)$ X
- (b) $(AP \times SP) - (AQ \times SP)$ X
- (c) $(AQ \times SP) - (SQ \times SP)$
- (d) $(AQ \times SP) - (AQ \times AP)$

$$\frac{(SQ - AQ) \times SP}{SQ \times SP - AQ \times SP}$$

(10) Which of the following equations can be used to calculate a material price variance?

- (a) $(AQ \times AP) - (AQ \times SP)$
- (b) $(AP \times SP) - (AQ \times SP)$
- (c) $(AQ \times SP) - (SQ \times SP)$
- (d) $(AQ \times SP) - (AQ \times AP)$

$$\frac{(SP - AP) \times AQ}{SP \times AQ - AP \times AQ}$$

(11) Which of the following is not likely to be a reason of unfavourable direct labour efficiency variance?

- (a) Increase in direct materials prices
- (b) Frequent break downs during production process
- (c) Lack of proper supervision
- (d) Use of old, outdated or faulty equipment

- (12) Which of the following is a purpose of standard costing?
- (a) To determine profit at different levels
 - (b) To determine break-even point
 - (c) To control costs
 - (d) To allocate cost with more accuracy
- (13) Which of the following activities is the Standard Costing System used for?
- (a) It is a basis for implementing cost control and fixing the price of products through variance analysis
 - (b) It helps to ascertain the cost-volume relationship between products manufactured by the business
 - (c) It helps to establish the breakeven point for the products manufactured by the company
 - (d) None of the above
- (14) Which of the following activities is true under the Standard Costing System?
- (a) The overhead volume variance is always beneficial ✗
 - (b) The idle time variance is never favourable
 - (c) To calculate the overall costs, a company can either use budgetary control or standard costing but not both of those techniques
 - (d) The overhead efficiency variance plus overhead expense variance is equal to the overhead budget variance for variable overheads
- (15) A standard cost is a carefully _____ unit cost which is prepared for each cost unit.
- (a) Pre-determined
 - (b) Absorbed
 - (c) Apportioned
 - (d) None
- (16) Setting of standard involves effective utilization of _____.
- (a) Men
 - (b) Material
 - (c) Machines
 - (d) All of the above
- (17) The standard cost card contains quantities and costs for
- (a) Direct material only.
 - (b) Direct labour only.
 - (c) Direct material and direct labour only.

- (d) Direct material, direct labour, and overhead.
- (18) Standards differ from budgets in that:
- (a) Budgets but not standards may be used in valuing inventories.
 - (b) Budgets but not standards may be journalized and posted.
 - (c) Budgets are a total amount and standards are a unit amount.
 - (d) Only budgets contribute to management planning and control.
- (19) Standard Costs:
- (a) Are imposed by governmental agencies.
 - (b) Are predetermined unit costs which companies use as measures of performance.
 - (c) Can be used by manufacturing companies but not by service or not-for-profit companies.
 - (d) All of the above.
- (20) The advantages of standard costs include all of the following except:
- (a) Management by exception may be used.
 - (b) Management planning is facilitated.
 - (c) They may simplify the costing of inventories.
 - (d) Management must use a static budget.
- (21) Normal standards:
- (a) Allow for rest periods, machine breakdowns, and setup time.
 - (b) Represent levels of performance under perfect operating conditions.
 - (c) Are rarely used because managers believe they lower workforce morale.
 - (d) Are more likely than ideal standards to result in unethical practices.
- (22) The setting of standards is:
- (a) A managerial accounting decision.
 - (b) A management decision.
 - (c) A worker decision.
 - (d) Preferably set at the ideal level of performance.
- (23) Which of the following is correct about the total overhead variance?
- (a) Budgeted overhead and budgeted overhead applied are the same.
 - (b) Total actual overhead is composed of variable overhead, fixed overhead, and period costs.
 - (c) Standard hours actually worked are used in computing the variance.

- ✓ (d) Standard hours allowed for the work done is the measure used in computing the variance.
- (24) Which of the following is incorrect about variance reports?
- (a) They facilitate "management by exception." ✓
 - ✓ (b) They should only be sent to the top level of management. ✓
 - (c) They should be prepared as soon as possible. ✓
 - (d) They may vary in form, content, and frequency among companies. ✓
- (25) Which of the following is incorrect about a standard cost accounting system?
- (a) It is applicable to job order costing.
 - (b) It is applicable to process costing.
 - ✓ (c) It reports only favourable variances.
 - (d) It keeps separate accounts for each variance.
- (26) Generally accepted accounting principles allow a company to:
- (a) Report inventory at standard cost but cost of goods sold must be reported at actual cost.
 - (b) Report cost of goods sold at standard cost but inventory must be reported at actual cost. ✗
 - ✓ (c) Report inventory and cost of goods sold at standard cost as long as there are no significant differences between actual and standard cost. ✓
 - (d) Report inventory and cost of goods sold only at actual costs; standard costing is never permitted.

Answer:

1	d	5	c	9	c	13	a	17	d	21	a	25	c
2	c	6	b	10	a	14	b	18	c	22	b	26	c
3	c	7	a	11	a	15	a	19	b	23	d		
4	c	8	b	12	c	16	d	20	d	24	b		

2. State True or False

- (1) One of the most important phases of responsibility accounting is establishing standard costs and evaluating performance by comparing actual costs with the standard costs. *True*
- (2) The standards are predetermined and a comparison of standards with actual costs enables to determine the efficiency of the concern. *True*
- (3) The basic purpose of standard costing is to determine efficiency or inefficiency in manufacturing a particular product. *True*

- (4) In budgetary control, the targets of expenditure are set and these targets cannot be exceeded. *True*
- (5) A current standard is a standard which is established for use over a short period of time and is related to current condition. *True*
- (6) The deviations of the actual from the standard is known as 'variances'. *True*
- (7) Material Price Variance (MPV) = (SP - AP) × ~~AQ~~ *False* $MPV = (SP - AP) \times AQ$
- (8) Material Yield Variance (MYV) = (AY - SY) × AC *x False*
- (9) Labour Cost Variance is the difference between the Standard Cost of labour allowed for the actual output achieved and the actual wages paid. *True*
- (10) Fixed Overhead Cost Variance = Recovered Fixed Overheads – Actual Fixed Overheads *True*

Answer:

1	True
2	True
3	True
4	True
5	True
6	True
7	False
8	False
9	True
10	True

3. Fill in the Blanks

- (1) The purpose of standard cost accounting is to control costs and promote efficiency.
- (2) A standard is a norm against which the actual performance can be measured.
- (3) Recognizing the potential problem, most companies set attainable standard that include such factors as lost time and normal waste and spoilage.
- (4) Once the variances have been calculated, those who manage the business have to decide which variances should be investigated.
- (5) The selection of variances for investigation is therefore very much dependent on circumstances and on the person making the selection.
- (6) eff. ratio = Standard hours for actual output ÷ Actual hours worked × 100
- (7) cost variance is the difference between the standards cost and the actual cost.
- (8) Normal Standard allow for rest periods, machine breakdowns, and setup time.

- Labour mix variance*
- (9) _____ is the variance which arises due to change in the composition of a standard group, or, combination of labour force.
- (10) The ~~off allocation basis~~ _____ is how overhead is applied to a product and is typically based on direct labor hours, direct labor rupees or machine hours.

Answer:

- (1) Standard cost
- (2) Standard
- (3) Attainable standards
- (4) Variances
- (5) Investigation
- (6) Efficiency Ratio
- (7) Cost variance
- (8) Normal standards
- (9) Labour mix variance
- (10) Overhead base

4. Multiple Choice Questions

- (1) What is the labour rate variance if standard hours for 100 units of output are 400 @ ₹ 2 per hour and actual hours taken are 380 @ ₹ 2.25 per hour? SH SR
- (a) ₹120 (A) AH AR
- (b) ₹100 (A)
- (c) ₹95 (A) $(SR - AR) \times AH$
- (d) ₹ 25 (F) $(2 - 2.25) \times 380$
- $- 0.25 \times 380 = 95 (A)$
- (2) Standard quantity of material for one unit of output is 10 kgs @ ₹ 8 per kg. Actual output during a given period is 800 units. The standards quantity of raw material
- (a) 8,000 kgs 1 unit : 10 kgs @ ₹ 8
- (b) 6,400 Kgs 800 units = 800 × 10
- (c) 64,000 Kgs = 8000 kg
- (d) None of these
- (3) Standard price of material per kg is ₹ 20, standard usage per unit of production is 5 kg. Actual usage of production 100 units is 520 kgs, all of which was purchase at the rate of ₹ 22 per kg. Material cost variance is
- (a) ₹ 2,440 (A)
- (b) ₹ 1,440 (A)

standard : 1 unit : 5 kg @ £20
100 units : 500 kg @ £20 = £10,000

Actual : 100 units : 520 kg @ £22 = £11,440

$$MCV = £10,000 - £11,440 = \underline{£1,440 (A)}$$

- (c) ₹ 1,440 (F)
- (d) ₹ 2,300 (F)

(4) To produce a particular batch of product, F Corporation paid its workers ₹ 12.00 per hour for 4,000 hours of work. The standards for the quantity of work represented by the batch were ₹ 12.50 per hour and 4,400 hours. What was the labour efficiency variance? AR

- (a) 2,000.00 (F)
- (b) 5,000.00 (F)
- (c) 5,000.00 (A)
- (d) 2,000.00 (A)

$$\frac{(4400 - 4000) \times 12.50}{400 \times 12.50} = 5000 \text{ (F)}$$

$$-4800$$

(5) The firm's direct-labour rate variance was ₹ 4,800 unfavourable. Actual labour was 24,000 direct labour hours, at a cost of ₹ 1,68,000 for 25,000 units of finished product requiring 1 hour of direct labour each, at standard. What is the standard rate per direct labour hour?

- (a) ₹ 7.20
- (b) ₹ 6.80
- (c) ₹ 7.00
- (d) Cannot be determined from the information given

$$ALH = 24000 \quad SLH = 25000$$

$$AL \text{ cost} = 168000$$

$$ALR = 168000 / 24000 = ₹ 7$$

(6) During the month of December actual direct labour cost amounted to ₹ 39,550, the standard direct labour rate was ₹ 10 per hour and the direct labour rate variance amounted to ₹ 450 favourable. The actual direct labour hours worked was:

- (a) 3,955 hours
- (b) 4,000 hours
- (c) 3,910 hours
- (d) 4,500 hours

$$SR = ₹ 10$$

$$450 + 39550 = 10 \times AH$$

$$40000 = 10 \times AH$$

$$40000 / 10 = AH$$

$$AH = 4000$$

(7) XYZ factory working for 50 hours per week employs hundred workers on a job work. The standard output is 200 units per gang hour and standard rate is ₹ 1 per hour. During a week in June, five employees were paid @ ₹ 1.20 per hour and ten employees were paid @ 80 paise per hour. Rest of the employees was paid @ standard hour rate. The actual number of units produced was 10,200. Determine labour cost variance

- (a) ₹ 100 favourable
- (b) ₹ 150 unfavourable
- (c) ₹ 150 favourable
- (d) ₹ 100 unfavourable

(8) In producing product ZZ, 14,800 direct labor hours were used at a rate of ₹ 8.20 per hour. The standard was 15,000 hours at ₹ 8.00 per hour. Based on these data, the direct labour:

- (a) Quantity variance is ₹ 1,600 favourable.
- (b) Quantity variance is ₹ 1,600 unfavourable.



$$\begin{aligned}
 \text{LEV} &= \frac{(\text{SLH} - \text{ALH}) \times \text{AR}}{8} \\
 &= \frac{(15,000 - 14,800) \times 8}{8} \\
 &= \underline{\underline{1600 \text{ (F)}}}
 \end{aligned}$$

Standard output : 200 units \rightarrow 1 hour @ £1 x 100

$$\begin{aligned}
 \text{Actual} &= 5 \times 1.20 \times 50 + 10 \times 0.80 \times 50 + 85 \times 1 \times 50 \\
 &= 300 + 400 + 4250 \\
 &= \underline{\underline{4950}} \text{ (actual wages paid)}
 \end{aligned}$$

$$\text{Standard hours for actual output} = \frac{10200}{200} = \underline{\underline{51 \text{ hours}}}$$

$$\text{Standard wages} = 51 \text{ hours} \times \text{£1} \times 100 = \underline{\underline{5100}}$$

$$\begin{aligned}
 \text{Labour cost variance} &= \text{SC for AO} - \text{AC} \\
 &= 5100 - 4950 \\
 &= \underline{\underline{150 \text{ (F)}}}
 \end{aligned}$$

$$LRV = (SR - AR) \times AH$$

$$-4800 = (SR - 7) \times \underline{24000}$$

$$\frac{-4800}{24000} = SR - 7$$

$$-0.2 = SR - 7$$

$$\textcircled{SR} = -0.2 + 7 = \underline{\underline{6.8}}$$

- (c) Price variance is ₹ 2,960 favourable.
- (d) Price variance is ₹ 3,000 unfavourable.

Answer:

1	c
2	a
3	b
4	b
5	b
6	b
7	c
8	a

Forecasting, Budgeting and Budgetary Control

1. Multiple Choice Questions

- (1) What is the name given to a budget that has been prepared by re-evaluating activities and comparing the incremental costs of those activities with their incremental benefits?
- (a) Incremental budget
 - (b) Rolling budget
 - (c) Zero base budget
 - (d) Flexible budget
- (2) A budget is an instrument of management used as an aid in the
- (a) Planning ✓
 - (b) Programming ✓
 - (c) Control of business activity ✓
 - (d) All of the above
- (3) Following may be regarded as a summary budget
- (a) Production budget
 - (b) Master budget
 - (c) Cash budget
 - (d) Sales budget
- (4) Purchases budget is prepared using the information from
- (a) Capital expenditure budget
 - (b) Materials budget
 - (c) Both (A) and (B)
 - (d) None of the above
- (5) Following budget may be compiled on departmental basis
- (a) Production budget
 - (b) Purchase budget

- (c) Materials budget
(d) All of the above
- (6) Production budget is based upon
(a) Sales budget ✓
(b) Factory capacity ✓
(c) Availability of raw material and labour ✓
(d) All of the above ✓
- (7) Budget includes
(a) Income
(b) Expenditure
(c) Employment of capital ✓
(d) All of the above
- (8) Functional budget is subsidiary to
(a) Variable budget ✓
(b) Fixed budget ✓
(c) Master budget ✓
(d) All of the above ✓
- (9) A budget should be _____
(a) Rigid ✓
(b) Flexible
(c) Both (A) and (B)
(d) None of the above
- (10) The object of budgetary control is _____
(a) Planning ✓
(b) Forecasting
(c) Organizing
(d) Directing
- (11) The budget which is dynamic is _____.
(a) Flexible budget ✓
(b) Sales budget
(c) Cash budget
(d) Purchase budget
- (12) The process of _____ helps in the control of

- (a) Cost of production ✓
(b) Liquidity ✓
(c) Capital Expenditure ✓
✓(d) All of the above
- (13) Plant utilization budget and Manufacturing overhead budgets are types of
(a) Production budget
(b) Sales budget
✓(c) Cost budget
(d) None of the above
- (14) R&D budget and Capital expenditure budget are examples of
(a) Short-term budget
(b) Current budget
✓(c) Long-term budget
(d) None of the above
- (15) The scare factors is also known as
✓(a) Key factor
(b) Abnormal factor
(c) Linking factor
(d) None of the above
- (16) A budgeting process which demands each manager to justify his entire budget in detail from beginning is
(a) Functional budget
(b) Master budget
✓(c) Zero base budgeting
(d) None of the above
- (17) While preparing sales budget, which of the following factors are considered?
(a) Non-operational factors ✗
✓(b) Environmental factors
(c) Both a and b
(d) None of the above
- (18) _____ provides an estimate of the capital amount that may be required for buying fixed assets needed for meeting production requirements.
(a) Production budget

- (b) Cash budget
✓ (c) Capital expenditure budget
(d) None of the above
- (19) _____ is designed after assessment of the volume of output to be produced during budget period.
✓ (a) Cost budget
(b) Sales budget
(c) Production budget
(d) None of the above
- (20) _____ is the first step of budgetary system and all other budgets depends on it.
(a) Cost budget
✓ (b) Sales budget
(c) Production budget
(d) None of the above
- (21) _____ also known as subsidiary budgets.
(a) Master budget
✓ (b) Functional budget
(c) Cost budget
(d) None of the above
- (22) _____ contains the picture of total plans during the budget period and it comprises information relating to sales, profit, cost, production etc.
✓ (a) Master budget
(b) Functional budget
(c) Cost budget
(d) None of the above
- (23) _____ is stated as a budget which is made to change as per the levels of activity attained.
(a) Fixed budget
✓ (b) Flexible budget
(c) Both a and b
(d) None of the above
- (24) _____ is prepared for single level of activity and single set of business conditions.
✓ (a) Fixed budget
(b) Flexible budget

- (c) Both a and b
(d) None of the above
- (25) On the basis of period, budgets may be classified into _____ groups.
(a) Five
(b) Four
 (c) Three
(d) Two
- (26) Which of the following statements are not true about budget, budgeting & budgetary control?
(a) Budgetary control works on the basis of best option T
(b) Budget is one of the important mediums of communication T
(c) Budgeting develops the quality of objectivity in planning T
 (d) None of the above
- (27) Which of the following statements are true about budget, budgeting & budgetary control?
(a) Budgeting is business estimates for future periods T
(b) Budget is the process of preparing business estimates T
(c) Budgetary control is the means to achieve performance on the basis of budget T
 (d) None of the above
- (28) Which of the following statements are true about budget, budgeting & budgetary control?
(a) Budgetary control is a wider concept whereas Budget and budgeting are narrower concepts T
(b) If there is budgeting or budget, it is not necessary that there should be budgetary control also T
(c) If there is budgetary control, budgeting and budget are must T
 (d) All of the above
- (29) According to George R. Terry, _____ may be described as a process of finding out what is being done and comparing actual results with the corresponding budget data in order to approve accomplishment.
 (a) Budgetary control
(b) Budget
(c) Budgeting
(d) None of the above
- (30) Which of the following are not the objectives of Budgeting?
 (A) To express the objectives of the firms in qualitative terms.

- (B) To prepare base for evaluation of work performance. *T*
- (C) To co-ordinate organizational and managerial units of the firm. *False*
- (D) To develop a strong appraisal of objectives and policies of firm. *True*
- (a) A, B and C
- (b) B, C and D
- (c) *D, C and A*
- (d) None of the above

Answers:

1	c	5	a	9	b	13	c	17	b	21	b	25	c	29	a
2	d	6	d	10	a	14	c	18	b	22	a	26	d	30	d
3	b	7	c	11	b	15	a	19	a	23	b	27	c		
4	b	8	d	12	d	16	c	20	b	24	a	28	d		

2. State True or False

- (1) A budget is often thought of as a financial plan. *True*
- (2) Forecast is mainly concerned with an assessment of probable future events. *True*
- (3) Forecast means estimation of future trends and outcomes, based on the past and present data. *True*
- (4) Portraying with precision, the overall aims of the business and determining targets of performance for each section or department of the business. *True*
- (5) Objectives should not be defined precisely.
- (6) Key Factor is also called as "Limiting Factor" or Governing Factor. *True*
- (7) Formulation of a budget usually requires part time services of a senior executive *False*
- (8) The Budget manual is a schedule, document or booklet, which shows in a written form, the budgeting organization and procedure. *True*
- (9) The budget period is the length of time for which a budget is prepared and employed. *True*
- (10) The standards of activity levels for future period should be laid down. *True*

Answer:

1	True
2	True
3	True
4	True
5	False
6	True

7	False
8	True
9	True
10	True

3. Fill in the blanks:

- For the purpose of effective budgetary control, it is imperative on the part of each entity to have definite plan.
- The budget figures should be realistic and represent logically attainable goals.
- A fixed budget is designed to remain unchanged irrespective of the level of activity actually attained.
- A flexible is a budget which is designed to change in accordance with the various level of activity actually attained.
- According to the principles that guide the preparation of the flexible budget a series of fixed budgets are drawn for different levels of activity.
- functional budget are budgets prepared for each department or process within an organisation.
- cash budget is the most important of the entire functional budget.
- The alternative solution presented to the problem of inefficiency in the base is termed ZBB or sometimes priority-based budgeting.
- Performance Budget has been defined as a "budget based on functions, activities and projects."
- A Planning programming budgeting system is an approach that seeks to separate the policy planning aspects of budgeting from the short-term financial planning process.

Answer:

- "Plan of organization."
- Goals
- Fixed budget
- Flexible budget
- Flexible budget
- Functional budgets
- Cash budget
- Zero-based budgeting (ZBB)
- Performance Budget
- Planning, programming budgeting system (PPBS)



4. Multiple Choice Questions

- (1) Production at 60% activity is ₹ 600 units, if flexible budget needs to be calculated at 80% activity what will be units produced?
- (a) ~~₹ 800~~
 (b) ₹ 600
 (c) ₹ 1200
 (d) ₹ 1000
- (2) Given Production at 60% activity, 600 units, Material ₹ 50 per unit, Labour ₹ 20 per unit, Direct expenses Rs 5 per unit, Factory overheads ₹ 20,000 (60% variable) and Administration expenses Rs 15,000 (60% fixed). What will be the total cost per unit for production at 80% capacity?
- (a) ₹ 1,01,000
 (b) ₹ 126.25
 (c) ₹ 122
 (d) ₹ 1,22,000
- (3) A factory produces two types of articles Y and Z. Article Y takes 8 hours to make and Z takes 16 hours. In a month (25 days x 8 hours) 600 units of Y and 400 units of Z are produced. Given budgeted hours 8000 per month and men employed are 50. Determine Activity ratio, Capacity ratio and efficiency ratio.
- (a) 112%, 140%, 140%
 (b) 140%, 112%, 140%
 (c) 140%, 140%, 112%
 (d) None of the above
- (4) Given the budgeted output in second quarter are 8,000 units. In the first quarter, Fixed overheads were ₹ 40,000; Variable overheads were ₹ 5 per unit (₹ 40,000) and semi variable were ₹ 20,000 (60% varying @ ₹ 3 per unit). Determine the total manufacturing overhead budget for the second quarter.
- (a) ~~₹ 1,12,000~~
 (b) 1,12,000 units
 (c) Insufficient data
 (d) None of the above
- (5) ABC Company plans a sale of 96,000 units of TV product line in the first fiscal quarter, 1,20,000 TV units in second quarter, and 1,32,000 units and 1,50,000 units in third and fourth quarter, and 1,56,000 units in the first quarter of next year. Given that at the beginning of first fiscal quarter, the company has 16,000 units in stock. Also, at the end of each quarter, ABC Company wants to maintain an inventory equal to one-sixth of the

variable overhead = $5 \times 8000 = \text{£}40000$
 fixed overhead = $\text{£}40000$

semivariable

variable = $3 \times 8000 = \text{£}24000$

Fixed = $40\% \times 20,000 = \text{£}8000$

£112000

Particulars	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr of next year
Planned sales	96,000	1,20,000	1,32,000	1,50,000	1,56,000
opening stock	16,000	- 20,000	+		
closing stock	20,000	22,000			
	<u>$96 + 20 - 16$</u>				
	<u>$= 100000 \text{ units}$</u>	<u>122000</u>			

variable costs per unit

	material	=	£50
	labour	=	£20
	DE	=	£5
Factory	OH	=	£20
Adm	OH	=	£10
			<u>£105</u>

$$\begin{aligned} \text{FOH} &= 20,000 \times 60\% \\ &= 12,000 \\ &\quad \underline{600} \\ &= \underline{\underline{£20}} \end{aligned}$$

$$\begin{aligned} \text{Adm OH} &= 15,000 \times 40\% \\ &= \underline{6000} \\ &\quad \underline{600} \\ &= \underline{\underline{£10}} \end{aligned}$$

$$\begin{aligned} \text{Fixed FOH} &= 8000 \\ \text{Fixed AOH} &= 9000 \end{aligned}$$

At 800 units

$$\begin{aligned} \text{VC} &= £105 \times 800 = £84,000 \\ \text{TFC} &= 8000 + 9000 = \underline{\underline{£17,000}} \\ &\quad \underline{\underline{£101,000}} \end{aligned}$$

$$\text{cost per unit} = \frac{101,000}{800} = \underline{\underline{£126.25}}$$

① standard hours for actual production

$$\begin{aligned} Y &= 600 \text{ units} \times 8 \text{ hrs} = 4800 \text{ hrs} \\ Z &= 400 \text{ units} \times 16 \text{ hrs} = \underline{6400 \text{ hrs}} \\ &\quad \underline{\underline{11200 \text{ hrs}}} \end{aligned}$$

② Actual hours = 25 days \times 8 hrs \times 50 = 10,000 hrs

③ Budgeted hours = 8000 hrs

$$\text{Activity ratio} = \frac{\text{SH for AP}}{\text{BH}} = \frac{11200}{8000} = 140\%$$

$$\text{cap. ratio} = \frac{\text{AH}}{\text{BH}} = \frac{10000}{8000} = \underline{\underline{125\%}}$$

$$\textcircled{a} \text{ Efficiency ratio} = \frac{\text{SH for AD}}{\text{AH}} = \frac{11200}{16000} = 112\%$$

sales for the next fiscal quarter. Determine units to be manufactured in first and second quarter of the year.

(a) 10,00,000 and 1,35,000

(b) 10,00,000 and 1,22,000

(c) Insufficient data

(d) None of the above

Answer:

1	a
2	b
3	c
4	a
5	b

capital employed is considered by both RI as well as ROI.

Suppose : eg: Division's assets 4 years ago = ₹ 5,00,000
profit = 1,00,000

$$1^{st} \text{ year} = \frac{100000}{500000} = 20\%$$

$$2^{nd} \text{ year} = \frac{100000}{400000} = 25\%$$

Divisional Performance Measurement

1. Multiple Choice Questions

- (1) A company has two divisions. The divisions are identical in terms of the number and type of machines they have and the operations they carry out. However, one division was set up four years ago and the other was set up one year ago. Head office appraises the division using both return on the investment (ROI) and residual income (RI).
- Which of the following statements is correct in relation to the outcome of the appraisal for each division?
- (a) Both ROI and RI will favour the older division
 - (b) ROI will favour the older division, but RI will treat each fairly
 - (c) RI will favour the newer division and ROI will favour the older division
 - (d) Both RI and ROI will favour the newer division
- (2) Residual income is a better measure for performance evaluation of an investment center manager than return on investment because:
- (a) The problems associated with measuring the assets base are eliminated. ✗
 - (b) Desirable investment decisions will not be rejected by divisions that already have a high ROI.
 - (c) Only the gross book value of assets needs to be calculated.
 - (d) Returns do not increase as assets are depreciated.
- (3) A company that is seeking to increase ROI should attempt to decrease:
- (a) Sales. ✗
 - (b) Turnover. ✗
 - (c) Margin. ✗
 - (d) Average operating assets.
- $ROI \uparrow = \frac{\text{profit/return}}{\text{Capital employed} \downarrow}$
- (4) Which of the following would be considered an operating asset in return on investment computations?
- (a) Land being held for plant expansion. ✗
 - (b) Treasury stock. ✗
 - (c) Accounts receivable.

- (10) Norton and Kaplan argue that balanced scorecard measurements should
- (a) Clearly indicates the person responsible.
 - (b) Be linked.
 - (c) Be reinforcing.
 - ✓(d) Both B. and C.
- (11) Advocates of which of the following theories would be the most likely to criticize the balanced scorecard concept?
- (a) Japanese management theory.
 - (b) Deming's theory of management.
 - (c) JIT management theory.
 - ✓(d) Goldratt's theory of constraints.
- (12) In the Balanced Scorecard, Kaplan and Norton describe four perspectives that need to be balanced for companies to become and remain competitive. Which perspective places more emphasis on investing in employees?
- (a) Financial.
 - (b) Customer.
 - (c) Internal business processes.
 - ✓(d) Learning & growth.
- (13) According to Kaplan & Norton, which of the balanced scorecard perspectives is first in the chain of cause and effect relationships?
- (a) Financial.
 - (b) Customer.
 - (c) Internal business processes.
 - ✓(d) Learning & growth.
- (14) According to Kaplan & Norton, which of the balanced scorecard perspectives serves as the focus of the other perspectives?
- ✓(a) Financial.
 - (b) Customer.
 - (c) Internal business processes.
 - (d) Learning & growth.
- (15) Which of the following is not one of the main parts of the Kaplan-Norton balanced scorecard concept? Balancing:
- (a) Financial and non-financial measurements.
 - ✓(b) Cash flows and non-cash flows.

- (c) Short term and long term measurements.
- (d) Leading and lagging indicators.

Answers:

1	a	4	c	7	c	10	d	13	d
2	b	5	c	8	d	11	d	14	a
3	d	6	a	9	c	12	d	15	b

2. State True or False

- (1) The target return makes no allowance for the different risk of each investment centre. True
- (2) To overcome some of the dysfunctional consequences of ROI, the residual income approach can be used. True
- (3) $RI = \text{Divisional profit} - (\text{Percent capital charge} \times \text{Divisional investment})$ True
- (4) In a market-driven economy many Companies cannot create wealth. False
- (5) EVA was developed by the US consulting firm Stern Stewart & Co True
- (6) Economic value (or 'shareholder value') is defined as 'the present value of the future cash flows of a company, of a particular project or decision'. True
- (7) Positive EVA indicates that a company surpassed the expectations of its shareholders. True
- (8) NOPAT is net operating profit after tax True
- (9) $\text{Cost of debt after tax} = \text{Cost of debt before tax} \times (100 - \text{marginal tax rate})$. True
- (10) Responsibility accounting segregates costs and revenues into areas of responsibility, and a specific manager is made responsible for each area. True

Answers:

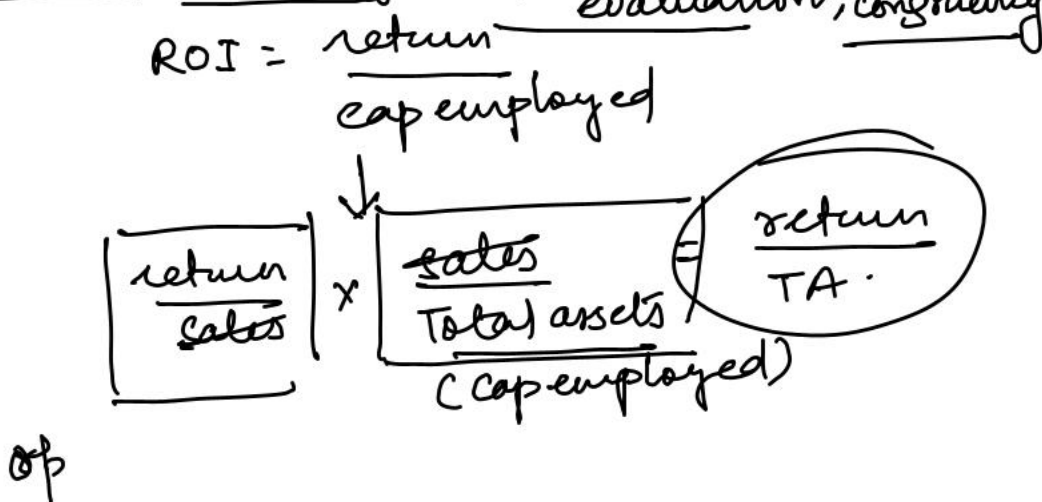
1	True
2	True
3	True
4	False
5	True
6	True
7	True
8	True
9	True
10	True

3. Fill in the Blanks

- (1) When an organization has a centralized structure, top management retains the majority of decision-making authority.
- (2) A decentralized company sets up responsibility centers.
- (3) Most businesses are somewhere along the continuum
- (4) An organisation is a group of people with a common purpose.
- (5) Decentralization means decisions are made at divisional and departmental levels.
- (6) The Du Pont ROI is an extended return on equity model, determined by multiplying the net profit margin with the asset turnover and the equity multiplier.
- (7) financial leverage is the use of debt to acquire additional assets or fund projects.
- (8) Profit ignores the cost of equity capital.
- (9) ROI is a form of ROCE.
- (10) Investments are appraised by discounted cash flow (DCF)
- (11) An Investment centre has control over both profits and investment.
- (12) Decentralization is the delegation of decision making authority to individual divisions of an organization.
- (13) Operating income divided by sales is referred to as operating profit margin
- (14) "Turnover sales" is divided by Total assets
- (15) Return on investment (ROI) can be expressed as a product of two factors: NP margin and asset turnover. This breakdown is often called the _____ formula.
- (16) operating profit less a minimum rate of return on operating assets is referred to as residual income (RI).
- (17) RI encourages investment in projects that would otherwise be rejected under ROI
- (18) In choosing an appropriate transfer price, the three problems of _____, and _____ must be considered simultaneously. autonomy, performance evaluation, congruency

Answers:

- (1) Centralized.
- (2) Decentralized
- (3) Continuum
- (4) Organization
- (5) Decentralization
- (6) DuPont analysis
- (7) Financial leverage
- (8) Profit



- (9) Return on investment (ROI)
- (10) Investments
- (11) Investment center
- (12) Decision making
- (13) Margin
- (14) Sales, Operating assets
- (15) Margin, Turnover, Du Pont
- (16) Operating income
- (17) Return on investment, Residual income
- (18) Goal congruence, Performance evaluation, Autonomy

4. Multiple Choice Questions

- (1) At the end of 20X1, an investment centre has net assets of ₹1m and annual operating profits of ₹ 1,90,000.

$$\frac{10,00,000}{10,00,000}$$

However, the bookkeeper forgot to account for the following:

A machine with a net book value of ₹40,000 was sold at the start of the year for ₹50,000 and replaced with a machine costing ₹ 2,50,000.

Both the purchase and sale are cash transactions. No depreciation is charged in the year of purchase or disposal. The investment centre calculates return on investment (ROI) based on closing net assets.

$$\rightarrow \text{ICMAI} = 10,00,000 - 40,000 = 9,60,000$$

Assuming no other changes to profit or net assets, what is the return on investment (ROI) for the year?

closing net assets

$$\text{ROI} = \frac{190000}{1210000}$$

- (a) 18.8%

$$= 10,00,000 - 40,000 + 2,50,000$$

- (b) 19.8%

- (c) 15.1%

$$= 12,10,000$$

$$\frac{190000}{1210000} \times 100 = 15.70\%$$

- (d) 15.9%

$$\text{ROI as per ICMAI} = \frac{960000}{1210000}$$

- (2) A division is considering investing in capital equipment costing ₹ 2.7m. The useful economic life of the equipment is expected to be 50 years, with no resale value at the end of the period. The forecast return on the initial investment is 15% per annum before depreciation. The division's cost of capital is 7%.

What is the expected annual residual income of the initial investment?

- (a) ₹ 0

$$2.7m = 27,00,000$$

- (b) ₹ 2,70,000

$$\text{depreciation} = \frac{27,00,000}{50} = ₹ 54,000$$

- (c) ₹ 1,62,000

- (d) ₹ 2,16,000

$$\text{Return} = 2700000 \times 15\% = 4,05,000$$

$$\text{Return after depreciation} = 4,05,000 - 54,000 = 3,51,000$$

$$ROI = 351000 - (2700000 \times 7\%) = 351000 - 189000 = \underline{\underline{162000}}$$

(3) The following ratios have been calculated for a company:

<u>Gross profit margin</u>	42%) $28\% \times 65\% = \underline{\underline{18.2\%}}$
<u>Operating profit margin</u>	28%	
<u>Gearing (debt/equity)</u>	40%	
<u>Asset turnover</u>	65%	

What is the return on capital employed for the company?

- (a) 27.3%
- ✓ (b) 18.2%
- (c) 11.2%
- (d) 16.8%

(4) At the start of the year, a division has non-current assets of ₹ 4 million and makes no additions or disposals during the year. Depreciation is charged at a rate of 10% per annum on all non-current assets held at the end of the year. Working capital is ₹ 0.5 million at the start of the year although this is expected to increase by 20% by the end of the year. The budgeted profit of the division after depreciation is ₹ 1.2m.

What is the expected ROI of the division for the year, based on average capital employed?

- ✓ (a) 27.59%
- (b) 26.37%
- (c) 18.39%
- (d) 31.58%

→ 40,00,000

$$\text{Assets at the end} = 40,00,000 - 10\% = \underline{\underline{36,00,000}}$$

$$\text{WC at the end} = 500000 + 20\% = \underline{\underline{6,00,000}}$$

$$\text{Total assets at the beg.} = 40,00,000 + 500000 = 45,00,000$$

$$\text{Total assets at the end} = 36,00,000 + 6,00,000 = 42,00,000$$

$$\text{Avg assets} = \frac{4500000 + 4200000}{2} = 43,50,000$$

$$ROI = \frac{12,00,000}{43,50,000} = \underline{\underline{27.58\%}}$$

Answers:

1	b
2	c
3	b
4	a

Responsibility Accounting

1. Multiple Choice Questions

- (1) Which of the following would be the most appropriate measure to monitor the performance of the manager of a profit centre?
- (a) Gross profit margin ~~X~~
 - (b) Revenue minus all costs ~~X~~
 - (c) Revenue minus controllable costs
 - (d) Return on capital employed
- (2) In a responsibility accounting system, managers are accountable for:
- (a) Incremental costs. ~~X~~
 - (b) Product costs but not for period costs. ~~X~~
 - (c) Costs over which they have control.
 - (d) Variable costs but not for fixed costs.
- (3) In designing a responsibility accounting system, one should keep in mind a certain characteristic of each cost. This characteristic is:
- (a) The degree of cost controllability by the manager;
 - (b) How the cost behaves with respect to volume;
 - (c) The accuracy of cost allocation;
 - (d) All of the above.
- (4) Which of the following statements are true about responsibility accounting?
- (a) Responsibility accounting results in inter-departmental conflicts
 - (b) In responsibility center more focus is paid on products, processes or jobs
 - (c) No focus is paid on controlling costs
 - (d) None of the above
- (5) Which concept (or concepts) listed below is (are) consistent with traditional responsibility accounting?
- (a) Vertical structure.
 - (b) Cross functional measurements.

- (c) Bottom up control.
(d) A and B.
- (6) In profit center revenue represents a monetary measure of output emanating from a profit center in a given period irrespective whether _____
(a) The revenue is realized or not
(b) The output is sold or not
(c) Both A and B
(d) None of the above
- (7) Which type of responsibility center has the greatest amount of autonomy?
(a) Revenue center.
(b) Cost center.
(c) Profit center.
(d) Investment center.
- (8) Which of the following is responsibility center?
(a) Expense center
(b) Profit center
(c) Investment center
(d) All of the above
- (9) The characteristics of a responsibility system for a JIT, or lean organization include
(a) Competition between subsystems.
(b) Independence of subsystems.
(c) Cross functional measurements.
(d) A and B.
- (10) The responsibility centers, for control purposes, may be classified into _____ types.
(a) Five
(b) Three
(c) Four
(d) None of the above
- (11) The area of focus on responsibility center is
(a) Quantum of sales
(b) Quantum of production
(c) Optimum utilization of resources
(d) All of the above

- (12) In responsibility cost accounting the costs in focus are
- (a) Controllable costs
 - (b) Uncontrollable costs
 - (c) Both A and B
 - (d) None of the above
- (13) In responsibility accounting, responsibilities of various groups or individuals are identified in terms of
- (a) Work
 - (b) Revenue
 - (c) Cost
 - (d) All of the above
- (14) Responsibility Accounting is also known as
- (a) Profitability accounting
 - (b) Activity accounting
 - (c) Both A and B
 - (d) None of the above
- (15) Which of the following represent arguments against traditional responsibility accounting?
- (a) It tends to promote competition between segments of a company.
 - (b) It tends to promote subsystem, or local optimization.
 - (c) It tends to ignore many of the interdependencies within an organization.
 - (d) All of the above.
- (16) Which of the following characteristics is not associated with traditional responsibility accounting?
- (a) Assumes optimization of the parts will optimize the whole.
 - (b) Assumes independence of the parts.
 - (c) Places emphasis on the performance of individuals.
 - (d) Attempts to control processes.
- (17) Responsibility Accounting is also known as
- (a) Profitability accounting
 - (b) Activity accounting
 - (c) Both A and B
 - (d) None of the above

- (18) Responsibility Accounting is also called _____ Accounting
- (a) Profitability
 - (b) Management
 - (c) Authority
 - (d) None of these
- (19) Responsibility accounting is used for _____
- (a) cost control
 - (b) planning
 - (c) decision making
 - (d) pricing
- (20) The performance of investment centre is based on _____
- (a) Cost of the centre
 - (b) Profit of the centre
 - (c) Profit and investment of the centre
 - (d) Revenue of the centre
- (21) In responsibility accounting the organization is divided into different _____ centers
- (a) Responsibility
 - (b) Cost
 - (c) Profit
 - (d) None of these
- (22) A cost centre is a segment of the organization where the manager is responsible for _____
- (a) Costs
 - (b) Inputs
 - (c) A or B
 - (d) None of these
- (23) Both costs and revenues are measured in _____ centers
- (a) Cost
 - (b) Profit
 - (c) Revenue
 - (d) All of these
- (24) A centre where the manager is responsible for sales is _____
- (a) Cost centre
 - (b) Revenue centre

- (c) Investment centre
 - (d) Sales Centre
- (25) The performance of investment centre is based on _____
- (a) Cost of the centre
 - (b) Profit of the centre
 - (c) Profit and investment of the centre
 - (d) Revenue of the centre

Answers:

1	c	5	a	9	c	13	d	17	c	21	a	25	c
2	c	6	c	10	b	14	c	18	a	22	c		
3	a	7	d	11	c	15	e	19	a	23	b		
4	a	8	d	12	a	16	d	20	c	24	b		

2. State True or False

- (1) Responsibility accounting is the system for collecting and reporting revenue and cost information by areas of responsibility. *True*
- (2) A responsibility accounting system produces responsibility reports that assist each successively higher level of management in evaluating the performances of subordinate managers and their respective organizational units. *True*
- (3) A key task of the management accountant is to create accounting systems that ensure that costs are incurred in accordance with expectations. *True*
- (4) Responsibility reports for subordinate managers and their immediate supervisors normally include comparisons of actual results with flexible budget figures. *True*
- (5) In the functional approach, company activities and responsibilities are organized according to major functions, such as marketing, manufacturing, and finance. *True*
- (6) Goals defined for each area of responsibility should be attainable with efficient and effective performance. *True*
- (7) Responsibility accounting is more far-reaching. *True*
- (8) A cost center is an organizational unit whose manager has the authority only to incur costs and is specifically evaluated on the basis of how well costs are controlled. *True*
- (9) A profit center is an organizational unit whose manager is responsible for generating revenues and managing expenses related to current activity. *True*
- (10) A revenue center is strictly defined as an organizational unit that is responsible for the generation of revenues and has no control over setting selling prices or budgeting costs. *True*

Answers:

1	True
2	True
3	True
4	True
5	True
6	True
7	True
8	True
9	True
10	True

3. Fill in the Blanks

- (1) An profit centre is an organizational unit whose manager is responsible for managing revenues and current expenses.
- (2) A unique challenge for the design of responsibility centre arises from the instance in which one responsibility center supplies its outputs largely to other internal responsibility centers
- (3) Reports should be prompt and timely.
- (4) Responsibility reports help each successively higher level of management in evaluating the performances of subordinate managers and their respective organisational units.
- (5) Divisional manager of the production division can be held accountable for all direct and indirect costs incurred in his division.
- (6) A cost centre manager may emphasize production efficiency and deemphasize the pleas of sales personnel for faster service and rush orders.
- (7) In most cases, it is relatively easy to identify activities with specific managers.
- (8) The most elementary form of responsibility center is the cost centre.
- (9) The profit centre resolves many of the problems just noted for the cost and revenue center concepts by combining the two.
- (10) A unique challenge for the design of responsibility centre arises from the instance in which one responsibility center supplies its outputs largely to other internal responsibility centers.

Answers:

- (1) Investment center,
- (2) Responsibility centers,
- (3) Report,
- (4) Responsibility reports,
- (5) Divisional manager,

- (6) Cost centre,
- (7) Activities,
- (8) Cost center,
- (9) Profit center,
- (10) Responsibility centers.

4. Multiple Choice Questions

(1) There are three departments A, B and C in a company. The sales of A, B and C are ₹ 3,52,000, ₹ 2,88,000 and ₹ 1,60,000, respectively. The variable costs of A, B and C are ₹ 2,40,000, ₹1,76,000 and ₹ 1,44,000 respectively. The direct fixed costs of A, B and C are ₹ 28,000, ₹ 22,400 and ₹12,800. Rank the different departments on basis of relative profitability.

- (a) A- Rank 3, B- Rank 1 and C- Rank 2
- (b) A- Rank 2, B- Rank 1 and C- Rank 3
- (c) A- Rank 3, B- Rank 2 and C- Rank 1
- (d) Insufficient data

	A	B	C
sales	352000	288000	160000
-vc	240000	176000	144000
	112000	112000	16000
contb/sales	31.82%	38.88%	10%

(2) In a company Department A recorded loss in the first half of the current year. The sale of department is ₹ 90,000 and uncontrollable costs are ₹ 91,000, Advise the management whether its operations should be continued or terminated.

- (a) Continued
- (b) Terminated
- (c) Insufficient information
- (d) None of the above

(3) In a control report of Department X, it is mentioned as indirect materials are ₹1,000, indirect labour ₹900, Overtime Charges ₹100, Depreciation on equipment ₹500, Allocated factory overhead (38% of factory space) ₹4,300, Allocated overhead of repair shop is ₹ 1,200. Determine total costs treating department X as a responsibility center.

- (a) ₹ 3,200
- (b) ₹ 2,200
- (c) ₹ 1,200
- (d) None of the above

TC = 2500

correct ans

Answers:

1	a
2	c
3	a

ICMAI ✓

1. Multiple Choice Question

- (1) A type of decision-making environment is
- (a) Certainty
 - (b) Uncertainty
 - (c) Risk
 - ✓ (d) All of these
- (2) Which of the following criterion is not used for decision-making under uncertainty?
- (a) Maximin ✓
 - (b) Maximax ✓
 - (c) Minimax ✓
 - ✓ (d) Minimize expected loss
- (3) Decision theory is concerned with
- (a) Methods of arriving at an optimal decision ✓
 - (b) Selecting optimal decision in a sequential manner ✓
 - (c) Analysis of information that is available ✓
 - ✓ (d) All of these
- (4) Which of the following criterion is not applicable to decision-making under risk?
- (a) Maximize expected return ✓
 - ✓ (b) Maximize return
 - (c) Minimize expect regret
 - (d) Knowledge of likelihood occurrence of each state of nature
- (5) The minimum expected opportunity loss (EOL) is
- (a) Equal to EVPI
 - (b) Minimum regret
 - (c) Equal to EMV
 - ✓ (d) Both (A) and (B)

- (6) The expected value of perfect information (EVPI) is
- (a) Equal to expected regret of the optimal decision under risk
 - (b) The utility of additional information
 - (c) Maximum expected opportunity loss
 - (d) None of the above
- (7) The value of the coefficient of optimism (a) is needed while using the criterion of
- (a) Equally likely
 - (b) Maximin
 - (c) Realism
 - (d) Minimax
- (8) The decision-maker's knowledge and experience may influence the decision-making process when using the criterion of
- (a) Maximax
 - (b) Maximax regret
 - (c) Realism
 - (d) Maximin
- (9) The difference between the expected profit under conditions of risk and the expected profit with perfect information is called
- (a) The expected value of perfect information
 - (b) Expected marginal loss
 - (c) None of the above
 - (d) Any one of the above
- (10) A situation in which a decision maker knows all of the possible outcomes of a decision and also knows the probability associated with each outcome is referred to as
- (a) Certainty.
 - (b) Risk.
 - (c) Uncertainty.
 - (d) Strategy.
- (11) Which of the following methods of selecting a strategy is consistent with risk averting behaviour?
- (a) If two strategies have the same expected profit, select the one with the smaller standard deviation.
 - (b) If two strategies have the same standard deviation, select the one with the smaller expected profit.

- (c) Select the strategy with the larger coefficient of variation.
- (d) All of the above are correct.
- (12) Which one of the following does not measure risk?
- (a) Coefficient of variation ✓
- (b) Standard deviation ✓
- (c) LPP → optimization
- (d) All of the above are measures of risk.
- (13) A situation in which a decision maker must choose between strategies that have more than one possible outcome when the probability of each outcome is unknown is referred to as
- (a) Diversification.
- (b) . Certainty.
- (c) Risk.
- ✓ (d) Uncertainty.
- (14) If a decision maker is risk averse, then the best strategy to select is the one that yields the highest expected utility.
- (a) Highest expected payoff.
- (b) Lowest coefficient of variation.
- ✓ (c) Highest expected utility.
- (d) Lowest standard deviation.
- (15) Circumstances that influence the profitability of a decision are referred to as
- (a) Strategies.
- (b) A payoff matrix.
- ✓ (c) States of nature.
- (d) the marginal utility of money.
- (16) A strategy that yields an expected monetary payoff of zero is called a
- (a) Risk-neutral strategy.
- ✓ (b) Fair game.
- (c) Zero-sum game.
- (d) Certainty equivalent
- (17) A matrix that, for each state of nature and strategy, shows the difference between a strategy's payoff and the best strategy's payoff is called
- (a) A maximin matrix.
- ✓ (b) A minimax regret matrix.

- (c) A payoff matrix.
 (d) An expected utility matrix.
- (18) The sequence of possible managerial decisions and their expected outcome under each set of circumstances can be represented and analysed by using
- (a) The minimax regret criterion.
 (b) A decision tree.
 (c) A payoff matrix.
 (d) Simulation.
- (19) The expected value of perfect information is calculated by subtracting:
- (a) The minimum expected opportunity loss from the expected opportunity loss with perfect information.
 (b) The maximum EMV from the minimum expected opportunity loss.
 (c) EVSI from the expected return with perfect information.
 (d) The maximum EMV from the expected return with perfect information.
- (20) The maximin criterion is a feature of which of the following?
- (a) Deterministic model
 (b) Decision-making under uncertainty
 (c) Optimization
 (d) Decision-making under certainty

Answer:

1	d	4	b	7	c	10	b	13	d	16	b	19	a
2	d	5	d	8	c	11	a	14	c	17	b	20	b
3	d	6	a	9	a	12	c	15	c	18	b		

2. State True or False

- (1) Decision theory provides a method for rational decision making when the consequences are not fully known. *True*
- (2) Companies benefit most from considering their risks when they are performing well and when markets are growing in order to sustain growth and profitability. *True*
- (3) A decision maker is risk neutral if he is concerned with what will be the most likely outcome. *True*
- (4) The decision outcome resulting from the same information may vary from manager to manager as a result of their individual attitude to risk. *True*
- (5) "Risk" can be defined in many ways. One definition has a negative connotation: "a condition in which



- there is a possibility of an adverse deviation from a desired outcome." True
- (6) The variance and standard deviation both give an idea of the variability of the possible values about the mean. True
- (7) Standard deviation is always expressed in the same units as the distribution. True
- (8) Uncertainty is risk that cannot be measured. False
- (9) If the occurrence or non-occurrence of one event does not change the probability of the occurrence of the other event, the two events are said to be independent. True
- (10) The expected value of an action is found by multiplying the probability of each potential outcome by its payoff. True

Answer:

1	True
2	True
3	True
4	True
5	True
6	True
7	True
8	False
9	True
10	True

3. Fill in the Blanks

- (1) expected value is a term that means a weighted average of the possible values using the probabilities as the weights.
- (2) A Budgeted amount of future cash flow is often thought of as an absolute number.
- (3) Approaches have been developed to choose the best option when the decision maker has several alternatives and there is uncertainty with respect to future events.
- (4) If a decision maker can estimate the probabilities of the future events, these should be incorporated into the decision model.
- (5) perfect information is knowledge about the future that would enable us to make the best choice today for any possible situation in the future.
- (6) market research is the systematic process of gathering, analysing and reporting data about markets to investigate, describe measure, understand or explain a situation or problem facing a company or organisation.
- (7) Data can be either primary (collected at first hand from a sample of respondents), or secondary (collected from previous surveys, other published facts and opinions, or from experts).

- Qualitative*
- (8) _____ data tells us why consumers think/buy or act the way they do.
- (9) *Payoff* tables identify and record all possible outcomes (or pay-offs) in situations where the action taken affects the outcomes.
- (10) The *maximin* decision rule suggests that a decision maker should select the alternative that offers the least unattractive worst outcome.

Answer:

- (1) Expected value,
- (2) Budgeted,
- (3) alternatives,
- (4) Probabilities,
- (5) Perfect information,
- (6) Market research,
- (7) Data,
- (8) Qualitative,
- (9) Pay-off,
- (10) Maximin.

4. Multiple Choice Question

- (1) A company is choosing which of three new products to make (A, B or C) and has calculated likely payoffs under three possible scenarios (I, II or III), giving the following payoff table.

Profit (Loss) Scenario	Product Chosen		
	A	B	C
I	20	80	10
II	40	70	100
III	50	(10)	40

Using maximax, which product would be chosen? *(50 80 100)*

- (a) Product A
 - (b) Product B
 - (c) Product C
 - (d) None of the Products
- (2) ABC Co is trying to set the sales price for one of its products. Three prices are under consideration, and expected sales volumes and costs are as follows.

Price per unit	<u>₹4</u>	₹4.30	₹4.40
Expected sales volume (units)	₹2	₹2.30	₹2.4

contribution



Profit matrix

	A 4	B 43	C 4.4
Best	12,000	12,200	10,000
most likely	8,000	8,750	8,800
worst	0	(1600)	(5600)

A: 16,000 uts \times £2 (contribution) = £32,000
- 20,000
profit: £12,000

B: 14,000 uts \times £2.3 (contribution) = 32,200
- 20,000
12,200

Best possible	16,000	14,000	12,500
Most likely	14,000	12,500	12,000
Worst possible	10,000	8,000	6,000

Fixed costs are ₹20,000 and variable costs of sales are ₹2 per unit.

Which price should be chosen?

- (a) ₹4
(b) ₹4.30
(c) ₹4.40
(d) Insufficient data
- (3) Suppose a manager has to choose between mutually exclusive options A and B, and the probable outcomes of each option are as follows.

Option A		Option B	
Probability	Profit (₹)	Probability	Profit (₹)
0.8	5,000	0.1	(2,000)
0.2	6,000	0.2	5,000
0.1	8,000	0.6	7,000
		0.1	8,000

option A
 $0.8 \times 5000 + 0.2 \times 6000$
 $= 4000 + 1200 = 5200$

option B

$$0.1 \times (2000) + 0.2 \times 5000 + 0.6 \times 7000 + 0.1 \times 8000$$

$$(200) + 1000 + 4200 + 800 = 5800$$

The expected value (EV) of profit will be:

- (a) ₹ 6,000
(b) ₹ 4,500
(c) ₹ 5,800
(d) None of the above
- (4) ABC stocks a weekly lifestyle magazine. The owner buys the magazines for ₹0.30 each and sells them at the retail price of ₹0.50 each.

At the end of the week unsold magazines are obsolete and have no value. The estimated probability distribution for weekly demand is shown below.

Weekly demand in units	Probability
20	0.20
30	0.55
40	0.25
	1.00

$$= 4$$

$$= 16.5$$

$$= 10$$

$$30.5$$

What is the expected value of demand?

- (a) 30
(b) 20
(c) 25

(d) None of the above

(5) A manager has to choose between mutually exclusive options C and D and the probable outcomes of each option are as follows.

Options C		Options D	
Probability	Cost ₹	Probability	Cost ₹
0.29	15,000	0.03	14,000
0.54	20,000	0.30	17,000
0.17	30,000	0.35	21,000
		0.32	24,000

option C

$$= 0.29 \times 15000 + 0.54 \times 20000 + 0.17 \times 30000$$

$$= 4350 + 10800 + 5100$$

$$= \underline{\underline{₹ 20,250}}$$

Both options will produce an income of ₹30,000. Which should be chosen?

- (a) Option C
- (b) Option D
- (c) No Option
- (d) Both the Options

option D

$$= 14000 \times 0.03 + 17000 \times 0.3 + 21000 \times 0.35 + 0.32 \times 24000$$

$$= 420 + 5100 + 7350 + 7680$$

$$= \underline{\underline{20550}}$$

(6) Suppose a businessman is trying to decide which of three mutually exclusive projects to undertake. Each of the projects could lead to varying net profit under three possible scenarios.

Profits Project

		D	E	F
Scenarios				
I	0.33	100	80	60
II	0.33	90	120	85
III	0.34	(20)	10	85

$$D = 0.33 \times 100 + 0.33 \times 90 + 0.34 \times (-20)$$

$$= 33 + 30 + (-6.8)$$

$$= \underline{\underline{56.2}}$$

Which Project is to be selected?

- (a) D
- (b) E
- (c) F
- (d) Insufficient data

$$E = 80 \times 0.33 + 120 \times 0.33 + 10 \times 0.34$$

$$= 26.4 + 40 + 3.4 \Rightarrow \underline{\underline{69.8}}$$

$$F = 60 \times 0.33 + 85 \times 0.33 + 85 \times 0.34$$

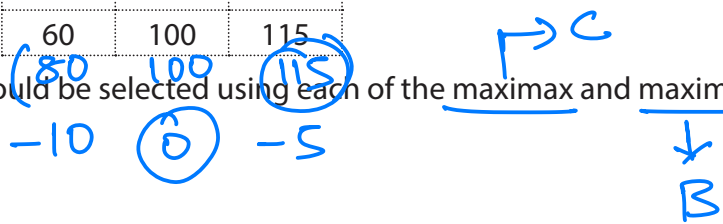
$$= 20 + 28.05 + 28.9 = \underline{\underline{76.95}}$$

(7) A company is considering which one of three alternative courses of action, A, B and C to take. The profit or loss from each choice depends on which one of four economic circumstances, I, II, III or IV will apply. The possible profits and losses, in thousands of pounds, are given in the following payoff table. Losses are shown as negative figures.

		Action		
		A	B	C
Circumstance	I	70	60	70
	II	-10	20	-5
	III	80	0	50
	IV	60	100	115

State which action would be selected using each of the maximax and maximin criteria?

- (a) A
- (b) B
- (c) C
- (d) All of the above



(8) Suppose that a manager is trying to decide which of three mutually exclusive projects to undertake. Each of the projects could lead to varying net profits which are classified as outcomes I, II and III. The manager has constructed the following payoff table or matrix (a conditional profit table):

Net profit if outcome turns out to be

Project	I	II	III
A	₹50,000	₹65,000	₹80,000
B	₹70,000	₹60,000	₹75,000
C	₹90,000	₹80,000	₹55,000
Probability	0.2	0.6	0.2

$$A = 50,000 \times 0.2 + 65,000 \times 0.6 + 80,000 \times 0.2$$

$$= 10,000 + 39,000 + 16,000$$

$$= 65,000$$

$$B = 70,000 \times 0.2 + 60,000 \times 0.6 + 75,000 \times 0.2$$

$$= 14,000 + 36,000 + 15,000$$

$$= 65,000$$

Which project would be chosen using EV?

- (a) A
- (b) B
- (c) C
- (d) None of the above

$$C = 90,000 \times 0.2 + 80,000 \times 0.6 + 55,000 \times 0.2$$

$$= 18,000 + 48,000 + 11,000$$

$$= 77,000$$

(9) A manager is trying to decide which of three mutually exclusive projects to undertake. Each of the projects could lead to varying net costs which the manager calls outcomes I, II and III. The following payoff table or matrix has been constructed:

Outcomes (not profit)

		I (Worst)	II (Most likely)	III (Best)
Project	A	50	85	130
	B	70	75	140
	C	90	100	110

Regret Table:

	I	II	III	Max
A	0	10	20	20
B	20	0	30	30
C	40	25	0	40

Which project should be undertaken under minimax regret rules?

- ✓ (a) A
 (b) B
 (c) C
 (d) Insufficient data

(10) The management of LT Company must choose whether to go ahead with either of two mutually exclusive projects: A or B. The expected profits are as follows:

	Profit if there is strong demand	Profit/(loss) if there is weak demand
Option A	₹4,000	₹(1,000)
Option B	₹1,500	₹ 500
Probability of demand	0.3	0.7

Ascertain what the decision would be, based on expected values, if no information about demand were available.

- (a) A
 ✓ (b) B
 (c) A and B
 (d) None

Exp value

$$\begin{aligned}
 A &= 4000 \times 0.3 + (1000) \times 0.7 \\
 &= 1200 + (700) \\
 &= 500
 \end{aligned}$$

$$\begin{aligned}
 B &= 1500 \times (0.3) + 500 \times 0.7 \\
 &= 450 + 350 \\
 &= \underline{\underline{800}}
 \end{aligned}$$

Answer:

1	c
2	a
3	c
4	a
5	a
6	c
7	b
8	c
9	b
10	b

NOTES

A large, empty rectangular area with a dotted border, intended for students to write their notes.

BIT Questions

1. Choose the most appropriate one from given four alternatives:

- (1) Type of accounting which measures, reports and analyse non-financial and financial information to help in decision making is called:
- (a) Financial Accounting
 - ✓ (b) Management Accounting
 - (c) Cost Accounting
 - (d) Green Accounting
- (2) Which one of the following is not considered as a method of Transfer Pricing?
- (a) Negotiated Transfer Pricing ✓
 - (b) Market Price Based Transfer Pricing ✓
 - ✓ (c) Fixed Cost Based Transfer Pricing
 - (d) Opportunity Cost Based Transfer Pricing
- (3) In cost accounting, purpose of variance analysis is to:
- (a) understand reasons for variances. ✓
 - (b) take remedial measures. ✓
 - (c) improve future performance. ✓
 - ✓ (d) All of the above
- (4) Absorption Costing is also known as:
- ✓ (a) Total Costing
 - (b) Committed Costing
 - (c) Target Costing
 - (d) Discretionary Costing
- (5) Which of the following is not correct with regard to Margin of Safety (MOS)?
- (a) $MOS = \text{Profit} / \text{PV Ratio}$ ✓
 - (b) $MOS = \text{Total Sales} - \text{Sales at BEP}$ ✓
 - (c) $MOS = \frac{\text{Total Sales} - \text{Sales at BEP}}{\text{Total Sales}} \times 100$ → Ambiguous
 - ✓ (d) $MOS = \frac{\text{Contribution} - \text{FC}}{\text{PV Ratio}}$ → Profit
- (6) Which one of the following is not to be considered for preparing a production budget?
- (a) The production plan of the organization ✓
 - (b) The Sales Budget ✓
 - ✓ (c) Research and Development Budget
 - (d) Availability of Raw Materials

(7) The breakeven point is the point at which,

- (a) There is no profit, no loss ✓
- (b) Contribution margin is equal to total fixed cost ✓
- (c) Total fixed cost is equal to total revenue ✗
- (d) All of the above. ✗

(8) The P/V ratio of a product is 0.4 and the selling price is ₹ 40 per unit. The marginal cost of the product would be,

- (a) ₹ 8
- ✓ (b) ₹ 24
- (c) ₹ 20
- (d) ₹ 25

$$\begin{aligned} \text{P/V ratio} &= 40\% \\ \frac{\text{Sales}}{\text{SP}} &= \frac{40}{40} \\ \text{Contribution} &= 40 \times 40\% \\ &= 16 \end{aligned}$$

$$\begin{aligned} \text{Sales} &= 40 \\ - \text{VC} &= 24 \text{ (B/F)} \\ \hline \text{Contribution} &= 16 \end{aligned}$$

(9) If standard hours are 400 @ ₹ 1 per hour and actual hours are 380 @ ₹ 1.25 per hour, the labour rate variance is:

- (a) ₹ 20 (Favourable)
- (b) ₹ 25 (Favourable)
- (c) ₹ 100 (Adverse)
- ✓ (d) ₹ 95 (Adverse)

$$\begin{aligned} \text{LRV} &= (\text{SR} - \text{AR}) \times \text{AH} \\ &= (1 - 1.25) \times 380 \\ &= -0.25 \times 380 = -95 \end{aligned}$$

(10) The time taken for initial unit of a product is 100 hours. At 80% learning rate what is the total time for 4 units.

- (a) 100 hours
- (b) 80 hours
- (c) 160 hours
- ✓ (d) 256 hours

1	100	} 80% Total Time
2	80	
4	64	

$$= 64 \times 4 = 256 \text{ hrs}$$

(11) Sales ₹ 4,00,000; Variable Cost ₹ 3,00,000; Fixed Cost ₹ 75,000; Investments ₹ 1,50,000 and desired 20% on investments. What is residual income?

- (a) ₹ 25,000
- (b) ₹ 30,000
- (c) ₹ 20,000
- ✓ (d) ₹ (5,000)

$$\begin{aligned} \text{Profit} &= \text{Sales} - \text{VC} - \text{FC} \\ &= 400000 - 300000 - 75000 \\ &= 25,000 \end{aligned}$$

$$\begin{aligned} \text{ROI} &= 150000 \times 20\% \\ &= 30,000 \end{aligned}$$

(12) Sales in January month ₹ 3,00,000; Credit Sales are 80%; Credit period is 2 months. Amount collected in the month of March is

- (a) ₹ 50,000
- ✓ (b) ₹ 2,40,000
- (c) ₹ 40,000

$$300000 \times 80\% = 240000$$

Jan credit sales are realised in March

- (d) None of the above
- (13) Planning and control are done by
- (a) top management
 - (b) lowest level of management
 - (c) all levels of management
 - (d) None of the above
- (14) The use of management accounting is
- (a) Compulsory
 - (b) Optional
 - (c) Mandatory as per the law
 - (d) None of the above
- (15) The budgets are classified on the basis of
- (a) Time
 - (b) Function
 - (c) Flexibility
 - (d) All of the above
- (16) Which of the following departments is most likely responsible for a price variance in direct materials?
- (a) Warehousing ✗
 - (b) Receiving ✗
 - (c) Purchasing
 - (d) Production
- (17) Idle time variance is always:
- (a) Favourable
 - (b) Adverse
 - (c) Favourable (or) Adverse
 - (d) None of these
- (18) In marginal costing, stock is valued at
- (a) Fixed Cost
 - (b) Variable Cost
 - (c) Inventory
 - (d) sales

$$\begin{aligned}
 \text{Production} &= \text{Sales} + \text{closing Inventory} - \text{opening Inventory} \\
 &= 5,00,000 + 2,10,000 - 1,30,000 \\
 &= 5,80,000
 \end{aligned}$$

Particulars	April	May	June	July
Sales	1,00,000	2,00,000	3,00,000	1,00,000
Cash sale	50,000	1,00,000	1,50,000	50,000 ✓
Credit sale	50,000	1,00,000	1,50,000	50,000
<u>Cash received</u>	20% 10,000	70% 70,000 35,000	10,000	5,000 ✓ 20,000 ✓ 1,05,000 ✓ <u>1,80,000</u>

(19) In two consecutive periods, sales and profit were ₹ 1,60,000 and ₹ 8,000 respectively in the first period and ₹ 1,80,000 and ₹ 14,000 respectively during the second period. If there is no change in fixed cost between the two periods, the PV ratio must be:

- (a) 20%
- (b) 25%
- (c) 30%
- (d) 40%

	1st period	2nd period	PV ratio
sales	160000	180000	
profit	8000	14000	
	$\Delta = 20,000$	$\Delta = 6000$	$\hookrightarrow \frac{6000}{20000} \times 100 = 30\%$

(20) Budgeted sales for the next year is 5,00,000 units. Desired ending finished goods inventory is 1,50,000 units and equivalent units in ending WIP inventory is 60,000 units. The opening finished goods inventory for the next year is 80,000 units, with 50,000 equivalent units in beginning WIP inventory. How many equivalent units should be produced?

- (a) 5,80,000
- (b) 5,50,000
- (c) 5,00,000
- (d) 5,75,000

Total ending inventory = 150000 + 60000 = 2,10,000

opening Inventory = 80,000 + 50,000 = 1,30,000

(21) Akash Ltd. is preparing its cash budget for the period. Sales are expected to be ₹ 1,00,000 in April, 2016; ₹ 2,00,000 in May 2016 ₹ 3,00,000 in June 2016 and ₹ 1,00,000 in July 2016. Half of all sales are cash sales and the other half are on credit. Experience indicates that 70% of the credit sales will be collected in the month following the sale, 20% the month after that and, 10% in the third month after the sale. The budgeted collection for the month of July, 2016 is:

- (a) ₹ 1,30,000
- (b) ₹ 1,80,000
- (c) ₹ 2,60,000
- (d) ₹ 3,60,000

$AR = \frac{15904}{560} = ₹ 28.4$

(22) During the month of March, 560 kg of material was purchased at a total cost of ₹ 15,904. The stock of material increased by 15 kg. it is the company's policy to value the stocks at standard purchase price. If the material price variance was ₹ 224 (A), the standard price per kg. of material is:

- (a) ₹ 28.40
- (b) ₹ 28.80
- (c) ₹ 28.00
- (d) ₹ 29.20

Standard quantity = 560 kg - 15 kg = 545 kg

MPV = (SR - AR) × AQ

-224 = (SR - 28.4) × 560

(23) Cost Price is not fixed in case of:

- (a) Cost plus contracts
- (b) Escalation clause

$\frac{-224}{560} = (SR - 28.4)$

$-0.4 = SR - 28.4$

$SR = -0.4 + 28.4 = ₹ 28$

- (c) De escalation clause
(d) All of the above
- (24) Continuous stock taking is a part of:
(a) ABC analysis
(b) Annual stock taking
(c) Perpetual Inventory
(d) None of these
- (25) In Reconciliation Statements expenses shown only in financial accounts are:
(a) Added to financial profit
(b) Deducted from financial profit
(c) Ignored
(d) Added to costing profit
- (26) Operating costing is applicable to:
(a) Hospitals
(b) Cinemas
(c) Transport undertaking
(d) All the above
- (27) Flexible budget requires a careful study of:
(a) Fixed, semi-fixed and variable expenses
(b) Past and current expenses
(c) Overheads, selling and administrative expenses
(d) None of the above
- (28) Which of the following items is not excluded while preparing a cost sheet?
(a) Goodwill written off
(b) Provision for taxation
(c) Property tax on factory building
(d) Interest paid
- (29) The most important element of cost is:
(a) Material
(b) Labour
(c) Overheads
(d) All the above

- (30) Depreciation is an example of:
- (a) Fixed cost
 - (b) Variable cost
 - (c) Semi variable cost
 - (d) None of the above
- (31) Joint cost is suitable for:
- (a) Infrastructure industry
 - (b) Ornament industry
 - (c) Oil industry
 - (d) Fertilizer industry
- (32) Which statement best describes the role of the management accountant?
- (a) Management accountants prepare the financial statements for an organization. ✗
 - (b) Management accountants facilitate the decision making process within an organization. ✓
 - (c) Management accountants make the principal decisions within an organization.
 - (d) Management accountants are basically information collectors.
- (33) In a factory when production is increased within the relevant range then:
- (a) Variable costs will vary on a per unit basis ✗
 - (b) Variable costs will vary in total ✓
 - (c) Fixed costs will vary in total ✗
 - (d) Fixed and variable costs stay the same in total
- (34) The main objective of budgetary control is:
- (a) to define the goal of the firm ✗
 - (b) to coordinate different departments ✓
 - (c) to plan to achieve its goals ✓
 - (d) all of the above
- (35) Method of pricing, when two separate pricing methods are used to price transfer of products from one subunit to another, is called:
- (a) dual pricing
 - (b) functional pricing
 - (c) congruent pricing
 - (d) optimal pricing

- (36) When are overhead variances recorded in a standard costing system?
- (a) when the goods are transferred out of work-in-progress. ✗
 - ✓ (b) when the factory overhead is applied to work-in-progress.
 - (c) when the cost of goods sold is recorded
 - (d) when the direct labour is recorded
- (37) Management Accounting is an integral part of management concerned with information.
- ✓ (a) identifying, presenting and interpreting
 - (b) identifying and presenting
 - (c) identifying
 - (d) None of the above
- (38) Management Accounting is related with .
- (a) formulating strategy ✓
 - (b) planning and controlling activities ✓
 - (c) optimizing the use of resources ✓
 - ✓ (d) All of the above
- (39) Despite the development of Management Accounting as an effective discipline to improve the managerial performance, it has some limitations. Which of the following is a limitation of management accounting?
- ✓ (a) Psychological Resistance
 - (b) Physiological Resistance
 - (c) Both of the above
 - (d) None of the above
- (40) The primary objective of Management Accounting is to .
- (a) maximize profits
 - (b) minimize losses
 - (c) maximize profits or minimize losses
 - ✓ (d) All of the above
- (41) Management accounting is concerned with data collection from .
- (a) internal sources
 - (b) external sources
 - ✓ (c) internal and external sources
 - (d) internal or external sources

- (42) Management Accounting is concerned with accounting information, which is useful to the management – This definition is given by .
- ✓ (a) Robert N. Anthony
 - (b) Brown and Howard
 - (c) CIMA
 - (d) The Institute of Chartered Accountants of England and Wales
- (43) Marginal costs is taken as equal to
- ✓ (a) Prime Cost plus all variable overheads
 - (b) Prime Cost minus all variable overheads
 - (c) Variable overheads
 - (d) None of the above
- (44) Marginal costing is also known as
- (a) Direct costing
 - (b) Variable costing
 - ✓ (c) Both A and B
 - (d) None of the above
- (45) Which of the following costs is relevant in decision-making?
- ✓ (a) committed costs
 - (b) accounting costs
 - (c) historical costs
 - (d) cash costs
- (46) An opportunity cost is the cost of
- ✓ (a) lost business
 - (b) unplanned new business
 - (c) obtaining new business opportunities
 - (d) the next best alternative course of action
- (47) In a product mix decision, which is the most important factor to consider in order to try to maximize profit?
- ✓ (a) contribution per unit of a scarce resource used to make the product
 - (b) contribution per unit of the product
 - (c) variable cost per unit of the product
 - (d) product unit selling price

(48) Which of the following costs incurred by a commercial airline can be classified as variable?

(a) Interest costs on leasing of aircraft ✗

(b) Pilots' salaries ✗

(c) Depreciation of aircraft ✗

✓ (d) None of these three costs can be classified as variable

(49) The basic decision rule on acceptance of special contracts is:

(a) Accept the special contract if additional fixed costs can be covered by contribution from other products ✗

(b) Accept the special contract if the additional revenue from the contract exceeds the fixed costs of manufacture ✗

(c) Accept the special contract if it produces a positive contribution to fixed costs ✗

✓ (d) Accept the special contract if it produces a positive contribution to variable costs

(50) If budgets are prepared of a business concern for a certain period taking each and every function separately such budgets are called .

(a) Separate Budgets

✓ (b) Functional Budgets

(c) Both of them

(d) None of the above

(51) Which of the following is not an example of functional budget?

(a) Production budget ✓

✓ (b) Cost of production budget → ✗

(c) Materials budget

(d) None of the above

(52) Which of the following is an essential of a budget?

(a) It is prepared for a definite future period ✓

(b) It is a statement prepared prior to a defined period of time ✓

(c) The Budget is monetary and I or quantitative statement of policy ✓

✓ (d) All of the above $\rightarrow \text{sales} + \text{closing inventory} - \text{opening Inv}$

(53) When preparing a production budget, the quantity to be produced equals

(a) sales quantity + opening inventory of finished goods + closing inventory of finished goods

✓ (b) sales quantity - opening inventory of finished goods + closing inventory of finished goods

- (c) sales quantity – opening inventory of finished goods – closing inventory of finished goods
- (d) sales quantity + opening inventory of finished goods – closing inventory of finished goods
- (54) In comparing a fixed budget with a flexible budget, what is the reason for the difference between the profit figures in the two budgets?
- ✓ (a) Different levels of activity
- (b) Different levels of spending
- (c) Different levels of efficiency
- (d) The difference between actual and budgeted performance
- (55) When budget allowances are set without the involvement of the budget owner, the budgeting process can be described as:
- ✓ (a) top down budgeting
- (b) negotiated budgeting
- (c) zero based budgeting
- (d) participative budgeting
- (56) For which of the following would zero based budgeting be most suitable?
- (a) Building construction → project Based Budgeting
- (b) Mining company operations ↙
- (c) Transport company operations ↙
- ✓ (d) Government department activities → most of the cost are discretion any.
- (57) Which among the below is the reason behind Material Price Variance:
- (a) Change in basis purchase price of material. ✓
- (b) Uneconomical size of purchase order.
- (c) Payment of excess or less freight.
- ✓ (d) All of the above
- (58) In a factory Standard rate per hour ₹ 4, Standard time per unit of output – 20 hours, Units produced - 500, Actual hours worked - 12,000. Compute Labour Efficiency Variance.
- (a) ₹ 6000 (Favourable) labour cost card
- ✓ (b) ₹ 8000 (Adverse) 1 unit : 20 hrs @ ₹ 4
500 units : 10000 hrs @ ₹ 4
- (c) ₹ 9,600 (Favourable)
- (d) ₹ 8000 (Favourable)
- (59) MSE Manufacturing gives you the following details. LEV = (SLH - ALH) X SR
Standard Price per kg of Material ₹ 2,
Actual hours worked 12,000
Standard hours for 500 units 10,000
- $$LEV = (SLH - ALH) \times SR$$
- $$= (10,000 - 12,000) \times 4$$
- $$= -2,000 \times 4 = -8,000$$

Actual Material used 2,000 kg,
Actual cost of Material ₹ 3,000.
Actual output 2,100 kg.
Compute Material Price Variance.

$$AR \text{ per unit} = \frac{₹ 3000}{2000 \text{ kgs}} = ₹ 1.5 / \text{kg}$$

$$\begin{aligned} MPV &= (SR - AR) \times AQ \\ &= (2 - 1.5) \times 2000 \text{ kg} \\ &= 0.5 \times 2000 \\ &= \underline{1000 (F)} \end{aligned}$$

- (a) ₹ 1050 (Favourable)
- (b) ₹ 1142 (Favourable)
- ✓ (c) ₹ 1000 (Favourable)
- (d) None of the above

(60) Which of the following factors does not affect Learning Curve

- (a) Method of production X
- ✓ (b) Labour strike ✓
- (c) Shut down
- (d) Efficiency rate

(61) Which of the following is not a reason to use the concept of Learning Curve?

- (a) Labour efficiency
- ✓ (b) Introducing new technology
- (c) Value chain effect
- (d) Standardization, specialization, and methods improvements

(62) Learning curve theory is not applicable to

- (a) Direct labour ✓
- (b) Material ✓
- (c) Spoilage and defective works
- ✓ (d) Overhead

(63) Decision-making concerns with:

- (a) Past
- ✓ (b) Future
- (c) Past and Future both
- (d) None of the above

(64) A large Margin of Safety indicates

- (a) Over-Capitalization
- ✓ (b) The soundness of business
- (c) Over Production
- (d) None of the above

- (65) Revision of budgets is
- (a) Unnecessary
 - (b) Cannot determine
 - ✓ (c) Necessary
 - (d) Inadequate data
- (66) Which of the following operating measures would a manager would like to see decreasing over time?
- (a) Merchandise Inventory Turn-over ✗
 - ✓ (b) Total quality cost ✓
 - (c) % of on-time deliveries
 - (d) Finished Goods Inventory Turn-over
- (67) Another name for the 'Learning Curve' is
- (a) Exponential Curve
 - (b) Growth Curve
 - (c) Production Curve
 - ✓ (d) Experience Curve
- (68) The well known basic function of management is
- (a) Motivating
 - (b) Leadership
 - ✓ (c) Decision making
 - (d) Communicating
- (69) Contribution margin is equal to
- (a) Sales - Fixed Cost - Profit
 - (b) Profit + Variable Cost
 - ✓ (c) Fixed Cost - Loss
 - (d) None of the above
- ① Sales - VC'
- ② FC + profit
- (70) In a system whereby all activities are revaluated each time a budget is formulated and starts with the assumption that requirement of funds does not exist is called
- (a) Performance Budgeting
 - (b) Programme Budgeting
 - (c) Flexible Budgeting
 - ✓ (d) Zero- based Budgeting

- (71) The management's time is saved by reporting only the deviations from the predetermined standards is called
- Management by objectives
 - Budgetary Control
 - Standard Costing
 - Management by Exception
- (72) Marginal Costing is also known as
- Direct Costing
 - Absorption Costing
 - Variable Cost
 - Variable Costing
- (73) Another name for 'Contribution' is
- Marginal Income
 - Gross Profit
 - Net Income
 - None of the above
- (74) Management Accounting
- accumulates, summarises and analyses the available data. ✓
 - is primarily concerned with the requirements of the management. ✓
 - makes Corporate Planning and Strategy effective. ✓
 - All of the above
- (75) XYZ Ltd. makes a special gadget for the car it manufactures. The machine for the gadget works to full capacity and incurs ₹ 15 Lakhs and ₹ 40 Lakhs respectively as Variable and Fixed Costs. If all the gadgets were purchased from an outside supplier, the machine could be used to produce other items, which would earn a total contribution of ₹ 25 Lakhs. What is the maximum price that XYZ Ltd. should be willing to pay to the outside supplier for the gadgets, assuming there is no change in Fixed Costs?
- VC
- (a) ₹ 40 Lakhs
- (b) ₹ 65 Lakhs
- (c) ₹ 25 Lakhs
- (d) ₹ 15 Lakhs
- Total contribⁿ from excess capacity
= VC saved + extra contribution
= ₹ 15L + ₹ 25L
= ₹ 40L
- (76) When a manager is concerned with monitoring total cost, total revenue and net profit conditioned upon the level of productivity, an accountant should normally recommend

	Flexible Budgeting	Standard costing
(a)	Yes ✓	Yes ✓
(b)	Yes	No
(c)	No	Yes
(d)	No	No

(77) The difference between hours paid and hours worked is known as

- (a) Labour rate variance
- (b) Labour efficiency variance
- ✓ (c) Idle time variance
- (d) Net efficiency variance

(78) The difference in total cost that results from two alternative courses of action is called

- (a) Relevant Cost
- (b) Opportunity Cost
- ✓ (c) Differential Cost
- (d) Marginal Cost

(79) A budget that gives a summary of all the functional budgets and projected Profit and Loss A/c is known as

- ✓ (a) Master budget
- (b) Flexible budget
- (c) Performance budget
- (d) Discretionary budget

(80) When there are no opening or closing stocks, profit under marginal costing will be

- (a) Greater than in absorption costing
- (b) Less than in absorption costing
- ✓ (c) Equal to absorption costing
- (d) Greater, Lower or Equal depending on certain factors

op stock > closing stock → MC → profit ↑
 cl. stock > op. stock → AC → profit ↑
 cl. stock = op. stock → AC = MC

(81) Break Even Point can be reduced by

- (a) Increasing selling price per unit
- ✓ (b) Reducing the variable costs
- (c) Reducing fixed costs
- ✓ (d) All of the above

→ PV ratio ↑

$$BEP = \frac{FC}{PV \text{ ratio}}$$

FC ↓ → BEP ↓

→ PV ratio ↑

PV ratio ↑

Inverse relation

(82) One of the following is not within the scope of Management Accounting

- (a) Formulation of policies ✓
 ✓ (b) Classification and collection of costs
 (c) Planning and co-ordinating the activities of the enterprise
 (d) Decision making on alternative courses of action

(83) AB company budgets for fixed overhead of ₹ 24,000 ^{BFOH} and Production of 4800 units. Actual Production is 4200 units. If fixed overhead cost ~~increased~~ ^{incurred} is ₹ 22,000, the Fixed overhead volume variance will be

- (a) ₹ 1,000 (Adv.)
 (b) ₹ 2,000 (Fav.)
 ✓ (c) ₹ 3,000 (Adv.)
 (d) ₹ 3,000 (Fav.)

$$\text{FOH volume variance} = (\text{AP} - \text{BP}) \times \text{BFOH rate}$$

Answer: $\text{Budgeted FOH rate} = \frac{₹24000}{4800} = ₹5$

- (1) (b) Management Accounting
 (2) (c) Fixed Cost Based Transfer Pricing
 (3) (d) All of the above
 (4) (a) Total Costing
 (5) (d) MOS = PV Ratio × Sales – Fixed Cost
 (6) (c) Research and Development Budget
 (7) (a) There is no profit, no loss
 (8) (b) ₹ 24
 (9) (d) ₹ 95 (Adverse)
 (10) (d) 256 hours
 (11) (d) ₹ (5,000)
 (12) (b) ₹ 2,40,000
 (13) (a) top management
 (14) (b) Optional
 (15) (d) All of the above
 (16) (c) Purchasing
 (17) (b) Adverse
 (18) (b) Variable Cost
 (19) (c) 30%
 (20) (a) 5,80,000

$$\begin{aligned} \text{FOH vol variance} &= (4200 - 4800) \times 5 \\ &= -3000 \\ &= \underline{3000 \text{ (Adverse)}} \end{aligned}$$

- (21) (b) ₹ 1,80,000
- (22) (c) ₹ 28.00
- (23) (a) Cost plus contracts
- (24) (c) Perpetual Inventory
- (25) (a) Added to financial profit
- (26) (d) All the above
- (27) (a) Fixed, semi-fixed and variable expenses
- (28) (c) Property tax on factory building
- (29) (a) Material
- (30) (a) Fixed cost
- (31) (c) Oil industry
- (32) (b) Management accountants facilitate the decision making process within an organization
- (33) (b) Variable costs will vary in total
- (34) (d) to coordinate different departments
- (35) (a) dual pricing
- (36) (b) when the factory overhead is applied to work-in-progress
- (37) (a) identifying, presenting and interpreting
- (38) (d) All of the above
- (39) (a) Psychological Resistance
- (40) (d) All of the above
- (41) (c) internal and external sources
- (42) (a) Robert N. Anthony
- (43) (a) Prime Cost plus all variable overheads
- (44) (c) Both A and B
- (45) (a) committed costs
- (46) (a) lost business
- (47) (a) contribution per unit of a scarce resource used to make the product
- (48) (d) None of these three costs can be classified as variable
- (49) (c) Accept the special contract if it produces a positive contribution to fixed costs
- (50) (b) Functional Budgets
- (51) (d) None of the above
- (52) (d) All of the above

- (53) (b) sales quantity – opening inventory of finished goods + closing inventory of finished goods
- (54) (a) Different levels of activity
- (55) (a) top down budgeting
- (56) (d) Government department activities
- (57) (d) All of the above
- (58) (b) ₹ 8000 (Adverse)
- (59) (c) ₹ 1000 (Favourable)
- (60) (c) Shut down
- (61) (b) Introducing new technology
- (62) (d) Overhead
- (63) (b) Future
- (64) (b) The soundness of business
- (65) (c) Necessary
- (66) (b) Total quality cost
- (67) (d) Experience Curve
- (68) (c) Decision making
- (69) (c) Fixed Cost - Loss
- (70) (d) Zero- based Budgeting
- (71) (d) Management by Exception
- (72) (d) Variable Costing
- (73) (a) Marginal Income
- (74) (d) All of the above
- (75) (a) ₹ 40 Lakhs
- (76) (a) Yes Yes
- (77) (c) Idle time variance
- (78) (c) Differential Cost
- (79) (a) Master budget
- (80) (c) Equal to absorption costing
- (81) (d) All of the above
- (82) (b) Classification and collection of costs
- (83) (c) ₹ 3,000 (Adv.)

2. Match the following in Column I with the appropriate in Column II

1. Match the following:

	Column I		Column II
1.	Learning Curve	B	A Negotiated Pricing
2.	Zero Based Budgeting	D	B Human Phenomenon
3.	Transfer Price	A	C <u>Fixed Costs are charged to cost of production</u>
4.	Absorption Costing	C	D <u>Discretionary cost</u>

2. Match the following:

	Column I		Column II
1.	Inter-firm Comparison	D	A <u>Decision Making</u>
2.	Margin of Safety	C	B <u>Difference between Standard and Actual cost</u>
3.	Variance Analysis	B	C Profit / PV Ratio
4.	Differential Costing	A	D <u>Technique for evaluating performance</u>

3. Match the following:

	Column I		Column II
1.	Transfer Pricing	B	A Opportunity Cost
2.	Budgetary Control	C	B <u>Divisional Profits</u>
3.	Learning Curve	D	C <u>An Executive Function</u>
4.	Relevant Cost	A	D <u>A mathematical or Statistical Technique</u>

4. Match the following:

	Column I		Column II
1.	The method which is followed for evaluation of equivalent production when prices are <u>fluctuating</u> .	C	A Fixed Cost / P/V ratio
2.	In hospital the <u>cost unit</u> is	E	B (Standard Yield for <u>actual Mix</u> minus Actual yield) x Standard Yield price
3.	Break even point (<u>in value</u>)	A	C Average Price method
4.	Direct material yield variance	B	D Fixed, Variable and Semi Variable Costs
5.	A flexible budget takes into the <u>account</u>	D	E <u>Per bed</u>

5. Match the following:

	Column I		Column II
1.	P/V Ratio	C	A Decision Package
2.	Direct Labour Efficiency	E	B Equivalent Production
3.	<u>Zero Based Budgeting</u>	A	C $\frac{\text{Total Contribution}}{\text{Total Sales Value}} \times 100$
4.	<u>Contract Costing</u>	D	D <u>Work Certified</u>
5.	<u>Process Costing</u>	B	E $(\text{Standard hour for actual production} - \text{Actual hours}) \times \text{Standard Rate}$

6. Match the following:

	Column I		Column II
1.	Transfer Price	A	A Goal Congruence
2.	Zero Based Budgeting	E	B Responsibility Accounting
3.	Performance budgeting	B	C <u>Performance Measurement</u>
4.	Throughput Accounting	C	D Notional Profit
5.	<u>Profit Earned on a Contract Account</u>	D	E <u>Not on the basis of trends</u>

7. Match the following:

	Column I		Column II
1.	Work Certified	C	A Process Costing
2.	Margin of Safety	D	B Budgetary Control
3.	Efficiency Variance	E	C <u>Contract Costing</u>
4.	Equivalent Production	A	D <u>CVP Analysis</u>
5.	Zero Based Budgeting	B	E Labour Cost Variance

8. Match the following:

	Column I		Column II
1.	Cost Driver	E	A Contract Costing
2.	Bottleneck Hours	C	B <u>Financial Soundness of Business</u>
3.	Budgetary Control	D	C Throughput Accounting
4.	Retention Money	A	D <u>Management by Exception</u>
5.	Margin of Safety	B	E <u>ABC Costing</u>

9. Match the following:

	Column I		Column II
1.	Relevant Cost	C	A Cost Control
2.	Standard Costing	A	B Decision taking
3.	Flexible Budget	E	C <u>Future costs affected by decisions taken</u>

4.	<u>Differential Cost Analysis</u>	<u>B</u>	D	Profitability rate
5.	<u>Angle of Incidence</u>	<u>D</u>	E	<u>Budgetary Control</u>

10. Match the following:

	Column I		Column II
1.	Uniform Costing	<u>E</u>	A Design of the Product
2.	Value Engineering	<u>A</u>	B <u>Measures divisional performance</u>
3.	Variance Analysis	<u>D</u>	C Contract Costing
4.	Escalation Clause	<u>C</u>	D Management by Exception
5.	Residual Income	<u>B</u>	E <u>Technique to assist inter-firm comparison</u>

11. Match the following:

	Column I		Column II
1.	Research and Development cost	A	CAS 2
2.	Depreciation on computer purchased for office	B	Forms part of selling expenses
3.	Abnormal loss is transferred to	C	Costing Profit and Loss Account
4.	In electricity companies, the cost unit is	D	Kilowatt
5.	The summary of all functional budgets	E	CAS 18
6.	Cost of free sample of product distributed	F	Forms part of office and administration expenses
7.	In contract costing, cost unit is	G	Per contract
8.	Capacity determination	H	Not shown in the cost sheet but debited to profit and loss account.
9.	Scrap value of abnormal loss of finished output	I	Not shown in the cost sheet but credited to profit and loss account.
10.	Cash discount allowed	J	Master budget

Cost Accounting

12. Match the following:

	Column I		Column II
1.	Market Based Price	<u>C</u>	A <u>Break – Even Analysis</u>
2.	Decision Unit	<u>D</u>	B Differential Cost
3.	Margin of Safety	<u>A</u>	C Transfer Pricing
4.	<u>Difference between costs of two alternatives</u>	<u>B</u>	D <u>Zero Based Budgeting</u>

13. Match the following:

	Column I		Column II
1.	Management Accounting	C	A Suitable information to internal and external users
2.	<u>Fiduciary Accounting</u>	D	B Suitable information to <u>operation</u> management
3.	Financial Accounting	A	C Suitable information to internal users
4.	Cost Accounting	B	D Suitable information to <u>third parties</u>

14. Match the following:

	Column I		Column II
1.	General Administrative overhead	D	A Contribution
2.	Marginal costing	A	B Relevant Cost
3.	<u>Make or buy decision</u>	B	C Excess over Break Even Sales
4.	Margin of Safety	C	D <u>Unavoidable Fixed Cost</u>

15. Match the following:

	Column I		Column II
1.	Principal Budget Factor	C	A <u>'Rationalisation'</u>
2.	Incremental Budgeting	D	B Summary Budget
3.	<u>ZBB</u>	A	C <u>Sales Demand</u>
4.	The Master Budget	B	D Encourages Slack

16. Match the following:

	Column I		Column II
1.	Distinctive feature of Learning curve	D	A <u>On the principle of exception</u>
2.	Standard costing works	A	B <u>is designed to fix responsibilities on executives, through the preparation of budgets.</u>
3.	Budgetary Control system	B	C <u>is that notional value at which goods and services are transferred between divisions</u> <u>in a decentralized organization.</u>
4.	Transfer Price	C	D <u>Persons engaged in repetitive task will improve his performance over time.</u>

17. Match the following:

	Column I		Column II
1.	Learning Curve	B	A Theodore P. Wright
2.	Transfer Price	C	B <u>Cumulative Average Time</u>

3.	<u>Experience Curve</u>	<u>D</u>	C	<u>Notional Value</u>
4.	<u>Factors affecting the cost of Airlines</u>	<u>A</u>	D	<u>Boston Consulting Group</u>

18. Match the following:

	Column I		Column II
1.	<u>Budgetary Control System</u>	<u>D</u>	A Are useful for budget and performance evaluation.
2.	Standard Costs	<u>A</u>	B Helps in <u>profit planning and analysis</u>
3.	Marginal Costing	<u>B</u>	C Aims at adherence <u>to planning costs</u>
4.	Cost Control	<u>C</u>	D The introduction and implementation of the system <u>may be expensive</u>

19. Match the following:

	Column I		Column II
1.	Absorption Costing	<u>D</u>	A Is concerned <u>with accounting information which is useful to Management.</u>
2.	Management Accounting	<u>A</u>	B At which total revenue is equal to total cost.
3.	<u>Break Even Point</u>	<u>B</u>	C Is frequently <u>used in conjunction with establishing bid price for contract.</u>
4.	Learning Curve	<u>C</u>	D Both <u>fixed and variable costs are considered for inventory valuation.</u>

Answer :

Ans: 1	Ans: 2	Ans: 3	Ans: 4	Ans: 5	Ans: 6	Ans: 7	Ans: 8
i) B	(i) D	(i) B	(i) C	(i) C	(i) A	(i) C	(i) E
ii) D	(ii) C	(ii) C	(ii) E	(ii) E	(ii) E	(ii) D	(ii) C
iii) A	(iii) B	(iii) D	(iii) A	(iii) A	(iii) B	(iii) E	(iii) D
iv) C	(iv) A	(iv) A	(iv) B	(iv) D	(iv) C	(iv) A	(iv) A
			(v) D	(v) B	(v) D	(v) B	(v) B

Ans: 9	Ans: 10	Ans: 11	Ans: 12	Ans: 13	Ans: 14	Ans: 15	Ans: 16
(i) C	(i) E	(i) E	(i) C	(i) C	(i) D	(i) C	(i) D
(ii) A	(ii) A	(ii) F	(ii) D	(ii) D	(ii) A	(ii) D	(ii) A
(iii) B	(iii) D	(iii) C	(iii) A	(iii) A	(iii) B	(iii) A	(iii) B
(iv) E	(iv) C	(iv) D	(iv) B	(iv) B	(iv) C	(iv) B	(iv) C
(v) D	(v) B	(v) J					
		(vi) B					
		(vii) G					

		(viii) A						
		(ix) I						
		(x) H						

Ans: 17	Ans: 18	Ans: 19						
(i) B	(i) D	(i) D						
(ii) C	(ii) A	(ii) A						
(iii) D	(iii) B	(iii) B						
(iv) A	(iv) C	(iv) C						

3. State whether the following are 'True' or 'False':

- (1) Standard Costs are arrived on the basis of costs incurred in the past. *False*
 Based on Technical estimates'
- (2) Experience Curve effects are reinforced when two or more products share a common resource. *False*
 → are prepared first
- (3) Preparation of a Master Budget precedes preparation of Functional Budgets. *False*
- (4) Other variables remaining constant, a hike in selling price per unit will lower the Break Even Point. *True*
- (5) Uniform costing is a method of costing. *False*
- (6) A variance may be either favourable or adverse. *True*
- (7) Marginal cost equals to prime cost plus variable overheads. *True*
- (8) Variable Cost is also known as Indirect Cost. *False*
- (9) It is optional for a company to have financial accounting. *False*
- (10) There is no difference between standard costing and budgeting. *False*
 → per unit
- (11) Contribution is the difference between the selling price and the variable cost. *True*
 → total
- (12) Constraint on particular resources is also known a key factor or limiting factor. *False*
- (13) Multiple costing is suitable for banking industry. *False*
- (14) Cost ledger control account makes the cost ledger self balancing. *True*
- (15) Production cost includes only direct costs related to the production. *False*
 overheads
- (16) CAS 9 is for direct expenses as issued by the Cost Accounting Standards Board (CASB) of the Institute of Cost Accountants of India. *False*
 CAS 10
- (17) ABC analysis is based on the principle of management by exception. *True*
 A ✓
 B
 C
- (18) Slow moving materials have a high turnover ratio. *False*
 low
- (19) Cost of indirect material is apportioned to various departments. *False*
 allocated
- (20) Departments that assist producing Department indirectly, are called service departments. *True*
- (21) Waste and scrap of material have small realisation value. *False*

- (22) Bin card are not the part of accounting records. True
- (23) The profit calculated under absorption costing and marginal costing is always equal. False
- (24) A flexible budget takes into account only fixed costs. False
- (25) At breakeven point, margin of safety is nil. True \rightarrow productivity increases when output
- (26) An increase in production means an increase in overall productivity. False increases in a greater proportion
- (27) Management Accounting is a traditional approach to accounting. False
- (28) The information in the management accounting system is used for three different purposes. True (planning, controlling, decision making)
- (29) Management accounting helps in decision making only, not in strategic decision making. False
- (30) The scope of Management Accounting is broader than the scope of Cost Accounting. True
- (31) As the reports generated by management accounting are not used by any external party, the business enterprises don't need to take care of GAAP. True
- (32) Management accounting records are kept for public. False
- (33) In marginal costing, managerial decisions are guided by profit. False contribution
- (34) In Absorption Costing, closing stock is valued at full cost. True (Fixed & var)
- (35) In marginal costing, fixed costs are treated as period cost. True
- (36) Marginal costing is a technique of cost control. False
- (37) When quantity (kg) of material is the limiting factor, products are ranked based on contribution per unit. False contribution / per kg of RM
- (38) When sales value (₹) is the limiting factor, products are ranked based on Profit Volume ratio. True
- (39) Fixed costs are always unavoidable. False contbⁿ per ₹1 of sale
- (40) A budget is not a quantitative statement. False
- (41) The principal budget factor is the factor which limits the activities of an organisation. True
- (42) The flexible budget also called as Sliding Scale Budget. True
- (43) The budget is imposed by lower management. False Top
- (44) The sales budget is an example of functional budget. True
- (45) Responsibility accounting is also called profitability accounting and activity accounting. True
- (46) Learning curve passes through three stages. False (Improvement & stability)
- (47) Learning curve suggests great opportunities for cost reduction. True
- (48) Application of learning curve concept pre-requisites uninterrupted flow of work. True
- (49) Learning curve effects make the value chain inefficient. False efficient \rightarrow lower
- (50) The more experience a firm has in producing a particular product, the higher is its costs. False
- (51) Management Accounting is largely based on estimates and as such total accuracy is not

ensured under Management Accountancy. True

- (52) The main objective of Budgetary control is to co-ordinate the different departments. True
operating costing
- (53) Standard Costing are applicable in Banking Industry. False
- (54) Learning Curve is a Cost Reduction technique. True
- (55) Standard Costing may not be suitable for small concerns. True
- (56) Production Budget is prepared before Sales Budget. False
- (57) Budgets are always prepared for one year. False
- (58) Marginal Costing is useful for short long term planning. False
- (59) Profit Planning and Control is not a part of Budgetary Control Mechanism. False
- (60) Standard Costs are based on technical assessments. True
- (61) PV Chart exhibits the relationship between profit and overhead volume. False
sales volume
- (62) A Sequential profit graph is prepared when multiple products are produced. True
- (63) Management Accounting is largely based on estimates accuracy than estimates. False
estimates accuracy
- (64) Zero-Base budgeting is more suitably applicable to Discretionary Cost areas. True
- (65) The PV ratio increases when the fixed cost of a firm decreases. False
remains unchanged

Answer Key:

$$PV \text{ ratio} = \frac{\text{Contb}^n}{\text{sales}} \times 100$$

- | | | | | |
|------------|------------|------------|------------|------------|
| (1) False | (14) True | (27) False | (40) False | (53) False |
| (2) False | (15) False | (28) True | (41) True | (54) False |
| (3) False | (16) False | (29) False | (42) True | (55) True |
| (4) True | (17) True | (30) True | (43) False | (56) False |
| (5) False | (18) False | (31) True | (44) True | (57) False |
| (6) True | (19) False | (32) False | (45) True | (58) False |
| (7) False | (20) True | (33) False | (46) True | (59) False |
| (8) False | (21) False | (34) True | (47) True | (60) True |
| (9) False | (22) True | (35) True | (48) True | (61) False |
| (10) False | (23) False | (36) False | (49) False | (62) True |
| (11) True | (24) False | (37) False | (50) False | (63) False |
| (12) False | (25) True | (38) True | (51) True | (64) True |
| (13) False | (26) False | (39) False | (52) False | (65) False |

NOTES

Empty space for notes.

MCQ Bank

1. Choose the most appropriate one from given four alternatives:

- (1) Management Accounting _____.
 (a) Accumulates, summarizes and analyses the available data. ✓
 (b) Is primarily concerned with the requirements of the management. ✓
 (c) Makes Corporate Planning and Strategy effective. ✓
 ✓(d) All of the above
- (2) Management accounting can be viewed as _____.
 (a) Marketing-oriented Accounting ✗
 ✓(b) Management-oriented Accounting
 (c) Accounting-oriented Management
 (d) Manager-oriented Accounting
- (3) The main objective of management accounting is
 (a) To maintain the accounting records ✗
 (b) To know the amount due from customers and suppliers ✗
 ✓(c) To ascertain analyse and interpret the results of business operations
 (d) To record all the business transactions
- (4) is the study of managerial aspects of financial accounting _____.
 (a) Cost accounting
 (b) Financial accounting
 ✓(c) Management accounting
 (d) Business accounting
- (5) The purpose of management accounting is to help make decisions
 ✓(a) Managers
 (b) Investors
 (c) Marketers
 (d) Banks
- (6) Management accounting assists the management in
 (a) Planning
 (b) Directing
 (c) Controlling
 ✓(d) All of the above

- (7) 'Period of lost relevance' is the of the evolution of management accounting.
- (a) 1st stage
 - (b) 2nd stage
 - ✓ (c) 3rd stage
 - (d) 4th stage
- (8) _____ criteria are a set of standards for a company's behaviour used by socially conscious investors to screen potential investments.
- (a) JIT
 - (b) AMT
 - ✓ (c) ESG
 - (d) ABC
- (9) Management accounting information helps managers formulate strategy by answering which of the following questions?
- (a) Who are the most important customers, and how can the company deliver value to the customers?
 - (b) What is most critical capability of the company which may be technology, production, or marketing? ✓
 - (c) How can we leverage it for new strategic initiatives?
 - ✓ (d) All of the above
- (10) Management accounting with specific focus on environmental issues is becoming increasingly important in organizations as environmental costs are large in many organisations. There are three specific reasons for this, which are _____.
- (a) Environmental costs are often high in the many manufacturing organisations ✓
 - (b) Regulatory requirements often impose huge fines for non-compliance
 - ✓ (c) Both 1 and 2
 - (d) Companies are increasingly realizing that being socially and environmentally responsible declines their image and this has positive impact on their bottom line.
- (11) Management accounting is concerned with data collection from _____.
- (a) internal sources
 - (b) external sources
 - ✓ (c) internal and external sources
 - (d) nternal or external sources
- (12) Management Accounting is concerned with accounting information, which is useful to the management – This definition is given by _____.
- ✓ (a) Robert N. Antho

- (b) Brown and Howard
 - (c) CIMA
 - (d) The Institute of Chartered Accountants of England and Wales
- (13) The primary objective of Management Accounting is to ____ .
- (a) maximize profits
 - (b) minimize losses
 - (c) maximize profits or minimize losses
 - ✓ (d) All of the above
- (14) Which of the following is a correct definition of activity-based management?
- (a) An approach to the costing and monitoring of activities which involves tracing resource consumption and costing final outputs. Resources are assigned to activities and activities to cost objects based on consumption estimates. The latter utilize cost drivers to attach activity costs to outputs. ✗
 - (b) The identification and evaluation of the activity drivers used to trace the cost of activities to cost objects. It may also involve selecting activity drivers with potential to contribute to the cost management function with particular reference to cost reduction ✗
 - (c) A method of budgeting based on an activity framework and utilizing cost driver data in the budget- setting and variance feedback processes. ✗
 - ✓ (d) A system of management which uses activity-based cost information for a variety of purposes including cost reduction, cost modeling and customer profitability analysis
- (15) Which of the following characteristics would be an indicator that a company would benefit from switching to activity based costing?
- (a) Only one homogenous product is produced on a continuous basis ✗
 - (b) The existing cost system is reliable and has produced excellent results
 - ✓ (c) Overhead costs are high and increasing and no one seems to know why
 - (d) The costs of implementing ABC out-weigh the benefits
- (16) According to the Chartered Institute of Management Accountants (CIMA), cost attribution to cost units on the basis of benefits received from indirect activities e.g. ordering, setting up, and assuring quality is known as:
- (a) Absorption costing
 - (b) Marginal costing
 - ✓ (c) Activity-based costing
 - (d) Job costing
- (17) In an ABC system, which of the following is likely to be classified as a batch level activity?
- ✓ (a) Machine set-up

- (b) Product design
 - (c) Inspection of every item produced
 - (d) Production manager's work
- (18) Activity based costing
- (a) Uses a plant wide overhead rate to assign overhead
 - (b) Is not expensive to implement ✎
 - (c) Typically applies overhead costs using direct labour hours ✎
 - ✓ (d) Uses multiple activity rates
- (19) Which of the following activities is not a batch level activity?
- (a) Processing purchase orders
 - ✓ (b) Designing products
 - (c) Receive raw materials from suppliers
 - (d) Setting up equipment
- (20) Which of the following is not included in batch level activities?
- (a) Material ordering cost
 - (b) Machine set-up cost
 - (c) Inspection cost
 - ✓ (d) Designing the product
- (21) Assigning overhead using ABC often:
- ✓ (a) Shifts overhead costs from high-volume products to low-volume products
 - (b) Shifts overhead costs from low-volume products to high-volume products
 - (c) Provides the same results as traditional costing
 - (d) Requires one predetermined overhead rate
- (22) In Activity Based Costing
- (a) Non-manufacturing costs may not be assigned to products ✎
 - ✓ (b) Some manufacturing costs may be excluded from product costs
 - (c) Allocation bases are the same as those used in traditional costing methods ✎
 - (d) Similar to traditional costing, ABC only uses one overhead cost pool ✎
- (23) In an ABC system, the allocation bases that are used for applying costs to services or procedures are called:
- (a) Cost Pool
 - ✓ (b) Cost Driver
 - (c) Cost Absorption

- (d) High Level Cost
- (30) The basis of apportionment of overheads which takes into account the profitability of various departments is called:
- (a) FIFO basis
 - (b) LIFO basis
 - (c) Ability to pay basis
 - ✓ (d) Activity basis
- (31) Which of the following is the main cost driver of customer order processing activity?
- (a) Flow of the product from the assembly line ✓
 - ✓ (b) Order value
 - (c) Number of problem suppliers
 - (d) Number of machine charges
- (32) Painting the product would be an example of which activity level groups
- (a) Facility-level activity
 - (b) Product-level activity
 - ✓ (c) Unit-level activity
 - (d) Batch-level activity
- (33) Which of the following tasks is not normally associated with an activity-based costing system?
- (a) Calculation of cost application rates ✓
 - (b) Identification of cost pools ✓
 - ✓ (c) Preparation of allocation matrices →
 - (d) Identification of cost drivers
- (34) All of the following are examples of batch level activities except:
- (a) Purchase order processing
 - (b) Setting up equipment
 - (c) The clerical activity associated with processing purchase orders to produce an order for a standard product
 - ✓ (d) Worker recreational facilities
- (35) A cost driver -
- (a) is a force behind the overhaed cost
 - (b) is an allocation base
 - (c) is a transaction that is a significant determinant of cost

- (d) is all of the above ✓
- (36) Which of these is NOT a cost driver For the Activity Design of products, services & Processes ?
- (a) Number of Products in design ✓
 - (b) Number of Parts per product ✓
 - ✓ (c) Number of employee Training Programmes
 - (d) Number of engineering Hours
- (37) Which of these in NOT a Cost driver for Marketing and sales Function ?
- (a) Number of advertisements/Inserti ons ✓
 - ✓ (b) Number of researche projects
 - (c) Number of Sales personnel
 - (d) sales Revenue
- (38) Which of these in NOT a Cost driver for Customer Service Activity?
- (a) Number of service calls ✓
 - (b) Number of Products serviced ✓
 - (c) Hours spent on servicing products ✓
 - ✓ (d) sales Revenue
- (39) Plant depreciation is an example of which activity-level group?
- (a) Unit-level activity
 - ✓ (b) Facility-level activity
 - (c) Batch-level activity
 - (d) Product-level activity
- (40) Under activity-based costing, 'material ordering' is considered as —
- (a) Unit-level activity
 - (b) Facility-level activity
 - ✓ (c) Batch-level activity
 - (d) Product-level activity
- (41) Samsung an appliance manufacturer is developing a new line of ovens that uses **controlled-laser technology**. Research and testing costs associated with the new ovens is said to arise from a:
- (a) Unit Level Activity
 - (b) Competitive Level Activity
 - (c) Facility Level Activity

- (d) Product Sustaining Activity
- (42) A homogeneous cost pool is one that:
- (a) Does not change over time
 - (b) Needs many activity drivers to be allocated to a cost object
 - (c) Can be explained with a single activity driver
 - (d) Has only one type of material assigned to it
- (43) An Activity-Based Costing, an inspection of the product is a level activity:
- (a) Unit
 - (b) Batch
 - (c) Product
 - (d) Facility
- (44) A company uses traditional standard costing system. The inspection and set-up costs are actually ₹1,760 against a budget of ₹2,000. ABC system is being implemented and accordingly the number of batches is identified as the cost driver for inspection and set up. The budgeted production is 10,000 units in batches of 1,000 units whereas actually 9,000 units were produced in 11 batches. The cost per batch under ABC system will be

- (a) ₹ 160
- (b) ₹ 200
- (c) ₹ 180
- (d) ₹ 220

Budgeted cost = 2000

Budgeted no. of Batches = $\frac{10,000}{1,000} = 10$ Batches

Cost per Batch = $2000 / 10 = ₹ 200 / \text{Batch}$

- (45) X Company uses activity-based costing for Product B and Product D. The total estimated overhead cost for the parts administration activity pool was ₹5,50,000 and the expected activity was 2000 part types. If Product D requires 1200 part types, the amount of overhead allocated to product D for parts administration would be:

- (a) ₹ 2,75,000
- (b) ₹ 3,00,000
- (c) ₹ 3,30,000
- (d) ₹ 3,45,000

2000 part types → ₹5,50,000

1 part types → $\frac{550000}{2000}$

1200 part types → $\frac{550000}{2000} \times 1200 = ₹ 3,30,000$

- (46) Fast Ltd. manufactures three types of products A, B, and C following ABC System. During a period, the company incurred ₹73,000 as inspection cost and it was worked for 10, 20 and 9 production runs respectively for producing products A, B, and C. The inspection costs for product B under the ABC system was

- (a) ₹ 15,000
- (b) ₹ 40,000
- (c) ₹ 18,000

39 production run → 73,000

1 production run → $\frac{73000}{39}$

20 production run = $\frac{73000}{39} \times 20 = ₹ 37,435$

(d) ₹ 24,000

- (47) A company operates an activity based costing (ABC) system to attribute its overhead costs to cost objects. In its budget for the year- ending 31st August, 2022. The company expected to place a total of 2000 purchase orders at a total cost of ₹1,00,000. This activity and its related costs were budgeted to occur at a constant rate throughout the budget year which is divided into 13 four week periods.

During the four-week period ended 30th June 2021, a total of 200 purchase orders were placed at a cost of ₹ 9,000. The over recovery of these costs for the four-week period was

(a) ₹ 2,000

(b) ₹ 3,000

(c) ₹ 1,500

✓ (d) ₹ 1,000

$$\text{Budgeted cost per order} = \frac{100000}{2000} = ₹50$$

$$\text{Absorbed cost} = ₹50 \times 200 = ₹10,000$$

$$- \text{Actual cost} \quad (9,000)$$

$$\text{Over recovered: } \underline{1000}$$

- (48) A company manufactures 500 units of product AX the material cost to manufacture is ₹ 1,50,000, Labour cost ₹2,65,000. Material reordering cost is ₹4,500, Material handling cost is ₹2,500 Material order – 35, Material movement – 20.

Total Material cost under Activity based costing is.

(a) ₹ 554

(b) ₹ 4,22,000

✓ (c) ₹ 1,57,000

(d) ₹ 1,084

$$1,50,000 + 4500 + 2500 =$$

- (49) To obtain the break-even point in rupee sales value, total fixed costs are divided by:

(a) Variable cost per unit;

(b) Contribution margin per unit;

(c) Fixed cost per unit;

✓ (d) Profit/volume ratio.

- (50) The break-even point is the point at which:

(a) There is no profit, no loss; ✓

(b) Contribution margin is equal to total fixed cost; ✓

(c) Total revenue is equal to total cost;

✓ (d) All of the above.

- (51) The primary difference between a fixed budget and a variable (flexible) budget is that a fixed budget:

(a) includes only fixed costs, while a variable budget includes only variable costs. ✓

(b) is concerned with only further acquisitions of fixed costs, while a variable budget is concerned with expenses which vary with sales. ✓

- (c) cannot be changed after the period begins, while a variable budget can be changed after the period begins. ✗
- ✓ (d) is a plan for a single level of sales (or other measure of activity), while a variable budget consists of several plans, one for each of several levels of sales (or other measures of activity).
- (52) Margin of safety is referred to as: Sales - BEP sales.
- (a) Excess of actual sales over fixed expenses;
- (b) Excess of actual sales over variable expenses;
- ✓ (c) Excess of actual sales over break-even sales;
- (d) Excess of budgeted sales over fixed costs.
- (53) Contribution margin is known as
- ✓ (a) Marginal income
- (b) Gross profit
- (c) Net income
- (d) Net profit
- (54) Fixed cost per unit decrease when There is a inverse relation between FC and no. of units.
- ✓ (a) Production volume increases
- (b) Production volume decreases
- (c) Variable costs per unit decreases
- (d) Prime costs per unit decreases
- (55) Within a relevant range, the amount of variable costs per unit
- (a) Differs at each production level
- ✓ (b) Remains constant at each production level
- (c) Increases as production increases
- (d) Decreases as production increases
- (56) Margin of safety is referred to as
- ✓ (a) Excess of budgeted or actual sales over the variable expenses and fixed expense, at break-even.
- (b) Excess of budgeted or actual sales revenue over the fixed expenses.
- (c) Excess of actual sales over budgeted sales.
- (d) Excess of sales revenue over the variable expenses
- (57) Under marginal costing system, the contribution margin discloses the excess of
- (a) Revenue over fixed costs
- (b) Projected revenues over the break-even point

- (c) Revenues over variable costs
(d) Variable costs over fixed costs
- (58) A decrease in sales price
(a) does not affect the break-even point
(b) lowers the fixed cost
(c) Increases the break-even point
(d) lowers the break-even point
- (59) Determine Margin of safety if Profit is ₹15,000 and P/V ratio is 40%.
(a) ₹ 37,500
(b) ₹ 33,000
(c) ₹ 38,000
(d) None of the above
- $MOS = \frac{\text{profit}}{P/V \text{ ratio}} = \frac{15000}{40\%} = \underline{\underline{₹37500}}$
- (60) What is Margin of Safety if Sales is 20,000 units and B.E.P is 15,000 units?
(a) 15000 units
(b) 5000 units
(c) 10000 units
(d) 20000 units
- $MOS = \text{Sales} - \text{BEP sales}$
 $= 20,000 \text{ uts} - 15,000 \text{ uts}$
 $= \underline{\underline{5,000 \text{ uts}}}$
- (61) Determine sales in rupees for desired profit if fixed cost is ₹10,000, Variable cost is ₹30,000, Sales is ₹50,000 and desired profit is ₹5,000.
(a) ₹ 73,500
(b) ₹75,000
(c) ₹ 5,000
(d) ₹ 37,500
- $\text{Sales} = \frac{FC + \text{profit}}{P/V \text{ ratio}}$
 $= \frac{10000 + 5000}{40\%} = \frac{15000}{40\%} = \underline{\underline{₹37,500}}$
- $P/V \text{ ratio} = \frac{20000 \times 20}{50000} = 40\%$
- (62) What will be sales in rupees for desired profit if fixed cost is ₹30,000, desired profit is ₹15,000 and P/V ratio is 30%?
(a) ₹ 1,50,000
(b) ₹ 1,00,000
(c) ₹ 2,00,000
(d) None of the above
- $\text{sales} = \frac{FC + \text{profit}}{P/V \text{ ratio}} = \frac{30000 + 15000}{30\%}$
 $= \frac{45000}{30\%} = \underline{\underline{₹150000}}$
- (63) Calculate sales in rupees for desired profit if fixed cost is ₹10,000, selling price is ₹20 per unit, Variable cost is ₹15 per unit and desired profit is ₹1 per unit
(a) ₹ 20,000
(b) ₹ 50,000

let the no. of units be x

$$\text{Contribution} = £20 - 15 = £5$$

$$\text{PV ratio} = \frac{£5}{£20} \times 100 = \underline{\underline{25\%}}$$

$$20x = \frac{10,000 + x}{25\%}$$

$$\underline{20x \times 25\%} = 10,000 + x$$

$$5x = 10,000 + x$$

$$5x - x = 10,000$$

$$4x = 10,000$$

$$x = \frac{10,000}{4}$$

$$= \underline{\underline{2500 \text{ units}}} \times 20 = \underline{\underline{£50,000}}$$

let the no. of units sold be x .

$$\text{Sales} = \frac{\text{FC} + \text{profit}}{\text{contb}^n/\text{unit}}$$

$$x = \frac{50,000 + 10x}{60}$$

$$60x = 50,000 + 10x$$

$$60x - 10x = 50,000$$

$$50x = 50,000$$

$$x = \frac{50,000}{50} = 1000 \text{ units}$$

(c) ₹ 70,000

(d) ₹ 10,000

(64) Determine sales in units for desired profit if Fixed cost is ₹15,000, desired profit is ₹5,000. Selling price per unit is ₹20 and Variable cost per unit is ₹16.

✓ (a) ₹5,000 units $\text{contb}^n/\text{unit} = ₹20 - ₹16 = ₹4$

(b) ₹ 5,000

(c) ₹ 10,000

(d) ₹10,000 units

$$\text{Sales} = \frac{\text{FC} + \text{profit}}{\text{contb}^n/\text{unit}} = \frac{15000 + 5000}{4} = \frac{20000}{4} = 5000 \text{ units}$$

(65) What will be sales in units if fixed cost is ₹50,000 Contribution per unit is ₹60 and desired profit per unit is ₹10.

(a) ₹6,000 units

(b) ₹ 1,000

(c) ₹1,000 units

(d) ₹ 6,000

$$\text{Sales} = \frac{\text{FC} + \text{profit (in total)}}{\text{contb}^n/\text{unit}}$$

$$\frac{20}{50} \times 100 = 40\% \text{ (PVR)}$$

(66) 9. Determine B.E.P in units and amount if Units produced if ₹10,000, Fixed cost is ₹40,000, Selling price is ₹50 per unit and Variable cost is ₹30 per unit.

(a) ₹40 per unit, ₹2,00,000

(b) ₹50 per unit, ₹10,00,000

✓ (c) ₹20 per unit, ₹1,00,000

(d) None of the above

$$\text{BEP (units)} = \frac{\text{FC}}{\text{contb}^n/\text{unit}} = \frac{40000}{20} = 2000 \text{ units}$$

$$\text{BEP (value)} = \frac{\text{FC}}{\text{PVR}} = \frac{40000}{40\%} = 100000$$

(67) Determine B.E.P if Sales is ₹1,00,000, Variable cost is ₹50,000 and Profit is ₹20,000.

✓ (a) ₹ 60,000

(b) ₹ 40,000

(c) ₹ 80,000

(d) None of the above

$$\text{Sales} = 1,00,000$$

$$- \text{VC} \quad \underline{50,000}$$

$$\text{PVR} = \frac{50,000}{100,000} \times 100 = 50\%$$

$$\text{contb}^n: \quad \underline{50,000}$$

$$- \text{FC (BIF)} \quad \underline{(30,000)}$$

$$\text{profit} \quad 20,000$$

$$\text{BEP} = \frac{\text{FC}}{\text{PVR}} = \frac{30000}{50\%} = 60000$$

(68) P_v ratio will increase if there is -

(a) a decrease in fixed cost

(b) an increase in fixed cost

(c) a decrease in selling price per unit

✓ (d) a decrease in variable cost per unit

(69) Under marginal costing, the cost of product for inventory valuation includes

✓ (a) prime costs and variable factory overheads

(b) prime cost only

- (c) prime costs and Fixed factory overheads
- (d) prime costs and all factory overheads

(70) period costs are :

- (a) variable cost
- (b) fixed cost
- (c) prime cost
- (d) overheads cost

(71) Marginal costs is taken as equal to

- (a) Prime Cost plus all variable overheads
- (b) Prime Cost minus all variable overheads
- (c) Variable overheads
- (d) None of the above

(72) Contribution margin is equal to

- (a) Sales - Fixed Cost - Profit α
- (b) Profit + Variable Cost α
- (c) Fixed Cost - Loss
- (d) None of the above

① Sales - VC
② FC + profit.

contbⁿ = 32000
FC = 40000
Loss = (8000)

FC - loss

(73) It is pallned sell 1,00,000 units of product A at ₹12 per unit. Fixed Costs are ₹2,80,000 .To achive a profit of ₹2,00,000 what would the variable costs be ?

- (a) ₹ 4,80,000
- (b) ₹ 7,20,000
- (c) ₹ 9,00,000
- (d) ₹ 9,20,000

Sales = 100000 @ 12 = 12,00,000
- VC contbⁿ = (7,20,000)
- FC profit = 4,80,000
- FC = (2,80,000)
2,00,000

(74) Factors which can change the break even point

- (a) change in total fixed costs ✓
- (b) change in variable costs per unit ✓
- (c) change in the selling price per unit ✓
- (d) All of the above.

$BEP = \frac{FC}{PVratio}$

(75) net profit ratio is 12% and bep is 40 % of total sales compute pv ratio

- (a) 60%
- (b) 52%
- (c) 28%
- (d) 20%

$BEP + MOS = 100$

$40\% + MOS = 100$

$MOS = 60\%$ ✓

$MOS = \frac{profit}{PVratio}$

$60 = \frac{12}{PVratio}$

$PVratio = \frac{12}{60} \times 100$

$129 = 20\%$

let the sales be 100
 profit = 12% of 100 = 12
 MOS = 60% of 100 = 60

- (76) If the total cost of 1000 units is ₹ 60,000 and that of 1001 units is ₹ 60,400, then the increase of ₹400 in the total cost is:
- (a) Prime cost
 - (b) All variable overheads
 - (c) Marginal cost
 - (d) None of the above
- (77) Which of the following statements are true about marginal costing?
- (a) In marginal costing, fixed costs are treated as product costs ✗
 - (b) Marginal costing is not an independent system of costing ✓
 - (c) The elements of cost in marginal costing are divided into fixed and variable components
 - (d) Both b and c ✓
- (78) The costing method where fixed factory overheads are added to inventory is called:
- (a) Activity-based costing
 - (b) Absorption costing ✓
 - (c) Marginal costing
 - (d) All of the above
- (79) While computing profit in marginal costing:
- (a) The fixed cost gets added to the contribution
 - (b) The total marginal cost gets deducted from total sales revenue ✓
 - (c) The total marginal cost gets added to total sales revenue
 - (d) None of the above
- (80) Which of the following assumptions are made while calculating marginal cost
- (a) Total fixed cost is constant at all levels of output ✓
 - (b) Total variable cost varies according to the volume of output ✓
 - (c) All elements of cost can be divided into fixed and variable components ✓
 - (d) All of the above ✓
- (81) Contribution margin in marginal costing is also known as:
- (a) Net income
 - (b) Gross profit
 - (c) Marginal income ✓
 - (d) None of the above

- (82) What is the opportunity cost of making a component part in a factory given no alternative use of the capacity?
- (a) The variable manufacturing cost of the component
 - (b) The total manufacturing cost of the component
 - (c) The total variable cost of the component
 - ✓ (d) Zero
- (83) The difference in total cost that results from two alternative courses of action is called:
- (a) Relevant Cost
 - (b) Opportunity Cost
 - ✓ (c) Differential Cost
 - (d) Marginal Cost
- (84) Relevant costs are:
- (a) unavoidable, future and measured by cash
 - (b) avoidable, future and measured by cash
 - ✓ (c) avoidable, future and measured by profit
 - (d) unavoidable, future and measured by profit
- (85) The ^{profit} point at which total revenue is equal to the total cost is known as:
- (a) Margin of safety
 - ✓ (b) Break-even point
 - (c) Both a and b are incorrect
 - (d) Both a and b are correct
- (86) Which of the following costs would not be accounted for in a company's recordkeeping system?
- (a) an unexpired cost
 - (b) an expired cost
 - (c) a product cost
 - ✓ (d) an opportunity cost
- (87) PQR Ltd. manufactures a single product which it sells for ₹ 40 per unit. Fixed cost is ₹ 60,000 per year. The contribution to sales ratio is 40%. PQR Ltd.'s Break Even Point in units is _____
- \downarrow
 $\text{cont}^n/\text{unit} = 40\% \text{ of } 40 = ₹ 16$
 $\text{BEP}(\text{units}) = \frac{\text{FC}}{\text{cont}^n/\text{unit}} = \frac{60000}{16} = 3750 \text{ units}$
- (a) 3500
 - (b) 3700
 - ✓ (c) 3750
 - (d) 4000

(88) The break-even point of a manufacturing company is ₹1,60,000. Fixed cost is ₹48,000. Variable cost is ₹12 per unit. The PV ratio will be:

- (a) 20%
- (b) 40%
- ✓ (c) 30%
- (d) 25%

$$\text{BEP} = \frac{\text{FC}}{\text{Pv ratio}}$$

$$160000 = \frac{48000}{\text{Pv ratio}}$$

$$\text{Pv ratio} = \frac{48000}{160000} \times 100 = 30\%$$

$$\text{Pv ratio} = 40\%$$

(89) Product A generates a contribution to sales ratio of 40%. Fixed cost directly attributable to Product A amounted to ₹60,000. The sales revenue required to achieve a profit of ₹15,000 is

- (a) ₹ 2,00,000
- (b) ₹ 1,85,000
- (c) ₹ 1,87,500
- (d) ₹ 2,10,000

$$\text{FC} = 60,000$$

$$\text{DS} = \frac{\text{FC} + \text{profit}}{\text{Pv ratio}} = \frac{60000 + 15000}{40\%} = 187500 \checkmark$$

(90) XYZ Ltd. makes a special gadget for the car it manufactures. The machine for the gadget works to full capacity and incur ₹15 Lakhs and ₹40 Lakhs respectively as Variable and Fixed Costs. If all the gadgets were purchased from an outside supplier, the machine could be used to produce other items, which would earn a total contribution of ₹ 25 Lakhs. What is the maximum price that XYZ Ltd. should be willing to pay to the outside supplier for the gadgets, assuming there is no change in Fixed Costs?

- ✓ (a) ₹40 Lakhs
- (b) ₹65 Lakhs
- (c) ₹25 Lakhs
- (d) ₹15 Lakhs

(91) X Ltd. has 1000 units of an obsolete item which are carried in inventory at the original price of ₹ 50,000. If these items are reworked for ₹ 20,000, they can be sold for ₹ 36,000. Alternatively, they can be sold as a scrap for ₹6,000 in the market. In a decision model used to analyze the reworking proposal, the opportunity cost should be taken as

- (a) ₹ 16,000
- ✓ (b) ₹ 6,000
- (c) ₹ 30,000
- (d) ₹ 20,000

(92) The sales and profit of a firm for the year 2021 are ₹1,50,000 and ₹20,000 and for the year 2022 are ₹1,70,000 and ₹ 25,000 respectively. The P/V Ratio of the firm is

- (a) 15%
- (b) 20%
- ✓ (c) 25%

$$\text{Pv ratio} = \frac{\text{change in profit}}{\text{change in sales}} \times 100$$

$$= \frac{5000}{20,000} \times 100 = 25\%$$

(d) 30%

(93) Which one of the following is not considered as a method of Transfer Pricing

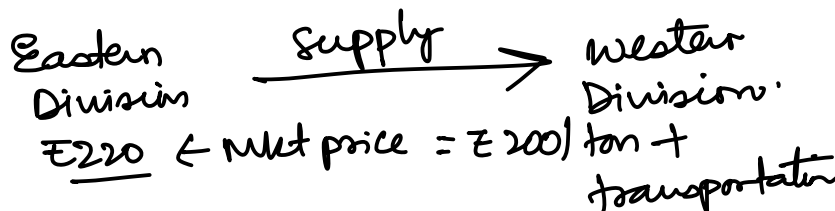
- (a) Negotiated Transfer Pricing ✓
- (b) Market Price Based Transfer Pricing ✓
- ✓ (c) Fixed Cost Based Transfer Pricing
- (d) Opportunity Cost Based Transfer Pricing ✓

(94) Method of pricing, when two separate pricing methods are used to price transfer of products from one subunit to another, is called:

- ✓ (a) Dual pricing
- (b) Functional pricing
- (c) Congruent pricing
- (d) Optimal pricing

(95) The Eastern division sells goods internally to the Western division of the same company. The quoted external price in industry publications from a supplier near Eastern is ₹200 per ton plus transportation. It costs ₹20 per ton to transport the goods to Western. Eastern's actual market cost per ton to buy the direct materials to make the transferred product is ₹100. Actual per ton direct labour is ₹50. Other actual costs of storage and handling are ₹40. The company president selects a ₹220 transfer price. This is an example of:

- (a) Negotiated transfer pricing.
- (b) Cost plus 20% transfer pricing.
- (c) Cost-based transfer pricing.
- ✓ (d) Market-based transfer pricing.



(96) Division P transfers its output to Division Q at variable cost. Once a year P charges a fixed fee to Q, representing an allowance for P's fixed costs. This type of transfer pricing system is commonly known as:

- (a) Dual pricing
- (b) Negotiated transfer pricing
- (c) Opportunity cost based transfer pricing
- ✓ (d) Two-part tariff transfer pricing

(97) In which of the following circumstances is there a strong argument that profit centre accounting is a waste of time?

- (a) When the transferred item is also sold on an external market
- (b) When the supplying division is based in a different country to head office
- (c) If the transferred item is a major product of the supplying division

- (d) If there is no similar product sold on an external market and the transferred item is a major product of the supplying division
- (98) Which one of the following is not considered as a method of Transfer Pricing?
- (a) Negotiated Transfer Pricing
 (b) Market Price Based Transfer Pricing
 (c) Fixed Cost Based Transfer Pricing
 (d) Opportunity Cost Based Transfer Pricing
- (99) Method of pricing, when two separate pricing methods are used to price transfer of products from one subunit to another, is called:
- (a) dual pricing
 (b) functional pricing
 (c) congruent pricing
 (d) optimal pricing
- (100) M Group has two divisions, Division P and Division Q. Division P manufactures an item that is transferred to Division Q. The item has no external market and 6,000 units produced are transferred internally each year. The costs of each division are as follows?

Variable Cost Division P

₹100 per unit Division Q ₹120 per unit

Fixed cost each year ₹1,20,000 ₹90,000 Head Office management decided that a transfer price should be set that provides a profit of ₹30,000 to Division P. What should be the transfer price per unit?

- (a) ₹145
 (b) ₹125
 (c) ₹120
 (d) ₹135

	Div P <u>6000 units</u>	Div Q
VC	₹100	₹120
FC	₹1,20,000	₹90,000

- (101) Minimax Ltd. fixes inter - divisional transfer prices for its products on the basis of cost plus a return on investment in the division. The budget for division X for 2022 – 23 appears as under -

Fixed Assets	₹8,00,000	} CE = 8L + 5L + 2L = 15L
Current Assets <u>excl. debtors</u>	₹5,00,000	
Debtors	₹2,00,000	
Annual fixed cost of the division	₹8,00,000	ROI = 15L × 28%
Variable cost per unit of the product	10	= <u>4.2L</u>
Budgeted volume	₹4,00,000 units per year	
Desired ROI	28%	

$$\begin{array}{rcl}
 \text{Variable cost} & = & 10 \times 400000 = 40,00,000 \\
 \text{Fixed cost} & = & 8,00,000 \\
 & & \hline
 & \text{Total cost} & 48,00,000 \\
 & + \text{ROI} & 4,20,000 \\
 & & \hline
 & & 52,20,000
 \end{array}$$

$$\text{Total price to be charged: } \underline{52,20,000}$$

$$\therefore \text{ price/unit} = \frac{52,20,000}{4,00,000} = \underline{\underline{\text{€13.05}}}$$

Total cost of Division P for 6000 units

$$\begin{array}{rcl}
 \text{Variable cost} & = & 6000 \text{ units} \times \text{€100} = 6,00,000 \\
 \text{Fixed cost} & = & 1,20,000 \\
 & & \hline
 & \text{TC} & 7,20,000 \\
 & + \text{profit} & 30,000 \\
 & \text{price to be charged} & \hline
 & \text{from Division Q} & \underline{\underline{\text{€7,50,000}}}
 \end{array}$$

$$\text{Transfer price/unit} = \frac{750000}{6000} = \underline{\underline{\text{€125}}}$$

Transfer price for division X is

- ✓ (a) ₹ 13.05
- (b) ₹ 10.70
- (c) ₹ 8.70
- (d) ₹ 14.70

(102) BC Company fixes the inter-divisional transfer prices for its products on the basis of cost, plus a return on investment in the division. The Budget for Division for Alpha for the year 2021-22 appears as under:

$$CE = 10L$$

Fixed Assets ₹5,00,000 Current assets ₹3,00,000 Debtors ₹2,00,000

Annual Fixed Cost of the Division ₹8,00,000

Variable Cost per unit of Product ₹10

$$VC = 40L \quad FC = 8L$$

Budgeted Volume 4,00,000 units per year

Desired ROI 28% on ₹10,00,000 → 2,80,000

$$TC = \frac{VC + FC}{ROI} = \frac{48L}{2.8L} = \frac{50.8L}{1}$$

Determine the transfer Price for Alpha.

- ✓ (a) 12.7
- (b) 17.2
- (c) 27.1
- (d) 11.7

$$TP = \frac{50,80,000}{4,00,000} = ₹12.70$$

(103) The _____ method of transfer pricing was introduced in order to overcome the problems caused by using marginal cost

- ✓ (a) dual price
- (b) Two-Part Transfer Pricing
- (c) Negotiated Transfer Pricing
- (d) none of them

(104) Transfer pricing methods may be classified

- ✓ (a) under 3 pricing method
- (b) under 4 pricing method
- (c) under 5 pricing method
- (d) under 7 pricing method

(105) Which of the following is true of standards?

- (a) Standards represent a benchmark or a norm ✓
- (b) Standards relate to input quantity ✓
- (c) Standards relate to input cost ✓

- (d) All of the above
- (106) Standards that can be attained only under the best circumstances are referred to as:
- (a) Attainable standards
 - (b) Budget standards
 - (c) Ideal standards
 - (d) Practical standards
- (107) Who is most likely to be held responsible for a material price variance?
- (a) Line workers
 - (b) Production supervisors
 - (c) Purchasing managers
 - (d) Production schedulers
- (108) Cost variance is the difference between
- (a) The standard cost and marginal cost
 - (b) The standards cost and budgeted cost
 - (c) The standards cost and the actual cost
 - (d) None of these
- (109) Standard costing is a tool, which replaces the bottleneck of the ^{problem} _____ costing.
- (a) Present
 - (b) Future
 - (c) Historical
 - (d) None of the above
- (110) If standard cost actual, then it is: standard cost > actual
- (a) Not favourable
 - (b) Favourable
 - (c) Neither favourable nor not favourable
 - (d) None of the above
- (111) From cost control point of view the standard most commonly used is:
- (a) Expected standard
 - (b) Theoretical standard
 - (c) Normal standard
 - (d) Basic standard
- (112) When more than one material is used in the manufacture of a product, which of the following variances arises:

- (a) Material yield variance
- ✓ (b) Material mix variance
- (c) Material price variance
- (d) Material usage variance

$$(SQ - AQ) \times SP$$

(113) Which of the following equations can be used to calculate a material quantity variance?

- (a) $(AQ \times AP) - (AQ \times SP)$
- (b) $(AP \times SP) - (AQ \times SP)$
- ✓ (c) $(AQ \times SP) - (SQ \times SP)$
- (d) $(AQ \times SP) - (AQ \times AP)$

$$\rightarrow \underline{SQ \times SP - AQ \times SP}$$

(114) Which of the following equations can be used to calculate a material price variance?

- (a) $(AQ \times AP) - (AQ \times SP)$
- (b) $(AP \times SP) - (AQ \times SP)$
- (c) $(AQ \times SP) - (SQ \times SP)$
- ✓ (d) $(AQ \times SP) - (AQ \times AP)$

$$(SP - AP) \times AQ$$

$$\underline{SP \times AQ - AQ \times AP}$$

(115) Which of the following is not likely to be a reason of unfavourable direct labour efficiency variance?

- ✓ (a) Increase in direct materials prices
- (b) Frequent break downs during production process ✓
- (c) Lack of proper supervision ✓
- (d) Use of old, outdated or faulty equipment ✓

(116) Which of the following is a purpose of standard costing?

- (a) To determine profit at different levels
- (b) To determine break-even point
- ✓ (c) To control costs
- (d) To allocate cost with more accuracy

(117) Which of the following activities is the Standard Costing System used for?

- ✓ (a) It is a basis for implementing cost control and fixing the price of products through variance analysis ✓
- (b) It helps to ascertain the cost-volume relationship between products manufactured by the business
- (c) It helps to establish the breakeven point for the products manufactured by the company
- (d) None of the above

- (118) Which of the following activities is true under the Standard Costing System?
- (a) The overhead volume variance is always beneficial ✗
 - ✓ (b) The idle time variance is never favourable
 - (c) To calculate the overall costs, a company can either use budgetary control or standard costing but not both of those techniques
 - (d) The overhead efficiency variance plus overhead expense variance is equal to the overhead budget variance for variable overheads
- (119) A standard cost is a carefully _____ unit cost which is prepared for each cost unit.
- ✓ (a) Pre-determined
 - (b) Absorbed
 - (c) Apportioned
 - (d) None
- (120) Setting of standard involves effective utilization of _____ .
- (a) Men
 - (b) Material
 - (c) Machines
 - ✓ (d) All of the above
- (121) The standard cost card contains quantities and costs for
- ✓ (a) Direct material only
 - (b) Direct labour only
 - (c) Direct material and direct labour only
 - (d) Direct material, direct labour, and overhead
- (122) Standards differ from budgets in that:
- (a) Budgets but not standards may be used in valuing inventories ✗
 - (b) Budgets but not standards may be journalized and posted ✗
 - ✓ (c) Budgets are a total amount and standards are a unit amount
 - (d) Only budgets contribute to management planning and control
- (123) Standard Costs:
- (a) Are imposed by governmental agencies
 - ✓ (b) Are predetermined unit costs which companies use as measures of performance
 - (c) Can be used by manufacturing companies but not by service or not-for-profit companies
 - (d) All of the above

(124) The advantages of standard costs include all of the following except:

- (a) Management by exception may be used ✓
- (b) Management planning is facilitated ✓
- (c) They may simplify the costing of inventories ✓
- (d) Management must use a static budget ✗

(125) Normal standards:

- (a) Allow for rest periods, machine breakdowns, and setup time ✓
- (b) Represent levels of performance under perfect operating conditions
- (c) Are rarely used because managers believe they lower workforce morale
- (d) Are more likely than ideal standards to result in unethical practices

(126) The setting of standards is:

- (a) A managerial accounting decision
- (b) A management decision
- (c) A worker decision
- (d) Preferably set at the ideal level of performance

(127) Which of the following is correct about the total overhead variance?

- (a) Budgeted overhead and budgeted overhead applied are the same
- (b) Total actual overhead is composed of variable overhead, fixed overhead, and period costs.
- (c) Standard hours actually worked are used in computing the variance
- (d) Standard hours allowed for the work done is the measure used in computing the variance

(128) What is the name given to a budget that has been prepared by re- evaluating activities and comparing the incremental costs of those activities with their incremental benefits?

- (a) Incremental budget
- (b) Rolling budget
- (c) Zero based budget
- (d) Flexible budget

(129) A budget is an instrument of management used as an aid in the _____ .

- (a) Planning
- (b) Programming
- (c) Control of business activity
- (d) All of the above

- (130) Following may be regarded as a summary budget
- (a) Production budget
 - (b) Master budget
 - (c) Cash budget
 - (d) Sales budget
- (131) Purchases budget is prepared using the information from:
- (a) Capital expenditure budget
 - (b) Materials budget
 - (c) Both (1) and (2)
 - (d) None of the above
- (132) Following budget may be compiled on departmental basis:
- (a) Production budget
 - (b) Purchase budget
 - (c) Materials budget
 - (d) All of the above
- (133) Production budget is based upon:
- (a) Sales budget
 - (b) Factory capacity
 - (c) Availability of raw material and labour
 - (d) All of the above
- (134) Budget includes:
- (a) Income
 - (b) Expenditure
 - (c) Employment of capital
 - (d) All of the above
- (135) A budget should be:
- (a) Rigid
 - (b) Flexible
 - (c) Both (1) and (2)
 - (d) None of the above
- (136) The object of budgetary control is
- (a) Planning
 - (b) Forecasting

- (c) Organizing
- (d) Directing

(137) The budget which is dynamic is .

- (a) Flexible budget
- (b) Sales budget
- (c) Cash budget
- (d) Purchase budget

(138) The process of budgeting helps in the control of:

- (a) Cost of production
- (b) Liquidity
- (c) Capital Expenditure
- (d) All of the above

(139) Plant utilization budget and Manufacturing overhead budgets are types of:

- (a) Production budget
- (b) Sales budget
- (c) Cost budget
- (d) None of the above

(140) R&D budget and Capital expenditure budget are examples of:

- (a) Short-term budget
- (b) Current budget
- (c) Long-term budget
- (d) None of the above

(141) The scare factors is also known as:

- (a) Key factor
- (b) Abnormal factor
- (c) Linking factor
- (d) None of the above

(142) What is the name given to a budget that has been prepared by re- evaluating activities and comparing the incremental costs of those activities with their incremental benefits?

- (a) Incremental budget
- (b) Rolling budget
- (c) Zero based budget
- (d) Flexible budget

(143) A budget is an instrument of management used as an aid in the _____ .

- (a) Planning
- (b) Programming
- (c) Control of business activity
- (d) All of the above

(144) Following may be regarded as a summary budget

- (a) Production budget
- (b) Master budget
- (c) Cash budget
- (d) Sales budget

(145) Purchases budget is prepared using the information from:

- (a) Capital expenditure budget
- (b) Materials budget
- (c) Both (1) and (2)
- (d) None of the above

(146) Following budget may be compiled on departmental basis:

- (a) Production budget
- (b) Purchase budget
- (c) Materials budget
- (d) All of the above

(147) Production budget is based upon:

- (a) Sales budget
- (b) Factory capacity
- (c) Availability of raw material and labour
- (d) All of the above

(148) A budget should be:

- (a) Rigid
- (b) Flexible
- (c) Both (1) and (2)
- (d) None of the above

(149) The object of budgetary control is

- (a) Planning
- (b) Forecasting

- (c) Organizing
- (d) Directing

(150) The budget which is dynamic is _____ .

- (a) Flexible budget
- (b) Sales budget
- (c) Cash budget
- (d) Purchase budget

(151) The process of budgeting helps in the control of:

- (a) Cost of production
- (b) Liquidity
- (c) Capital Expenditure
- (d) All of the above

(152) Plant utilization budget and Manufacturing overhead budgets are types of:

- (a) Production budget
- (b) Sales budget
- (c) Cost budget
- (d) None of the above

(153) R&D budget and Capital expenditure budget are examples of:

- (a) Short-term budget
- (b) Current budget
- (c) Long-term budget
- (d) None of the above

(154) The scare factors is also known as:

- (a) Key factor
- (b) Abnormal factor
- (c) Linking factor
- (d) None of the above

(155) A company usually determines the appropriate degree of decentralization based on a combination of the _____ .

- (a) Managers' personal characteristics ✓
- (b) Nature of decisions required for organizational growth ✓
- (c) Types of organizational activities in which the company is engaged ✓
- (d) All of these ✓

- (156) Major disadvantages of Decentralization are _____ .
- (a) Can result in a lack of goal congruence or sub optimization by sub-unit managers
 - (b) Requires more effective communication abilities because decision making is removed from the home office
 - (c) Helps top management recognizes and develop managerial talent
 - ✓ (d) Both 1 and 2
- (157) Which of the following is/are not benefit/s of Decentralization ?
- (a) Greater awareness of local problems → *Benefit*
 - (b) Allows managerial performance to be comparatively evaluated → *Benefit*
 - ✓ (c) Creates personnel difficulties upon introduction, especially if managers are unwilling to delegate effectively
 - (d) Develops skill level of junior managers
- (158) Return on Equity =
- ✓ (a) Net Profit Margin × Asset Turnover Ratio × Financial Leverage
 - (b) Gross Profit Margin × Asset Turnover Ratio × Financial Leverage
 - (c) Net Profit Margin × Inventory Turnover Ratio × Financial Leverage
 - (d) Net Profit Margin × Asset Turnover Ratio × Operating Leverage
- (159) According to DuPont methodology, three main financial parameters that drive Return on Equity (ROE) are _____ .
- (a) (1) Employee performance, (2) Asset usage performance, and (3) Financial leverage.
 - ✓ (b) (1) Operating performance, (2) Asset usage performance, and (3) Financial leverage.
 - (c) (1) Operating performance, (2) Inventory usage performance, and (3) Financial leverage.
 - (d) (1) Operating performance, (2) Asset usage performance, and (3) Operating leverage.
- (160) Asset usage performance means _____
- (a) a very basic profitability ratio
 - ✓ (b) Total Asset Turnover (Turnover ÷ Total Assets)
 - (c) the use of debt to acquire additional assets or fund projects
 - (d) None of these
- (161) Financial leverage means _____.
- (a) a very basic profitability ratio
 - (b) Total Asset Turnover (Turnover ÷ Total Assets)
 - ✓ (c) the use of debt to acquire additional assets or fund projects
 - (d) None of these

(162) According to Du Pont Analysis a company can increase its Return on Equity if it _____.

- (a) Generates a high Net Profit Margin *op eff* ↑
- (b) Effectively uses its assets so as to generate more sales ↑
- (c) Has a high Financial Leverage ↑
- ✓ (d) All of these

(163) Du Pont ROE =

- ✓ (a) Margin on Sales × Asset Turnover × Equity Multiplier
- (b) Margin of Safety × Asset Turnover × Equity Multiplier
- (c) Margin on Sales × Inventory Turnover × Equity Multiplier
- (d) Margin on Sales × Asset Turnover × Debt Multiplier

(164) _____ expresses divisional profit as a percentage of the assets employed in the division.

- ✓ (a) ROI
- (b) EPS
- (c) ROCE
- (d) EBITDA

(165) Return on investment (ROI) is

- (a) $(\text{Profit before tax} \div \text{Operations management capital employed}) \times 100$
- (b) $(\text{Profit before interest and tax} \div \text{Total capital employed}) \times 100$
- (c) $(\text{ROE} \div \text{Operations management capital employed}) \times 100$
- ✓ (d) $(\text{Profit before interest and tax} \div \text{Operations management capital employed}) \times 100$

(166) RI (Residual Income) =

- (a) Divisional profit — (Percentage of change in Sales × Divisional investment)
- ✓ (b) Divisional profit — (Percent capital charge × Total investment)
- (c) Divisional profit — (Percent capital charge × Divisional investment)
- (d) Total profit — (Percent capital charge × Divisional investment)

(167) The main advantages of RI is/are _____.

- (a) It avoids suboptimal decisions as investments are not rejected merely because they lower the divisional manager's ROI. ✓
- (b) It maximizes growth of the company and increases shareholders' wealth by accepting opportunities which earn a rate of return in excess of the cost of capital.
- (c) The cost of capital charge on divisional investments ensures that divisional managers are aware of the opportunity cost of funds.
- ✓ (d) All of these

(168) Acme, a division of Ace Manufacturing, has assets of ₹2,25,000 and an operating income of ₹55,000. What is the division's ROI?

- (a) 24.44% ✓ $\frac{55000}{225000} = 24.44\%$
- (b) 23%
- (c) 25%
- (d) 50%

(169) An investment centre has net assets of ₹8,00,000, and made profits before interest and tax of ₹1,60,000. The notional cost of capital is 12%. Calculate and comment on the RI (Residual Income) for the period.

- (a) ₹ 1,60,000
- (b) ₹ 96,000
- (c) ₹ 64,000 ✓ $160000 - (800000 \times 12\%) = 160000 - 96000 = 64000$
- (d) ₹ 2,56,000

(170) A person made a Capital Investment of ₹2,00,000 in a company. Operating profit, after taxes, is ₹28,000. The opportunity cost of that investment is 10%. Calculate EVA.

- (a) 20,000
- (b) ₹ 2,800
- (c) ₹ 8,000 ✓ $EVA = NOPAT - (CE \times WACC)$
 $= 28000 - (200000 \times 10\%)$
 $= 28000 - 20000 = 8000$
- (d) ₹ 17,200

(171) For EVA there 3 responsibility centres, which are _____.

- (a) Cost centre
- (b) Profit centre
- (c) Investment centre
- (d) All of these ✓

(172) The theory of learning curves will only hold if which of the following conditions apply?

- (a) The task must be repetitive ✓
- (b) Production must be at an early stage so that there is room for improvement ✓
- (c) There is inconsistency in the workforce ✗
- (d) Both 1 and 2 ✓

(173) _____ can be used:

- (i) To calculate the incremental cost of making extra units of a particular products,
- (ii) To set standards for labour,
- (iii) To prepare realistic production budgets and to report labour cost variances, and
- (iv) To quote contact price.

- ✓ (a) Learning curve theory
- (b) Return on investment
- (c) Du Pont ROE
- (d) Economic Value Added

(174) The four Perspectives of the Balanced Scorecard are _____.

- (a) 1. Operational Perspective, 2. Customers Perspective, 3. Internal business process Perspective and 4. Learning & Growth Perspectives.
- (b) 1. Financial Perspective, 2. Sellers Perspective, 3. Internal business process Perspective and 4. Learning & Growth Perspectives.
- ✓ (c) 1. Financial Perspective, 2. Customers Perspective, 3. Internal business process Perspective and 4. Learning & Growth Perspectives.
- (d) 1. Financial Perspective, 2. Customers Perspective, 3. External process Perspective and 4. Learning & Growth Perspectives.

(175) MI Ltd. has earned a net profit of ₹15 lakhs after Tax at 30%. Interest cost charged by the financial institutions was ₹10 Lakhs. The Invested capital is ₹ 95 Lakhs of which 55% is debt. The company maintains a weighted average cost of capital of 12%. Compute the Operating Income.

(a) ₹ 15 lakhs	EBIT	XX	
(b) ₹ 21.43 lakhs	- Intt	XX	
(c) ₹ 10 lakhs	EBT	XX	
✓ (d) ₹ 31.43 lakhs	- Tax	XX	
	PAT	XX	

EBIT 31.43L
- Intt 10L

EBT = 21.43L (100%)

→ 15L (70%)

(176) According to Kaplan & Norton, which of the balanced scorecard perspectives serves as the focus of the other perspectives?

- ✓ (a) Financial.
- (b) Customer.
- (c) Internal business processes.
- (d) Learning & growth.

(177) 4. Which of the following would be considered an operating asset in return on investment computations?

- (a) Land being held for plant expansion. ✗
- (b) Treasury stock. ✗
- ✓ (c) Accounts receivable. ✓
- (d) Common stock.

(178) A company that is seeking to increase ROI should attempt to decrease:

- (a) Sales. ✗

- (b) Turnover.
 - (c) Margin.
 - (d) Average operating assets.
- (179) The performance of investment centre is based on _____.
- (a) Cost of the centre
 - (b) Profit of the centre
 - (c) Profit and investment of the centre
 - (d) Revenue of the centre
- (180) Both costs and revenues are measured in _____ centers
- (a) Cost
 - (b) Profit
 - (c) Revenue
 - (d) All of these
- (181) A cost centre is a segment of the organization where the manager is responsible for _____.
- (a) Costs
 - (b) Inputs
 - (c) A or B
 - (d) None of these
- (182) The performance of investment centre is based on _____.
- (a) Cost of the centre
 - (b) Profit of the centre
 - (c) Profit and investment of the centre
 - (d) Revenue of the centre
- (183) Responsibility accounting is used for _____.
- (a) cost control
 - (b) planning
 - (c) decision making
 - (d) pricing
- (184) Responsibility Accounting is also known as _____.
- (a) Profitability accounting
 - (b) Activity accounting
 - (c) Both A and B
 - (d) None of the above

- (185) Which of the following characteristics is not associated with traditional responsibility accounting?
- (a) Assumes optimization of the parts will optimize the whole. ✓
 - (b) Assumes independence of the parts. ✓
 - (c) Places emphasis on the performance of individuals. ✓
 - ✓ (d) Attempts to control processes.
- (186) In responsibility accounting, responsibilities of various groups or individuals are identified in terms of ____.
- (a) Work ✓
 - (b) Revenue ✓
 - (c) Cost ✓
 - ✓ (d) All of the above
- (187) The area of focus on responsibility center is ____.
- (a) Quantum of sales
 - (b) Quantum of production
 - ✓ (c) Optimum utilization of resources
 - (d) All of the above
- (188) In profit center revenue represents a monetary measure of output emanating from a profit center in a given period irrespective whether ____.
- (a) The revenue is realized or not
 - (b) The output is sold or not
 - ✓ (c) Both A and B
 - (d) None of the above
- (189) In a control report of Department X, it is mentioned as indirect materials are ₹1,000, indirect labour ₹900, Overtime Charges ₹100, Depreciation on equipment ₹500, Allocated factory overhead (38% of factory space) ₹4,300, Allocated overhead of repair shop is ₹1,200. Determine total costs treating department X as a responsibility center.
- (a) ₹ 3,200
 - (b) ₹ 2,200
 - (c) ₹1,200
 - ✓ (d) None of the above
- $$\begin{array}{r}
 1000 + 900 + 100 + 500 \\
 \hline
 2500
 \end{array}$$
- (190) Which of the following criterion is not used for decision-making under uncertainty?
- (a) Maximin ✓
 - (b) Maximax ✓

- (c) Minimax ✓
 (d) Minimize expected loss ✓
- (191) Decision theory is concerned with _____.
 (a) Methods of arriving at an optimal decision ✓
 (b) Selecting optimal decision in a sequential manner ✓
 (c) Analysis of information that is available ✓
 (d) All of these ✓
- (192) Which of the following criterion is not applicable to decision-making under risk?
 (a) Maximize expected return ✓
 (b) Maximize return
 (c) Minimize expect regret
 (d) Knowledge of likelihood occurrence of each state of nature
- (193) The minimum expected opportunity loss (EOL) is _____.
 (a) Equal to EVPI
 (b) Minimum regret
 (c) Equal to EMV
 (d) Both (A) and (B) ✓
- (194) The expected value of perfect information (EVPI) is
 (a) Equal to expected regret of the optimal decision under risk ✓
 (b) The utility of additional information
 (c) Maximum expected opportunity loss
 (d) None of the above
- (195) The value of the coefficient of optimism (a) is needed while using the criterion of _____.
 (a) Equally likely
 (b) Maximin
 (c) Realism ✓
 (d) Minimax
- (196) The decision-maker's knowledge and experience may influence the decision-making process when using the criterion of
 (a) Maximax
 (b) Maximax regret
 (c) Realism ✓
 (d) Maximin

- (197) The difference between the expected profit under conditions of risk and the expected profit with perfect information is called
- ✓ (a) The expected value of perfect information
 - (b) Expected marginal loss
 - (c) None of the above
 - (d) Any one of the above
- (198) A situation in which a decision maker knows all of the possible outcomes of a decision and also knows the probability associated with each outcome is referred to as
- (a) Certainty.
 - ✓ (b) Risk.
 - (c) Uncertainty.
 - (d) Strategy.
- (199) Which of the following methods of selecting a strategy is consistent with risk averting behaviour?
- ✓ (a) If two strategies have the same expected profit, select the one with the smaller standard deviation.
 - (b) If two strategies have the same standard deviation, select the one with the smaller expected profit.
 - (c) Select the strategy with the larger coefficient of variation.
 - (d) All of the above are correct.
- (200) Which one of the following does not measure risk?
- (a) Coefficient of variation ✓
 - (b) Standard deviation ✓
 - ✓ (c) LPP → used for optimization
 - (d) All of the above are measures of risk.
- (201) The sequence of possible managerial decisions and their expected outcome under each set of circumstances can be represented and analysed by using _____.
- (a) The minimax regret criterion.
 - ✓ (b) A decision tree.
 - (c) A payoff matrix.
 - (d) Simulation.
- (202) We are comparing two investment projects. Both have expected returns of 20%, but the standard deviation of Project A's returns is 15%, while the standard deviation of Project B's returns is 9%. Which one is relatively riskier?
- ✓ (a) A

risk se darna

- (b) B
- (c) Both A and B
- (d) Bnone of these

(203) Two investments have different expected returns. Project A's expected return is 20% and the standard deviation of its returns is 15%. Project B's expected return is only 10%, while the standard deviation of its returns remains at 9%. Compute Coefficient of Variance of Project A.

$$\begin{array}{l} \text{(a) } 0.20 \\ \text{(b) } 0.75 \\ \text{(c) } 0.90 \\ \text{(d) } 0.10 \end{array}$$

$$\begin{array}{l} \text{Project A} \\ E(R) = 20\% \\ \sigma = 15\% \end{array} \quad \left| \quad \begin{array}{l} \text{Project B} \\ E(R) = 10\% \\ \sigma = 9\% \end{array} \right.$$

$$\text{Co. eff of variance} = \frac{\sigma}{E(R)} = \frac{15\%}{20\%} = 0.75$$

Answer:

- (1) (d) All of the above
- (2) (b) Management-oriented Accounting
- (3) (c) To ascertain analyse and interpret the results of business operations
- (4) (c) Management accounting
- (5) (a) Managers
- (6) (d) All of the above
- (7) (c) 3rd stage
- (8) (c) ESG
- (9) (d) All of the above
- (10) (c) Both 1 and 2
- (11) (c) internal and external sources
- (12) (a) Robert N. Antho
- (13) (d) All of the above
- (14) (d) A system of management which uses activity- based cost information for a variety of purposes including cost reduction, cost modeling and customer profitability analysis
- (15) (c) Overhead costs are high and increasing and no one seems to know why
- (16) (c) Activity-based costing
- (17) (a) Machine set-up
- (18) (d) Uses multiple activity rates
- (19) (b) Designing products
- (20) (d) Designing the product
- (21) (a) Shifts overhead costs from high-volume products to low-volume products

- (22) (b) Some manufacturing costs may be excluded from product costs
- (23) (b) Cost Driver
- (24) (d) Shipping costs
- (25) (d) Cost Object
- (26) (b) In an ABC costing system, costs are only assigned to products that actually required work that gave rise to a particular cost
- (27) (c) Activities— Cost of Activities—Cost Driver – Cost allocated to cost objects
- (28) (d) Facility Level Cost
- (29) (c) Organizational Level Cost
- (30) (d) Activity basis
- (31) (b) Order value
- (32) (c) Unit-level activity
- (33) (c) Preparation of allocation matrices
- (34) (d) Worker recreational facilities
- (35) (d) is all of the above
- (36) (c) Number of employee Training Programmes
- (37) (b) Number of researche projects
- (38) (d) sales Revenue
- (39) (b) Facility-level activity
- (40) (c) Batch-level activity
- (41) (d) Product Sustaining Activity
- (42) (c) Can be explained with a single activity driver
- (43) (b) Batch
- (44) (b) ₹ 200
- (45) (c) ₹ 3,30,000
- (46) (b) ₹ 40,000
- (47) (d) ₹ 1,000
- (48) (c) ₹ 1,57,000
- (49) (d) Profit/volume ratio.
- (50) (d) All of the above.
- (51) (d) is a plan for a single level of sales (or other measure of activity), while a variable budget consists of several plans, one for each of several levels of sales (or other measures of activity).

- (52) (c) Excess of actual sales over break-even sales;
- (53) (a) Marginal income
- (54) (a) Production volume increases
- (55) (b) Remains constant at each production level
- (56) (c) Excess of actual sales over budgeted sales.
- (57) (c) Revenues over variable costs
- (58) (c) Increases the break-even point
- (59) (a) ₹ 37,500
- (60) (b) 5000 units
- (61) (d) ₹ 37,500
- (62) (a) ₹ 1,50,000
- (63) (b) ₹ 50,000
- (64) (a) ₹5,000 units
- (65) (c) ₹1,000 units
- (66) (c) ₹20 per unit, ₹1,00,000
- (67) (a) ₹ 60,000
- (68) (d) a decrease in variable cost per unit
- (69) (a) prime costs and variable factory overheads
- (70) (b) fixed cost
- (71) (a) Prime Cost plus all variable overheads
- (72) (c) Fixed Cost - Loss
- (73) (b) ₹ 7,20,000
- (74) (d) All of the above.
- (75) (d) 20%
- (76) (c) Marginal cost
- (77) (d) Both b and c
- (78) (b) Absorption costing
- (79) (b) The total marginal cost gets deducted from total sales revenue
- (80) (d) All of the above
- (81) (c) Marginal income
- (82) (d) Zero
- (83) (c) Differential Cost
- (84) (c) avoidable, future and measured by profit

- (85) (b) Break-even point
- (86) (d) an opportunity cost
- (87) (c) 3750
- (88) (c) 30%
- (89) (c) ₹ 1,87,500
- (90) (a) ₹40 Lakhs
- (91) (b) ₹ 6,000
- (92) (c) 25%
- (93) (c) Fixed Cost Based Transfer Pricing
- (94) (b) Functional pricing
- (95) (d) Market-based transfer pricing.
- (96) (d) Two-part tariff transfer pricing
- (97) (d) If there is no similar product sold on an external market and the transferred item is a major product of the supplying division
- (98) (b) Fixed Cost Based Transfer Pricing
- (99) (a) dual pricing
- (100) (b) ₹ 125
- (101) (a) ₹ 13.05
- (102) (a) 12.7
- (103) (a) dual price
- (104) (a) under 3 pricing method
- (105) (d) All of the above
- (106) (c) Ideal standards
- (107) (c) Purchasing managers
- (108) (c) The standards cost and the actual cost
- (109) (c) Historical
- (110) (b) Favourable
- (111) (a) Expected standard
- (112) (b) Material mix variance
- (113) (c) $(AQ \times SP) - (SQ \times SP)$
- (114) (a) $(AQ \times AP) - (AQ \times SP)$
- (115) (a) Increase in direct materials prices
- (116) (c) To control costs

- (117) (a) It is a basis for implementing cost control and fixing the price of products through variance analysis
- (118) (b) The idle time variance is never favourable
- (119) (a) Pre-determined
- (120) (d) All of the above
- (121) (d) Direct material, direct labour, and overhead
- (122) (c) Budgets are a total amount and standards are a unit amount
- (123) (b) Are predetermined unit costs which companies use as measures of performance
- (124) (d) Management must use a static budget
- (125) (a) Allow for rest periods, machine breakdowns, and setup time
- (126) (b) A management decision
- (127) (d) Standard hours allowed for the work done is the measure used in computing the variance
- (128) (c) Zero based budget
- (129) (d) All of the above
- (130) (b) Master budget
- (131) (b) Materials budget
- (132) (a) Production budget
- (133) (d) All of the above
- (134) (d) All of the above
- (135) (b) Flexible
- (136) (a) Planning
- (137) (b) Sales budget
- (138) (d) All of the above
- (139) (c) Cost budget
- (140) (c) Long-term budget
- (141) (a) Key factor
- (142) (c) Zero based budget
- (143) (d) All of the above
- (144) (b) Master budget
- (145) (b) Materials budget
- (146) (a) Production budget
- (147) (d) All of the above

- (148) (b) Flexible
- (149) (a) Planning
- (150) (b) Sales budget
- (151) (d) All of the above
- (152) (c) Cost budget
- (153) (c) Long-term budget
- (154) (a) Key factor
- (155) (d) All of these
- (156) (d) Both 1 and 2
- (157) (c) Creates personnel difficulties upon introduction, especially if managers are unwilling to delegate effectively
- (158) (a) $\text{Net Profit Margin} \times \text{Asset Turnover Ratio} \times \text{Financial Leverage}$
- (159) (b) (1) Operating performance, (2) Asset usage performance, and (3) Financial leverage.
- (160) (b) $\text{Total Asset Turnover} (\text{Turnover} \div \text{Total Assets})$
- (161) (c) the use of debt to acquire additional assets or fund projects
- (162) (d) All of these
- (163) (a) $\text{Margin on Sales} \times \text{Asset Turnover} \times \text{Equity Multiplier}$
- (164) (a) ROI
- (165) (d) $(\text{Profit before interest and tax} \div \text{Operations management capital employed}) \times 100$
- (166) (c) $\text{Divisional profit} - (\text{Percent capital charge} \times \text{Divisional investment})$
- (167) (d) All of these
- (168) (a) 24.44%
- (169) (c) ₹ 64,000
- (170) (c) ₹ 8,000
- (171) (d) All of these
- (172) (d) Both 1 and 2
- (173) (a) Learning curve theory
- (174) (c) 1. Financial Perspective, 2. Customers Perspective, 3. Internal business process Perspective and 4. Learning & Growth Perspectives.
- (175) (d) ₹31.43 lakhs
- (176) (a) Financial.
- (177) (c) Accounts receivable.
- (178) (d) Average operating assets.

- (179) (c) Profit and investment of the centre
- (180) (b) Profit
- (181) (c) A or B
- (182) (c) Profit and investment of the centre
- (183) (a) cost control
- (184) (c) Both A and B
- (185) (d) Attempts to control processes.
- (186) (d) All of the above
- (187) (c) Optimum utilization of resources
- (188) (c) Both A and B
- (189) (a) A. ₹ 3,200
- (190) (d) Minimize expected loss
- (191) (d) All of these
- (192) (b) Maximize return
- (193) (d) Both (A) and (B)
- (194) (a) Equal to expected regret of the optimal decision under risk
- (195) (c) Realism
- (196) (c) Realism
- (197) (a) The expected value of perfect information
- (198) (b) Risk.
- (199) (a) If two strategies have the same expected profit, select the one with the smaller standard deviation.
- (200) (b) LPP
- (201) (b) A decision tree.
- (202) (a) A
- (203) (b) 0.75

MQP Objectives

1. Multiple Choice Questions

[1 × 12 = 12]

- (i) _____ is the study of managerial aspects of financial accounting.
- (a) Cost accounting
 - (b) Financial accounting
 - (c) Management accounting
 - (d) Business accounting
- (ii) Just-in-time inventory management and Activity based costing were developed during the _____.
- (a) 1st stage
 - (b) 2nd stage
 - (c) 3rd stage
 - (d) 4th stage
- (iii) In an ABC system, the allocation bases that are used for applying costs to services or procedures are called: _____
- (a) Cost Pool
 - (b) Cost Drivers
 - (c) Cost Absorption
 - (d) Cost Object
- (iv) Which of the following would not be deducted from sales in a management report prepared using ABC?
- (a) Direct materials
 - (b) Direct labour
 - (c) Variable selling and administration costs
 - (d) Shipping costs
- (v) _____ an item for which cost measurement is required e.g. product, job or a customer.
- (a) Cost Pool
 - (b) Cost Driver
 - (c) Cost Absorption
 - (d) Cost Object

$$\frac{600}{66\%} \times 80\% = 800 \text{ units}$$

- (b) ₹ 600
- (c) ₹ 1200
- (d) ₹ 1000

(xii) In which of the following circumstances is there a strong argument that profit centre accounting is a waste of time?

- (a) When the transferred item is also sold on an external market.
- (b) When the supplying division is based in a different country to head office.
- (c) If the transferred item is a major product of the supplying division.
- (d) If there is no similar product sold on an external market and the transferred item is a major product of the supplying division.

2. **State True or False:**

[1 × 7 = 7]

- (i) Globalization and the rapid growth of international trade has made inter-company pricing an everyday necessity for the vast majority of businesses. *True*
- (ii) Divisional Autonomy is the degree of freedom a division manager can exercise in decisions making. *True*
- (iii) The Budget manual is a schedule, document or booklet, which shows in a written form, the budgeting organization and procedure. *True*
- (iv) If the occurrence or non-occurrence of one event does not change the probability of the occurrence of the other event, the two events are said to be independent. *True*
- (v) Benchmarking is a process of measuring the performance of a company's products, services, or processes against those of another business considered to be the best in the industry. *True*
- (vi) ABC recognizes the increased complexity of modern businesses with its multiple cost drivers, many of which are transaction based rather than volume based. *True*
- (vii) A revenue centre is strictly defined as an organizational unit that is responsible for the generation of revenues and has full control over setting selling prices or budgeting costs. *False* (does not have)

3. **Fill in the blanks:**

[1 × 6 = 6]

- (i) Transfer prices based on full cost are appropriate if top management treats the divisions like cost centre
- (ii) If the selling division has, excess capacity a transfer price based on variable cost would be an appropriate transfer price, although it would hurt the performance of the selling division.
- (iii) lean manufacturing systems that seek to reduce waste by implementing JIT production systems and focussing on AMT'S
- (iv) There has been a paradigm shift in the role of the management accountant in the era of globalisation. The focus shifted to strategic analysis



- (v) If a decision maker can estimate the _____ of the future events, these should be incorporated into the decision model.
- (vi) Under marginal costing, the stock is valued at _____ .

Answer:

(a)

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)
c	c	b	d	d	d	c	c	a	c	a	d

(b)

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
True	True	True	True	True	True	False

(c)

(i)	(ii)	(iii)	(iv)	(v)	(vi)
Cost centres	Excess capacity, variable cost	just-in-time (JIT) production systems, advanced manufacturing technologies (AMTs)	strategic analysis	probabilities	Variable costz

1. Multiple Choice Questions

[1 × 12 = 12]

- (i) In a product mix decision, which is the most important factor to consider in order trying to maximise profit?
- (a) contribution per unit of a scarce resource used to make the product
 - (b) contribution per unit of the product
 - (c) variable cost per unit of the product
 - (d) product unit selling price
- (ii) Which of the following costs incurred by a commercial airline can be classified as variable?
- (a) Interest costs on leasing of aircraft ✗
 - (b) Pilots' salaries ✗
 - (c) Depreciation of aircraft ✗
 - (d) None of these three costs can be classified as variable
- (iii) A large margin of safety indicates ____.
- (a) Over capitalization
 - (b) The soundness of business
 - (c) Overproduction
 - (d) None of the above
- (iv) Usually the production budget is stated in terms of ____.
- (a) Money
 - (b) Quantity
 - (c) Both of the above
 - (d) None of the above
- (v) Revision of budgets is necessary when original budget was prepared with ____.
- (a) only management's direction
 - (b) judgement of employees only
 - (c) Inappropriate data
 - (d) All of the above
- (vi) Which of the following is NOT a method of transfer pricing?
- (a) Cost plus transfer price ✓
 - (b) Internal price plus transfer price
 - (c) Market-based transfer price

- (d) Two-part transfer price
- (vii) What transfer pricing method is preferred by Cost Accountant?
- (a) Cost Based
 - (b) Negotiated
 - (c) Market Based
 - (d) Dual Pricing
- (viii) Management accounting deals with _____ data.
- (a) qualitative
 - (b) quantitative
 - (c) both qualitative and quantitative
 - (d) only non-financial
- (ix) The following is the limitation of management accounting –
- (a) Costly Affair
 - (b) Evolutionary Stage
 - (c) Psychological Resistance
 - (d) All of the above
- (x) Objectives of Management Accounting _____.
- (a) Policy formulation
 - (b) Helpful in decision making
 - (c) Helpful in controlling
 - (d) All of the above
- (xi) Which of the following costs is relevant in decision-making?
- (a) committed costs
 - (b) accounting costs
 - (c) historical costs
 - (d) cash costs
- (xii) The cost data provide invaluable information for taking the following managerial decision(s)
- (a) To make or buy
 - (b) To own or hire fixed asset
 - (c) Determining the expansion or contraction policy
 - (d) All of the above

2. **State True or False**

[1 × 7 = 7]

- (i) Management Accounting reports are ~~public documents~~. *used Internally* **False**
- (ii) The budgetary control system is designed to fix responsibilities on executives through preparation of budgets. **True**
- (iii) A ~~cash~~ *master* budget is a summary of all functional budgets.
- (iv) Experience curve effects are reinforced when two or more products do not share a common activity or resource. **False**
- (v) Differential Cost is the change in the costs which results from the adoption of an alternative course of action. **True**
- (vi) While marginal costing excludes the entire fixed costs, some of the fixed costs may be taken into account as being relevant for the purpose of differential cost analysis. **True**
- (vii) The early identification of principal budget factor is important in the budgetary planning process because it indicates which budget should be prepared first. **True**

3. **Fill in the blanks**

[1 × 6 = 6]

- (i) The preparation of Du Pont Control chart is related to analysis of return on equity
- (ii) Master Budget contains the picture of total plans during the budget period and it comprises information relating to sales, profit, cost, production etc.
- (iii) flexible budget is stated as a budget which is made to change as per the levels of activity attained.
- (iv) CSF (critical success factors) are often quoted in management literature as those areas in which an organization needs to perform best if it has to achieve overall success.
- (v) If a decision maker can estimate the probabilities of future events, these should be incorporated into the decision model.
- (vi) Direct costing is also referred as marginal costing

Answers:

1.	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)
	a	d	b	c	c	b	b	c	d	d	a	d

2.	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
	False	True	False	False	True	True	True

3.	(i)	(ii)	(iii)	(iv)	(v)	(vi)
	Return on Equity	Master Budget	Flexible Budget	Critical success factor(CSFs)	Probabilities	Marginal costing

1. Multiple Choice Questions

[1 × 15 = 12]

(i) _____ is the study of managerial aspects of financial accounting

- (a) Cost accounting
- (b) Financial accounting
- (c) Management accounting
- (d) Business accounting

(ii) X Company uses activity-based costing for Product B and Product D. The total estimated overhead cost for the parts administration activity pool was ₹5,50,000 and the expected activity was 2000 part types. If Product D requires 1200 part types, the amount of overhead allocated to product D for parts administration would be:

- (a) ₹2,75,000
- (b) ₹3,00,000
- (c) ₹3,30,000
- (d) ₹3,45,000

$$2000 \text{ part types} \rightarrow \underline{\underline{₹550000}}$$

$$1200 \text{ part types} \rightarrow \frac{₹550000}{2000} \times 1200$$

(iii) Cost attribution to cost units on the basis of benefit received from indirect activities, such as ordering, setting-up, assuring quality is known as:

- (a) Allocation
- (b) Activity-based costing
- (c) Always better control
- (d) Absorption

(iv) What is Margin of Safety if Sales is 20,000 units and B.E.P is 15,000 units?

- (a) 15000 units
- (b) 5000 units
- (c) 10000 units
- (d) 20000 units

$$\text{units} = 10,000$$

$$FC = 20,000$$

$$FC/\text{unit} = \frac{20000}{10000} = ₹2$$

(v) Fixed cost per unit decrease when _____

- (a) Production volume increases
- (b) Production volume decreases
- (c) Variable costs per unit decreases
- (d) Prime costs per unit decreases

$$\text{units} = 15000$$

$$FC = 20000$$

$$FC/\text{unit} = \frac{20000}{15000} = ₹1.33$$

(vi) The break-even point of a manufacturing company is ₹1,60,000. Fixed cost is ₹48,000. Variable cost is ₹12 per unit. The PV ratio will be:

- (a) 20%
- (b) 40%
- ✓ (c) 30%
- (d) 25%

$$\text{BEP} = \frac{\text{FC}}{\text{PV ratio}}$$

$$160000 = \frac{48000}{\text{PVR}}$$

$$\text{PVR} = \frac{48000}{160000} = 0.3 = 30\%$$

(vii) A radio manufacturer finds that it costs ₹6.25 per unit to make component M-140 and the same is available in the market at ₹5.75 each. Continuous supply is also fully assured. The break-down cost per unit as follows: Materials ₹2.75, Labour ₹1.75 other variable expenses ₹0.50, Depreciation and other fixed cost ₹1.25. What would be your decision, if the supplier offered the component at ₹4.85 per unit?

- (a) Make
- ✓ (b) Buy
- (c) Sell
- (d) None of the above

RC RC

$$\text{Relevant} = 2.75 + 1.75 + 0.50 = \text{₹}5$$

(viii) Which one of the following is not considered as a method of Transfer Pricing?

- (a) A Negotiated Transfer Pricing ✓
- (b) B Market Price Based Transfer Pricing ✓
- ✓ (c) C Fixed Cost Based Transfer Pricing
- (d) D Opportunity Cost Based Transfer Pricing

(ix) Standard quantity of material for one unit of output is 10 kgs @ ₹8 per kg. Actual output during a given period is 800 units. The standards quantity of raw material

- ✓ (a) 8,000 kgs
- (b) 6,400 Kgs
- (c) 64,000 Kgs
- (d) None of these

$$\text{standard: } 1 \text{ unit} = 10 \text{ kg @ ₹}8$$

$$= 800 \text{ units} = 8000 \text{ kg @ ₹}8$$

(x) Standard price of material per kg is ₹20, standard usage per unit of production is 5 kg. Actual usage of production 100 units is 520 kgs, all of which was purchase at the rate of ₹22 per kg.

Material cost variance is

- (a) ₹ 2,440 (A)
- ✓ (b) ₹ 1,440 (A)
- (c) ₹ 1,440 (F)
- (d) ₹ 2,300 (F)

$$\text{Standard: } 1 \text{ unit} = 5 \text{ kg @ ₹}20$$

$$100 \text{ units} = 500 \text{ kg @ ₹}20 = \text{₹}10,000$$

$$\text{Actual: } 520 \text{ kg @ ₹}22 = \text{₹}11,440$$

Adm exp $\left\{ \begin{array}{l} F - 15000 \times 60\% = 9000 \\ V - 15000 \times 40\% = 6000 \end{array} \right.$

$\frac{6000}{600} = ₹10$

FOH $\left\{ \begin{array}{l} \text{Variable} = 20000 \times 60\% \rightarrow 12000 \\ \text{Fixed} = 20,000 \\ \times 40\% = 8000 \\ = ₹20 \end{array} \right.$

(xi) Given Production at 60% activity, 600 units Material ₹50 per unit, Labour ₹ 20 per unit, Direct expenses ₹5 per unit, Factory overheads ₹20,000 (60% variable) and Administration expenses ₹15,000 (60% fixed). What will be the total cost per unit for production at 80% capacity? $\rightarrow 800 \text{ units}$

- (a) ₹ 1,01,000
- ✓ (b) ₹ 126.25
- (c) ₹ 122
- (d) ₹ 1,22,000

variable costs

Mat = ₹50
Labour = ₹20
DE = ₹5
FOH = ₹20
ADM = ₹10

105 VC $VC = 105 \times 800 = 84000$

+ FC

Adm 011 9000
Factory OH 8000

TC ₹101000

(xii) _____ is prepared for single level of activity and single set of business conditions.

- ✓ (a) Fixed budget
- (b) Flexible budget
- (c) Both a and b
- (d) None of the above

per unit = $\frac{101000}{800} = ₹126.25$

(xiii) If the time taken to produce the first unit of a product is 4000 hrs, what will be the total time taken to produce the 5th to 8th unit of the product, when a 90% learning curve applies?

- (a) 10,500 hours
- (b) 12,968 hours
- (c) 9,560 hours
- ✓ (d) 10,368 hours

1 4000 hrs } 90%
2 3600 hrs } 90%
4 3240 } 90%

(xiv) In responsibility cost accounting the costs in focus are _____.

- ✓ (a) Controllable costs
- (b) Uncontrollable costs
- (c) Both A and B
- (d) None of the above

8 2916

Total Time for 8 units = $2916 \times 8 = 23328 \text{ hrs}$
Total Time for 4 units = $3240 \times 4 = 12960 \text{ hrs}$
10368 hrs

(xv) ABC stocks a weekly lifestyle magazine. The owner buys the magazines for ₹0.30 each and sells them at the retail price of ₹0.50 each.

At the end of the week unsold magazines are obsolete and have no value. The estimated probability distribution for weekly demand is shown below.

Weekly demand in units	Probability
20	0.20
30	0.55
40	0.25
1.00	

4 units
16.5 units
10 units
30 units

What is the expected value of demand?

- (a) 30
- (b) 20
- (c) 25
- (d) None of the above

Answer:

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)	(xv)
c	c	b	b	a	c	b	c	a	b	b	a	d	a	a

1. Multiple Choice Questions

[1 × 15 = 15]

- (i) Management accounting deals with _____ data.
- (a) Qualitative
 - (b) Quantitative
 - (c) Both qualitative and quantitative
 - (d) Non-financial
- (ii) According to the Chartered Institute of Management Accountants (CIMA), cost attribution to cost units on the basis of benefits received from indirect activities e.g. ordering, setting up, and assuring quality is known as:
- (a) Absorption costing
 - (b) Marginal costing
 - (c) Activity-based costing
 - (d) Job costing
- (iii) The following information relate to ABC

Activity level	60%	80%	
Variable costs (₹)	12,000	16,000	4000
Fixed costs (₹)	20,000	22,000	2000

The differential cost for 20% capacity is _____.

- (a) ₹4,000
 - (b) ₹2,000
 - (c) ₹6,000
 - (d) ₹5,000
- (iv) The break-even point is the point at which:
- (a) There is no profit, no loss;
 - (b) Contribution margin is equal to total fixed cost;
 - (c) Total revenue is equal to total cost;
 - (d) All of the above.
- (v) A decrease in sales price _____.
- (a) does not affect the break-even point
 - (b) lowers the fixed cost
 - (c) Increases the break-even point

(d) lowers the break-even point

(vi) What will be sales in rupees for desired profit if fixed cost is ₹30,000, desired profit is ₹15,000 and P/V ratio is 30%?

- (a) ₹1,50,000
(b) ₹1,00,000
(c) ₹2,00,000
(d) None of the above

$$\text{Sales} = \frac{\text{FC} + \text{profit}}{\text{P/V ratio}} = \frac{30000 + 15000}{30\%} = ₹1,50,000$$

(vii) Variable cost is also referred to as in the marginal costing technique:

- (a) Total cost
(b) Product cost
(c) Period cost
(d) None of the above

(viii) The sales and profit of a firm for the year 2021 are ₹1,50,000 and ₹20,000 and for the year 2022 are ₹1,70,000 and ₹25,000 respectively. The P/V Ratio of the firm is _____.

- (a) 15%
(b) 20%
(c) 25%
(d) 30%

$$\text{P/V ratio} = \frac{\text{change in profit}}{\text{change in sales}} = \frac{5000}{20000} \times 100 = 25\%$$

(ix) A company manufactures and sells three types of products namely A, B and C. Total sales per month is ₹80,000 in which the share of these three products are 50%, 30% and 20% respectively. The variable cost of these products is 60%, 50% and 40% respectively. The combined P/V Ratio will be:

- (a) 49%
(b) 48%
(c) 47%
(d) 50%

cont'n 40% 50% 60%

$$\begin{aligned} \text{A} &\rightarrow 80,000 \times 50\% = 40,000 \times 40\% = 16,000 \\ \text{B} &\rightarrow 80,000 \times 30\% = 24,000 \times 50\% = 12,000 \\ \text{C} &\rightarrow 80,000 \times 20\% = 16,000 \times 60\% = 9,600 \\ \text{Total} &= 37,600 \end{aligned}$$

$$\frac{\text{TC}}{\text{TS}} \times 100 = \frac{37600}{80000} \times 100 = 47\%$$

(x) M Group has two divisions, Division P and Division Q. Division P manufactures an item that is transferred to Division Q. The item has no external market and 6,000 units produced are transferred internally each year. The costs of each division are as follows?

	Division P	Division Q
Variable Cost	₹100 per unit	120 per unit
Fixed cost each year	₹1,20,000	90,000

Head Office management decided that a transfer price should be set that provides a profit of ₹30,000 to Division P. What should be the transfer price per unit?

- (a) ₹145

$$\begin{aligned}
 TVC &= 6000 \times 100 = \text{₹}600000 \\
 TFC &= \text{₹}120000 \\
 TC &= \text{₹}720000 \\
 + \text{profit sales} &= \text{₹}30000 \\
 \hline
 &= \text{₹}750000 \\
 \text{no. of units} &= 6000 \\
 TP/\text{unit} &= \frac{750000}{6000} = \text{₹}125
 \end{aligned}$$

- (b) ₹125 ✓
 (c) ₹120
 (d) ₹135
- (xi) Standard costing is a tool, which replaces the bottleneck of the _____ costing.
 (a) Present
 (b) Future
 (c) Historical ✓
 (d) None of the above

- (xii) During the month of December actual direct labour cost amounted to ₹39,550 the standard direct labour rate was ₹10 per hour and the direct labour rate variance amounted to ₹450 favourable. The actual direct labour hours worked was:
 (a) 3,955 hours
 (b) 4,000 hours ✓
 (c) 3,910 hours
 (d) 4,500 hours

$$\begin{aligned}
 (SR - AR) \times AH &= \text{DLR variance} \\
 SR \times AH - AR \times AH &= 450 \\
 10 \times AH - 39550 &= 450 \quad \rightarrow \frac{40000}{10} \\
 10AH &= 39550 + 450 \quad AH = 4000
 \end{aligned}$$

- (xiii) A factory produces two types of articles Y and Z. Article Y takes 8 hours to make and Z takes 16 hours. In a month (25 days x 8 hours) 600 units of Y and 400 units of Z are produced. Given budgeted hours 8000 per month and men employed are 50. Determine Activity ratio, Capacity ratio and efficiency ratio.
 (a) 112%, 140%, 140%
 (b) 140%, 112%, 140%
 (c) 140%, 140%, 112% ✓
 (d) None of the above

$$\begin{aligned}
 Y &= 8 \text{ hrs} \\
 Z &= 16 \text{ hrs}
 \end{aligned}$$

- (xiv) According to Kaplan & Norton, which of the balanced scorecard perspectives serves as the focus of the other perspectives?
 (a) Financial. ✓
 (b) Customer.
 (c) Internal business processes.
 (d) Learning & growth.
- (xv) If a decision maker is risk averse, then the best strategy to select is the one that yields the _____.
 (a) Highest expected payoff. ✗
 (b) Lowest coefficient of variation. ✗
 (c) Highest expected utility. ✓
 (d) Lowest standard deviation

standard hours for actual production

$$Y = 8 \text{ hours} \times 600 \text{ units} = 4800 \text{ hrs}$$

$$Z = 16 \text{ hours} \times 400 \text{ units} = 6400 \text{ hrs}$$

11200 hrs

Budgeted hours = 8000 hours

Actual hours = 25 Days \times 8 hours \times 50 = 10,000 hours.

$$\textcircled{i} \text{ Activity ratio} = \frac{\text{std. hours for AP}}{\text{Budg. hours}} = \frac{11200}{8000} = \underline{\underline{140\%}}$$

$$\textcircled{ii} \text{ capacity ratio} = \frac{\text{actual hours}}{\text{Budgeted hours}} = \frac{10,000}{8,000} = 125\%$$

$$\textcircled{iii} \text{ efficiency ratio} = \frac{\text{std hours for AP}}{\text{actual hours}} = \frac{11200}{10000} = \underline{\underline{112\%}}$$

Answers :

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)	(xv)
c	c	c	a	c	a	b	c	c	b	c	b	c	a	c

1. **Choose the correct option:**

[15 x 2 = 30]

- (i) Is the study of managerial aspects of financial accounting.
- (a) Cost accounting
 - (b) Financial accounting
 - (c) Management accounting
 - (d) Business accounting
- (ii) Process of Cost allocation under Activity Based Costing is:
- (a) Cost of Activities—Activities—Cost Driver – Cost allocated to cost objects
 - (b) Cost Driver — Cost of Activities— Cost allocated to cost objects – Activities
 - (c) Activities— Cost of Activities—Cost Driver – Cost allocated to cost objects
 - (d) Activities—Cost Driver – Cost allocated to cost objects — Cost of Activities
- (iii) Plant depreciation is an example of which activity-level group?
- (a) Unit-level activity
 - (b) Facility-level activity
 - (c) Batch-level activity
 - (d) Product-level activity
- (iv) A decrease in sales price
- (a) does not affect the break-even point
 - (b) lowers the fixed cost
 - (c) Increases the break-even point
 - (d) lowers the break-even point
- (v) What will be the margin of safety if sales is ₹3,00,000 and B.E.P is ₹ 4,50,000?
- (a) ₹1,00,000
 - (b) ₹1,50,000
 - (c) Amount of sales < B.E.P, therefore no margin of safety
 - (d) None of the above
- (vi) The costing method where fixed factory overheads are added to inventory, is called:
- (a) Activity-based costing
 - (b) Absorption costing
 - (c) Marginal costing
 - (d) All of the above

$PV \text{ ratio} = 40\%$

(vii) Product A generates a contribution to sales ratio of 40%. Fixed cost directly attributable to Product A amounted to ₹60,000. The sales revenue required to achieve a profit of ₹15,000 is:

$FC = 60,000$
 $Sales = \frac{FC + \text{profit}}{PVR} = \frac{60,000 + 15,000}{40\%} = \frac{75,000}{40\%} = 1,87,500$

- (a) ₹ 2,00,000
- (b) ₹ 1,85,000
- (c) ₹ 1,87,500
- (d) ₹ 2,10,000

(viii) M Group has two divisions, Division P and Division Q. Division P manufactures an item that is transferred to Division Q. The item has no external market and 6,000 units produced are transferred internally each year. The costs of each division are as follows:

	Division P	Division Q
Variable Cost	₹ 100 per unit	₹ 120 per unit
Fixed cost each year	₹ 1,20,000	₹ 90,000

Head Office management decided that a transfer price should be set that provides a profit of ₹ 30,000 to Division P. What should be the transfer price per unit?

- (a) ₹ 145
 - (b) ₹ 125
 - (c) ₹ 120
 - (d) ₹ 135
- || Repeat

(ix) Which one of the following is not considered as a method of Transfer Pricing?

- (a) Negotiated Transfer Pricing ✓
- (b) Market Price Based Transfer Pricing ✓
- (c) Fixed Cost Based Transfer Pricing
- (d) Opportunity Cost Based Transfer Pricing

(x) If standard cost actual, then it is:

- (a) Not favourable
- (b) Favourable
- (c) Neither favourable nor not favourable
- (d) None of the above.

$SC < \text{actual} \rightarrow \text{unfavourable}$
 $SC > \text{actual} \rightarrow \text{favourable}$

(xi) What is the labour rate variance if standard hours for 100 units of output are 400 @ ₹ 2 per hour and actual hours taken are 380 @ ₹ 2.25 per hour?

- (a) ₹120 (A)
- (b) ₹100 (A)
- (c) ₹95 (A)

$LRV = (SR - AR) \times AH$
 $= (2 - 2.25) \times 380$
 $= -0.25 \times 380$
 $= -95 \Rightarrow 95 (A)$

(d) ₹ 25 (F)

(xii) A budgeting process which demands each manager to justify his entire budget in detail from beginning is:

- (a) Functional budget
- (b) Master budget
- ✓ (c) Zero base budgeting
- (d) None of the above

(xiii) The following ratios have been calculated for a company:

Gross profit margin	42%
Operating profit margin	28%
Gearing (debt/equity)	40%
Asset turnover	65%

Handwritten calculation for Return on Capital Employed:

$$\frac{\text{Return}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Total assets (Cap employed)}}$$

What is the return on capital employed for the company?

- (a) 27.3%
- ✓ (b) 18.2%
- (c) 11.2%
- (d) 16.8%

Handwritten calculation: $28\% \times 65\% = 18.2\%$

Handwritten formula: $\frac{\text{Return}}{\text{Cap employed}}$

(xiv) Which of the following is responsibility center?

- (a) Expense center
- (b) Profit center
- (c) Investment center
- ✓ (d) All of the above.

(xv) The minimum expected opportunity loss (EOL) is

- (a) Equal to EVPI
- (b) Minimum regret
- (c) Equal to EMV
- ✓ (d) Both (A) and (B)

Answer:

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)
(c)	(c)	(b)	(c)	(a)	(b)	(c)	(b)	(c)	(b)
(xi)	(xii)	(xiii)	(xiv)	(xv)					
(c)	(c)	(b)	(d)	(d)					

Choose the correct option:

[15 x 2 = 30]

(xvi) Which of the following is not a characteristic of management accounting?

- (a) Forward-looking ✓
- ✓ (b) Historical orientation
- (c) Internal focus
- (d) Decision - making

(xvii) The break-even point is where:

- ✓ (a) Total costs equal total revenue
- (b) Total revenue exceeds total costs
- (c) Variable costs equal fixed costs
- (d) Contribution margin is negative

$$TC = TR$$

no profit no loss

$$FC = \text{cont}^n$$

(xviii) Variance analysis is used to:

- ✓ (a) Identify the root causes of inefficiencies
- (b) Calculate contribution margin
- (c) Prepare financial statements
- (d) Determine break-even point

(xix) Which of the following is not a relevant cost information in a make or buy decision in short run (i.e., in marginal costing)?

- (a) Burglary Insurance
- (b) Fire Insurance
- (c) Marine Insurance
- ✓ (d) None of the above

sunk cost → Irrelevant.

(xx) If Sales - ₹ 9,00,000 ; Margin of safety = 40% ; P/V Ratio = 2/3, then what is the Break- even Sales?

- (a) ₹ 4,50,000
- (b) ₹ 3,60,000
- ✓ (c) ₹ 5,40,000
- (d) ₹ 6,00,000

$$\text{BE sales} = 60\%$$

$$\text{BE sales} = 60\% \text{ of } 900000 = \underline{\underline{540000}}$$

(xxi) Sale for two consecutive months, of a company are ₹ 3,80,000 and ₹ 4,20,000. The company's net profits for these months amounted to ₹ 24,000 and ₹ 40,000 respectively. There is no change in contribution/sales ratio or fixed costs. The contribution/sales ratio of the company _____ is.

- (a) 1/3

pv ratio : $\frac{\text{change in profit}}{\text{change in sales}} = \frac{£16,000}{£40,000} = \frac{2}{5}$

- (b) 2/5
- (c) 1/4
- (d) 3/8

(xxii) Standard Cost is _____ a cost.

- (a) Pre-determined
- (b) Actual
- (c) Historical
- (d) Short-term

(xxiii) Which of the following budgets should be prepared first?

- (a) Production Budget
- (b) Purchase Budget
- (c) Master Budget
- (d) Sales Budget

(xxiv) Labour Turnover _____

- (a) The number of people working in the current period
- (b) The number of people who left the organisation in the previous period
- (c) Rate of change of labour force
- (d) The rate of the change in the wages of the labour force

(xxv) The per unit expenses of the FC portion varies with the volume of production while portion remains the same with volume.

per unit expenses of

- (a) Fixed; Variable
- (b) Variable; Fixed
- (c) Variable; Semi-Variable
- (d) Fixed; Semi-Variable

(xxvi) Which method of costing is commonly used by companies that produce unique products or services?

- (a) Process costing
- (b) Job costing
- (c) Batch costing
- (d) Both A and C

$(SP - AP) \times AQ$ $\frac{SP \times AQ - AP \times AQ}{}$

(xxvii) Material price variance is calculated by _____ .

- (a) Standard Price × Actual Quantity - Actual Price × Actual Quantity
- (b) Standard Price × Actual Quantity - Actual price × Standard Quantity

- (c) Actual Price × Actual Quantity - Standard price × Standard Quantity
 (d) Actual price × Standard Quantity - Standard price × Standard Quantity

(xxviii) Calculate the material price variance from the following:

Actual Quantity - 2.5 kgs
 Standard Price - ₹ 3 per kg
 Actual Price - ₹ 5 per kg
 Standard Quantity - 4.5 kgs

$$\begin{aligned} \text{MPV} &= (\text{SP} - \text{AP}) \times \text{AQ} \\ &= (3 - 5) \times 2.5 \\ &= -2 \times 2.5 \\ &= 5 \text{ (Adverse)} \end{aligned}$$

- (a) ₹ 3(F)
 (b) ₹ 5(A)
 (c) ₹ 12(A)
 (d) ₹ 6 (F)

(xxix) Which budgeting technique involves preparing budgets from the bottom of the organization hierarchy to the top?

- (a) Top-down budgeting
 (b) Zero-based budgeting
 (c) Incremental budgeting
 (d) Bottom-up budgeting

(xxx) A manufacturing company budgets to produce 10,000 units during a period. It expects to incur ₹50,000 in fixed overhead costs and ₹3 per unit in variable overhead costs. If the actual production turns out to be 9,500 units, what is the company's flexible budget overhead cost?

- (a) ₹74,500
 (b) ₹77,000
 (c) ₹79,500
 (d) ₹78,500

$$\begin{aligned} \text{FC} &= ₹ 50,000 \\ \text{VC} &= ₹ 3 \times 9,500 = ₹ 28,500 \\ \text{TC} &= \underline{\underline{₹ 78,500}} \end{aligned}$$

Answer:

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)	(xv)
b	a	a	b	c	b	a	d	c	a	b	a	b	d	d

NOTES

Termwise Objective

1. Multiple Choice Questions

[1 × 12 = 12]

(i) Profit Volume ratio is equal to:

- (a) Variable cost as a percentage of sales ✗
 (b) Fixed cost as a percentage of sales ✗
 ✓ (c) ^{Contribution} Excess of sales over variable cost as a percentage of sales
 (d) Total cost as a percentage of sales ;

(ii) A Limited produces 500 units of product in 7,500 hours against standard hours of 8,000. If standard rate per hour is ₹ 75, then labour efficiency variance will be:

- ✓ (a) ₹ 37,500 (F) ^{SR}
 (b) ₹ 37,500 (A)
 (c) ₹ 40,000 (F)
 (d) ₹ 38,000 (F)

$$\begin{aligned} LEV &= (SLH - ALH) \times SR \\ &= (8000 - 7500) \times 75 \\ &= 500 \times 75 = \underline{\underline{37500 (F)}} \end{aligned}$$

(iii) Divisional managers prepare _____ without reference to the past budget or achievements.

- (a) Outcome Budgets
 (b) Performance Budgets
 (c) Programme Budgets
 ✓ (d) Zero Base Budgets

(iv) According to Norton and Kaplan, the balanced scorecard should be used as .

- (a) a control system
 (b) a diagnostic system
 ✓ (c) a strategic system
 (d) All of the above

(v) A/An _____ is an organizational unit whose manager is responsible for generating revenue and managing expenses related to current activity.

- (a) Expense Centre
 (b) Revenue Centre
 (c) Cost Centre
 ✓ (d) Profit Centre

(vi) RTM Ltd., using Activity Based Costing (ABC), manufactures two types of products-P and Q respectively. During a period, the company incurred ₹ 50,000 as inspection cost and it worked for 10 and 15 production runs respectively for producing product P and Q. The inspection cost for product P under ABC system was:

- (a) ₹ 20,000
 (b) ₹ 30,000
 (c) ₹ 40,000
 (d) None of the above
- Handwritten calculation:*
 25 prodⁿ runs → ₹ 50,000
 10 prodⁿ runs → $\frac{50,000}{25} \times 10 = ₹ 20,000$

(vii) The minimum expected opportunity loss (EOL) is

- (a) equal to EVPI
 (b) minimum Regret
 (c) equal to EMV
 (d) Both (A).and (B)

(viii) Responsibility Accounting is used for

- (a) cost control
 (b) planning
 (c) decision making
 (d) pricing

(ix) The term _____ is used to describe a location to which overhead costs are initially assigned.

- (a) Cost driver
 (b) Cost pool
 (c) Activity
 (d) Cost objects



(x) Units produced 50,000; Selling price per unit ₹ 15; Variable cost per unit ₹ 12; Fixed costs ₹ 1,60,000. Calculate sales value when the profit to be earned is ₹ 80,000.

- (a) ₹ 10,00,000
 (b) ₹ 12,00,000
 (c) ₹ 9,00,000
 (d) ₹ 14,00,000

Handwritten calculation:
 PV ratio = $\frac{15-12}{15} = 20\%$
 Sales = $\frac{1,60,000 + 80,000}{20\%} = \frac{2,40,000}{20\%} = ₹ 12,00,000$

(xi) Economic Value Added (EVA) can be calculated as under:

- (a) Return to Equity Shareholders fund — Cost of capital Employed.
 (b) Return to providers of fund — Cost of capital Employed.
 (c) Return to Long term loan fund — Cost of capital Employed.
 (d) Return to Equity Shareholders fund — Cost of Equity.

(xii) According to DuPont methodology, the parameter(s) that drive Return on Equity (ROE) is / are:

- (a) Operating performance ✓
- (b) Asset usage performance ✓
- (c) Financial leverage ✓
- (d) All of the above ✓

2. State whether the following statements are "True" or "False": [1 × 7 = 7]

- (i) Management accounting deals ~~only with~~ ^{both qualitative &} quantitative data. False
- (ii) In marginal costing ~~both fixed~~ and variable cost are considered for product costing and inventory valuation. False
- (iii) ~~Unavoidable~~ fixed costs are considered as relevant cost. False
- (iv) Standards are arrived at on the basis of past performance. False
- (v) Division under transfer pricing system is treated as Cost Centre. False
- (vi) Production budget is also known as Subsidiary Budget. True
- (vii) Return on Investment (ROI) ignores the cost of equity capital. True

3. Fill in the Blanks: 1x6=6

- (i) A standard is a norm against which the actual performance can be measured.
- (ii) CVP analysis is the study of the interrelationship between cost, volume and profit at various levels of activity.
- (iii) angle of incidence is an angle formed at the intersection point of total sales line and total cost line in a formal break-even chart.
- (iv) In Activity Based Costing, the allocation basis used for applying costs to services or products is called cost driver.
- (v) MOS is the excess of total sales over BEP sales.
- (vi) learning curve theory proposes that a learner's efficiency in a task improves over time, the more the learner performs the task.

Answers :

1.	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)
	c	a	d	c	d	a	d	a	b	b	b	d
2.	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)					
	False	False	False	False	False	True	True					

3.

(i)	Standard
(ii)	Cost-volume-profit (CVP) / Break even
(iii)	Angle of Incidence
(iv)	Cost driver
(v)	Margin of safety
(vi)	Learning curve

1. Multiple Choice Questions

[1 × 12 = 12]

(i) Which of the following would decrease unit contribution margin the most?

- (a) 10% decrease in selling price \checkmark Sales = ₹10
 (b) 10% increase in variable costs VC = ₹6
 (c) 10% decrease in variable costs \times $\text{Contribution} = ₹4$
 (d) 10% decrease in fixed costs \times
- Handwritten calculations:
 (i) Sales = ₹9, VC = ₹6, Contribution = ₹3
 (ii) Sales = ₹10, VC = ₹6.6, Contribution = ₹3.4

(ii) Which one of the following statements best demonstrates the concept of the learning curve?

- (a) Learning curve is a linear cost behavior influenced by learning. \checkmark
 (b) Learning curve is a judgmental method of estimating costs when learning is present. \checkmark
 (c) A learning curve is a percentage by which average time per unit produced decreases as output doubles. \checkmark
 (d) A learning curve is a percentage by which average time falls as output increases by one unit.

(iii) AB Ltd. uses standard costing system. The following information pertains to direct labour for Product X for the month of March, 2023:

Standard rate per hour ₹ 8; Actual rate per hour ₹ 8.40

Standard hours allowed for actual production is 2000 hours

Labour Efficiency variance = ₹ 1,600 (Adverse)

What were the actual hours worked?

- (a) 1,800 Hours
 (b) 1,810 Hours
 (c) 2,200 Hours \checkmark
 (d) 2,190 Hours

Handwritten calculations:
 $LEV = (SLH - ALH) \times SR$
 $-1600 = (2000 - ALH) \times 8$
 $\frac{-1600}{8} = (2000 - ALH)$
 $-200 = 2000 - ALH$
 $2000 + 200 = ALH$
 $2200 = ALH$

(iv) Economic value added (EVA) is a concept that is closely related to residual income. EVA is computed by

- (a) subtracting the adjusted total cost of capital from the adjusted after-tax income. \checkmark
 (b) subtracting adjusted after-tax income from total divisional investment.
 (c) dividing adjusted after-tax income by adjusted divisional investment. \times
 (d) dividing adjusted after-tax income by adjusted total cost of capital. \times

(v) Expected value in decision analysis is

- (a) a standard deviation using the probabilities as weights. \times

- (b) the square root of the squared deviations. ✓
- (c) a measure of the difference between the best possible outcome and the outcome of the original decision. ✓
- (d) an arithmetic mean using the probabilities as weights. $Contribution = ₹20$

(vi) M/s SP Limited sells Glucon P at a selling price of ₹ 100 per unit. Variable cost per unit is ₹80 and Fixed cost for the year is ₹ 3,00,000. Actual quantity sold during the year is 1,00,000 boxes of Glucon P. The Break Even Point (Units) and Margin of Safety (Units) will be

- (a) BEP (Units) will be 20,000 units and MOS (Units) will be 80,000 units.
- (b) BEP (Units) will be 10,000 units and MOS (Units) will be 90,000 units.
- ✓ (c) BEP (Units) will be 15,000 units and MOS (Units) will be 85,000 units.
- (d) BEP (Units) will be 50,000 units and MOS (Units) will be 50,000 units.

$$BEP = \frac{FC}{Contribution}$$

$$= \frac{300000}{20}$$

$$= 15000 \text{ units}$$

(vii) Standard output is 1,000 units and actual output is 800 units. Standard price per Kg is ₹ 2 and Actual price per Kg is ₹ 3. Standard quantity per unit is 4 Kg. If actual quantity is 4,000 kgs, the Material Cost Variance will be

- (a) ₹ 1,600 (F)
- (b) ₹ 1,600 (A)
- ✓ (c) ₹ 5,600 (A)
- (d) ₹ 3,200 (A)

standard: 1 unit : 4 kg @ ₹ 2

800 units : 3200 kg @ ₹ 2 = ₹ 6400

Actual = 4000 kg @ ₹ 3 = ₹ 12000

(viii) _____ is the budget which incorporates all functional budgets, which is finally approved, adopted & employed.

- (a) Zero Base Budget
- (b) Rolling Budget
- ✓ (c) Master Budget
- (d) Performance Budget

$$MCV = SC \text{ for } AO - AC$$

$$= 6400 - 12000$$

$$= ₹ 5600 (A)$$

(ix) M/s Shibaji Limited has Capital Employed of ₹ 4,50,000 and its Operating Income for the year ended 31-03-2023 is ₹ 1,00,000. If the minimum expected rate of return is 14%, the Residual Income (RI) of the Company is

- (a) ₹ 35,000
- (b) ₹ 43,000
- (c) ₹ 40,000
- ✓ (d) ₹ 37,000

$$Residual Income = OI - (WACC \times CE)$$

$$= 100000 - (14\% \times 450000)$$

$$= 100000 - 63000$$

$$= 37000$$

(x) M/s Dutta Rubber manufactured 10,000 units of Biodegradable disposable containers at the Material cost of ₹ 6 per unit. The Direct labour cost is ₹ 15 per unit out of which 2/3 is fixed. Factory overhead cost is ₹ 20 per unit of which 60% is fixed. The labour used for manufacturing Biodegradable disposable containers can be used to manufacture another product having selling price per unit of ₹ 40 and Material cost of ₹ 10 per unit, The Relevant

variable = ₹ 20 × 40% = ₹ 8

variable = ₹ 15 × 1/3 = ₹ 5

alternative → $\text{Contb}^n = ₹40 - ₹10 = ₹30$

Cost (RC) of manufacturing Biodegradable disposable containers is

(a) ₹ 66

✓ (b) ₹ 44

(c) ₹ 36

(d) ₹ 32

$$\begin{aligned} \text{MC} &= ₹6. \\ + \text{FOH}(v) &= ₹8 \\ + \text{Contb}^n &= ₹30 \\ \hline & ₹44 \end{aligned}$$

(xi) Fixed cost is Relevant Cost if it is

✓ (a) Discretionary

(b) Sunk

(c) Unavoidable

(d) Periodic

(xii) According to Norton and Kaplan, the balanced scorecard should be used as

(a) A Control system

(b) A Diagnostic system

✓ (c) A Strategic system

(d) Both (A) & (C) above

(xiii) M/s NABARD Limited has provided you the following data for the financial year 2022-23. Break Even Point (in ₹) = 2,66,666.67. Selling price per unit is ₹ 100 and Variable Cost per unit is ₹ 70. Fixed Cost is ₹ 80,000. If the selling price per unit is reduced by 10% in the next year, what will the new Break Even Point (in%)?

(a) ₹ 3,56,058

✓ (b) ₹ 3,60,000

(c) ₹ 3,88,556

(d) ₹ 3,57,548

$$\text{pv ratio} = \frac{100 - 70}{100} \times 100 = 30\%$$

$$\text{FC} = \frac{80,000}{100}$$

$$\rightarrow \text{capital employed} = 10L + 10L = ₹20L$$

(xiv) M/s Agartala Plastics Private Limited has provided you the information of its pack aging division. Fixed Assets = ₹ 10,00,000 & Current Assets = ₹ 10,00,000. Annual Fixed Cost of the packaging division is ₹ 16,00,000, Variable Cost per unit is ₹ 10. If the budgeted volume per year = 8,00,000 units and Return on Investment is 18%, the Transfer Price of the packaging division will be

(a) ₹ 11.60

✓ (b) ₹ 12.45

(c) ₹ 13.40

(d) ₹ 10.90

$$\begin{aligned} \text{TVC} &= 800000 \times 10 = 80,00,000 \\ \text{TFC} &= 16,00,000 \\ \text{ROI} &= 18\% \times 2000000 = 3,60,000 \\ \hline & 99,60,000 / 800000 \\ &= ₹12.45 \end{aligned}$$

(xv) Under Marginal Costing, the Opening & Closing stock is valued at which of the following basis?

(a) Opening stock is valued at variable cost & closing stock is valued at total cost. ✓

$$\begin{array}{l} \text{new selling price} = \text{£}100 - 10\% = \text{£}90 \\ \text{variable costs} = \text{£}70 \end{array}$$

$$\text{new contribution} = \underline{\underline{\text{£}20}}$$

$$\text{PV ratio} = \frac{\text{Cont}^n}{\text{Sales}} \times 100 = \frac{20}{90} \times 100 = 22.22\%$$

$$\text{Fixed costs} = \underline{\underline{\text{£}80000}}$$

$$\begin{aligned} \text{Break even point} &= \frac{\text{FC}}{\text{PV ratio}} = \frac{80000}{22.22\%} \\ &= \underline{\underline{3,60,000}} \end{aligned}$$

- (b) Opening stock is valued at total cost & closing stock is valued at variable cost. ↗
- ✓ (c) Both Opening & Closing stock is valued at variable cost.
- (d) Both Opening & Closing stock is valued at total cost.

Answers :

(i)	(a)	(ii)	(c)	(iii)	(c)	(iv)	(a)	(v)	(d)
(vi)	(c)	(vii)	(c)	(viii)	(c)	(ix)	(d)	(x)	(b)
(xi)	(a)	(xii)	(c)	(xiii)	(b)	(xiv)	(b)	(xv)	(c)

1. Multiple Choice Questions

[2 × 15 = 30]

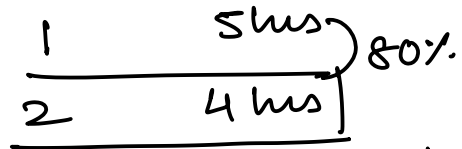
- (i) Which one of the following statements is false?
- (a) Management accountant uses cost accounting tools and techniques for planning and decision making. *True*
 - (b) Management accounting is mostly historical in its approach and it projects the past. *False*
 - (c) Cost accounting system can be installed without management accounting.
 - (d) Management accounting focuses on wealth maximization.
- (ii) According to DU-Pont Methodology, the parameter(s) that drive Return on Equity (ROE) is / are ____.
- (a) Operating performance
 - (b) Asset usage performance
 - (c) ~~Financial Leverage~~
 - (d) All of the above
- (iii) Which one of the following Responsibility Centers, is an Organizational Unit whose manager is responsible for managing revenues and current expenses?
- (a) Investment Center
 - (b) Revenue Center
 - (c) Profit Center
 - (d) Cost of Expense Center
- (iv) The Laplace Criterion is the feature of which of the following?
- (a) Deterministic Model
 - (b) Decision making under certainty
 - (c) Decision making under uncertainty
 - (d) Optimization
- (v) Bon, a division of BANT Ltd. a manufacturing company, has total assets of ₹ 12,00,000 and an Operating Income of ₹ 3,00,000. What is the Division's Residual Income (RI) if the cost of capital is 15%?

- (a) ₹ 1,80,000
- (b) ₹ 1,50,000
- (c) ₹ 1,20,000
- (d) ₹ 60,000

$$\begin{aligned}
 RI &= OI - (WACC \times CE) \\
 &= 300000 - (1200000 \times 15\%) \\
 &= 300000 - 180000 \\
 &= \underline{120000}
 \end{aligned}$$

(vi) An employee of DOXIN Ltd. took 5 hours to complete the first unit job in the assembly line. Using a 80% incremental unit time learning model, the time to be taken to complete the second unit job will be _____.

- (a) 4 hours
- ✓ (b) 3 hours
- (c) 2 hours
- (d) 5 hours



Total Time for 2 units = 8 hrs
Time for 1st unit = 5 hrs

3 hrs.

(vii) In the factory of DOSN Ltd., using Standard Costing System, the details of overhead expenditure for the month of May'24 are as under:

	Standard (₹)	Actual (₹)
Fixed Overheads	80,000 ✓	85,000 ✓
Variable Overheads	1,20,000 ✓	1,15,000 ✓
Output (units)	40,000	?

BOH rate = $\frac{BF\text{OH}}{B\text{output}} = \frac{80000}{40000} = ₹2$

If Fixed overhead volume variance is ₹ 4,000 (Adv.), identify the Actual Output (in units).

- ✓ (a) 38000 units
- (b) 41000 units
- (c) 42000 units
- (d) Insufficient information

FOH vol variance = $(AP - BP) \times BOH\ rate$
 $-4000 = (AP - 40000) \times 2$
 $-2000 = AP - 40000$
 $AP = -2000 + 40000 = 38000$

(viii) FBT Ltd. is presently operating at 60% capacity and producing 600 units. The Cost structure at 60% Level of Activity is: Material ₹ 50 per unit, Labour ₹ 25 per unit, Direct expenses ₹ 5 per unit, Factory overheads ₹ 20,000 (60% variable) and Administration expenses ₹ 15,000 (60% fixed). What will be the Total Cost per unit for production at 80% capacity?

- (a) ₹ 1,05,000
- ✓ (b) ₹ 131.25
- (c) ₹ 126.25
- (d) None of the above

(ix) SNG Ltd. is choosing which of three products P, Q and R to make and has calculated likely payoffs under three possible scenarios (A₁, A₂ or A₃), giving the following payoff table:

Profit/(Loss) Scenarios	Product Chosen		
	P	Q	R
A ₁	40	80	20
A ₂	80	100	150
A ₃	100	(20)	70

maximum payoff
80
150
100

Using maximax, identify the product which would be chosen by the company.

- (a) Product P

Maximum of (80, 150, 100) = 150

60% capacity = 600 units

variable costs

material = £ 50
Labour = £ 25
Direct expenses = £ 5
Variable FOH = £ 20
Variable AOH = £ 10
£ 110

80% cap → TVC → $110 \times 800 = 88000$
TFC
Factory OH
Adm OH

$\left. \begin{array}{l} 88000 \\ -8000 \\ 9000 \end{array} \right\} \rightarrow \frac{105000}{800} = \underline{\underline{£ 131.25}}$

Factory overhead = £ 20000

60% → variable = $20000 \times 60\% = \frac{12000}{600} = \underline{\underline{£ 20}}$

40% → Fixed = 8000

administration overhead = £ 15000

Fixed → 60% → 9000

Variable (40%) → $\frac{6000}{600}$

per unit = £ 10

- (b) Product Q
 (c) Product R
 (d) None of the above
- (x) A _____ is defined as a budget continuously updated by adding a further accounting period when the earlier accounting period has expired.
- (a) Zero base budget
 (b) Step-up budget
 (c) Rolling budget
 (d) Performance budget

- (xi) In _____ both fixed and variable costs are considered for product costing and inventory valuation.

(a) Marginal Costing

(b) Relevant Costing

(c) Absorption Costing

(d) Activity Based Costing

$$\begin{aligned} \text{At 200 units} \\ \text{Total variable OH} &= 20 \times 200 = \text{₹}4000 \\ \text{Total Fixed OH} &= \text{₹}10000 - \text{₹}4000 \\ &= \text{₹}6000 \end{aligned}$$

- (xii) M/s Unicom Limited sold 200 units and 300 units of its product in 2023 and 2024 respectively. If total overhead for 2023 and 2024 is ₹ 10,000 and ₹ 12,000 respectively, the fixed overhead would be _____.

(a) ₹ 6,000

(b) ₹ 4,000

(c) ₹ 8,000

(d) ₹ 10,000

$$\begin{aligned} \text{variable OH per unit} &= \frac{12000 - 10000}{300 - 200} \\ &= \frac{2000}{100} = \text{₹}20 \end{aligned}$$

$$\text{contb}^n = 50 \times 20\% = \underline{10}$$

- (xiii) If P/V Ratio is 20%, Selling price per unit is ₹ 50, Margin of safety is 2000 units and Fixed cost is ₹ 30,000, the actual sales quantity is _____.

(a) 4000 units

(b) 6000 units

(c) 5000 units

(d) 7000 units

$$\begin{aligned} \text{MOS} &= \frac{\text{profit}}{\text{Pv ratio}} / \frac{\text{profit}}{\text{contb}^n/\text{unit}} \\ 2000 &= \frac{\text{profit}}{10} \quad \text{profit} = \underline{20000} \end{aligned}$$

- (xiv) A Limited produces 500 units of product in 7500 hours against standard hours of 8000. If standard rate per hour is ₹ 50, then labour efficiency variance will be ₹ _____.

(a) 25,000 (F)

(b) 25,000 (A)

(c) 40,000 (F)

(d) 50,000 (F)

$$\begin{aligned} \text{Sales quantity} &= \frac{\text{FC} + \text{profit}}{\text{contb}^n/\text{unit}} \\ &= \frac{30000 + 20000}{10} \\ &= \underline{50000 / 10 = 5000 \text{ units}} \end{aligned}$$

$$\begin{aligned}
 LEV &= (SLH - ALH) \times SR \\
 &= (8000 - 7500) \times 50 \\
 &= 500 \times 50 \\
 &= \underline{25000 (F)}
 \end{aligned}$$

Alternatives

$$\text{Break even sales} = \frac{FC}{\text{contb}^n/\text{unit}} = \frac{30000}{10} = 3000 \text{ units}$$

MOS

Sales

=

2000 units

Total sales

5000 units

(xv) Expected returns of two mutually exclusive project is 15%. The S.D. of return of Project-1 is 20% while S.D. of return of Project-2 is 10%. The Coefficient of variation of Project-1 and Project-2 are _____.

- (a) Project-1 = 0.75 and Project-2 = 0.90
- ✓ (b) Project-1 = 1.33 and Project-2 = 0.66
- (c) Project-1 = 1.43 and Project-2 = 0.86
- (d) Project-1 = 1.39 and Project-2 = 0.56

Answer:

(i)	(B)
(ii)	(D)
(iii)	(A)
(iv)	(C)
(v)	(C)
(vi)	(B)
(vii)	(A)
(viii)	(B)
(ix)	(C)
(x)	(C)
(xi)	(C)
(xii)	(A)
(xiii)	(C)
(xiv)	(A)
(xv)	(B)

$$\text{coeff of variation} = \frac{\sigma}{\text{ECR}}$$

$$A = \frac{20\%}{15\%} = 1.33$$

$$B = \frac{10\%}{15\%} = \underline{\underline{0.66}}$$

Postal Test Paper Objectives

Postal Test Paper

1. Multiple Choice Questions

[1 × 12 = 12]

- (i) Production at 60% activity is ₹ 600 units, if flexible budget needs to be calculated at 80% activity what will be units produced?
- (a) ₹ 800
- (b) ₹ 600
- (c) ₹1200
- (d) ₹ 1000
- (ii) In which of the following circumstances is there a strong argument that profit centre accounting is a waste of time?
- (a) When the transferred item is also sold on an external market.
- (b) When the supplying division is based in a different country to head office.
- (c) If the transferred item is a major product of the supplying division.
- (d) If there is no similar product sold on an external market and the transferred item is a major product of the supplying division.
- (iii) Management accounting assists the management in ____.
- (a) Planning •
- (b) Directing •
- (c) Controlling •
- (d) All of the above
- (iv) Creation of value through effective use of resources is the focus area of the:
- (a) 1st stage
- (b) 2nd stage
- (c) 3rd stage
- (d) 4th stage
- (v) In an ABC system, the allocation bases that are used for applying costs to services or procedures are called: _____
- (a) Cost Pool
- (b) Cost Driver
- (c) Cost Absorption
- (d) Cost Object
- (vi) Plant depreciation is an example of which activity-level group?
- (a) Unit-level activity

- ✓ (b) Facility-level activity
 (c) Batch-level activity
 (d) Product-level activity
- (vii) The main reason for the usage of Activity Based Costing, by replacing the traditional costing system is that:
- (a) The overhead recovery rates used in traditional costing systems are inappropriate for decision-making.
 ✓ (b) The companies deal with more number of products at present
 (c) No scope for cause and effect relationship in traditional costing
 (d) The new manufacturing technology needs information for feedback of performance even the product is in progress.
- (viii) Activity-based costing:
- (a) Uses a plant-wide overhead rate to assign overhead ✗
 (b) Is not expensive to implement ✗
 (c) Typically applies overhead costs using direct labor-hours ✗
 ✓ (d) Uses multiple activity rates
- (ix) Which of the following is least likely to be classified as a batch level activity in an activity based costing system?
- (a) Quality assurance ✓
 (b) Receiving and inspection ✓
 ✓ (c) Property taxes
 (d) Production set-up
- (x) Margin of safety is referred to as
- ✓ (a) Excess of budgeted or actual sales over the variable expenses and fixed expense, at break-even.
 (b) Excess of budgeted or actual sales revenue over the fixed expenses.
 (c) Excess of actual sales over budgeted sales.
 (d) Excess of sales revenue over the variable expenses.
- (xi) A decrease in sales price
- (a) does not affect the break-even point
 (b) lowers the fixed cost
 ✓ (c) Increases the break-even point
 (d) lowers the break-even point

(xii) What will be sales in units if fixed cost is ₹50,000 Contribution per unit is ₹60 and desired profit per unit is ₹10.

- (a) ₹ 6,000
 (b) ₹ 1,000
 (c) ₹ 1,000
 (d) ₹ 6,000

Let the no. of units be x .

$$50000 = 50x$$

$$x = \frac{50000}{50} = 1000 \text{ units}$$

$$\text{Total profit} = 10x$$

$$x = \frac{50000 + 10x}{60}$$

$$60x = 50000 + 10x \quad [1 \times 7 = 7]$$

2. State True or False:

- (i) The purpose of moving from a traditional costing system to an ABC system must therefore be based on the premise that the new information provided will lead to action that will increase the overall profitability of the business. True
- (ii) Activity based costing is ~~not~~ expensive to implement. False
- (iii) The kind of cost which will not differ due to the volume of the production is called Fixed cost. True
- (iv) Another term for marginal costing is variable costing. True
- (v) Fixation of selling price in the long run can be done ~~without~~ considering fixed costs. False
- (vi) Key factor is important in ascertaining the profitability. True
- (vii) Marginal-costing technique is also used in planning the profit level of the business. True

3. Fill in the blanks:

[1 × 6 = 6]

- (i) A standard is a norm against which the actual performance can be measured.
- (ii) normal standard allow for rest periods, machine breakdowns, and setup time.
- (iii) Transfer prices based on full cost are appropriate if top management treats the divisions like cost centre.
- (iv) According to the principles that guide the preparation of the flexible budgets a series of fixed budgets are drawn for different levels of activity.
- (v) Performance Budgets has been defined as a "budget based on functions, activities and projects."
- (vi) Return on investment encourages investment in projects that would otherwise be rejected under Residual Income.

Answers :

a)	i	ii	iii	iv	v	vi	vii	viii	ix	x	xi	xii
	a	d	d	d	b	b	b	d	c	c	c	c

b)	i	ii	iii	iv	v	vi	vii
	True	False	True	True	False	True	True

c)

i	ii	iii	iv	v	vi
Standard	Normal Standards	Cost Centers	Flexible Budget	Performance Budget	Residual Income

