

MQP

Dec 25 Set 1

1. If $Q:W = 2:3$, $W:T = 4:5$ and $T:Y = 6:7$, find $Q:Y$.

- (a) 35: 51
- (b) 16: 35
- (c) 16: 51
- (d) 35: 51

2. Find the fourth proportional to 6, 8, 9 is _____.

- (a) 18
- (b) 12
- (c) 7
- (d) 13

3. If $A \propto 1/B$ and $A = 7$ when $B = 3$, then when $B =$

$2\frac{1}{3}$, A is _____.

- (a) $3/7$
- (b) 3
- (c) 9
- (d) 1

4. Using the properties of proportion, solve the

following equation for y , given $\frac{341}{91} = \frac{y^3+3y}{3y^2+1}$

- (a) 14
- (b) 11
- (c) 12
- (d) 10

5. If 4, 6, p , 27, q is in continued proportion, find the values of p and q .

- (a) $p = 9$, $q = 9$
- (b) $p = 9$, $q = 81$
- (c) $p = 81$, $q = 9$
- (d) $p = 81$, $q = 81$

6. Find the next 5 terms for the series: 2, -4, 8, -16, 32

- (a) -64, 128, -256, 512, -1024
- (b) 64, -128, 256, -512, 1024
- (c) 64, 128, 256, 512, 1024
- (d) -64, -128, -256, -512, -1024

7. Accumulated series of deposits as future sum money is classified as –

- (a) Annuity Fund
- (b) Sinking Fund
- (c) Marginal Fund
- (d) Nominal Fund

8. A sum of money double itself at 7% p.a. compound interest in _____.

- (a) 10.27 years
- (b) 10.00 years
- (c) 12.07 years
- (d) 12.00 years

9. Which one of the following is Discriminant of a quadratic equation?

- (a) $-b+b^2-4ac$
- (b) $-b-b^2-4ac$
- (c) b^2-4ac
- (d) $\sqrt{b^2 + 4ac}$

10. If $b^2 - 4ac > 0$, is a perfect square, the nature of roots would be _____.

- (a) Real and Equal
- (b) Imaginary
- (c) Unreal
- (d) Real and Unequal

11. In how many ways can 4 different cars, one of each of the 4 manufacturers, be parked in a parking lane?

- (a) 20 ways
- (b) 22 ways
- (c) 24 ways
- (d) 26 ways

12. Find the number of permutations for 11 bikes if 5 bikes are to be taken at a time.

- (a) 54540
- (b) 55440
- (c) 44550
- (d) 45450

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



13. Determine the number of ways in which a digit and a vowel can be selected from 10 digits and 26 letters of Alphabet?

- (a) 50
- (b) 210
- (c) 105
- (d) None of the Above

14. Find the logarithm of 125 to the base 5 $\sqrt{5}$

- (a) 6
- (b) 4
- (c) 3
- (d) 2

15. State True or False: $\log_2 10 + \log_8 125 = 1$

- (a) Not possible
- (b) True
- (c) May be true
- (d) None of the above

16. Find t when $\log_t 3125 = 5$

- (a) 5
- (b) 125
- (c) 25
- (d) 625

17. What will be the value of $9^6 \times 9^{-4} \times 9^2 \times 9^3 \times 9^6$?

- (a) 9^{13}
- (b) 9^{21}
- (c) Both 'a' and 'b'
- (d) None of the above

18. Find the square of the difference of the roots of $115 + 5(x^2 - 12x) = 0$

- (a) 24
- (b) 48
- (c) 26
- (d) 52

19. A tin manufacturer has a revenue function given by: $R = 11Q^2 - 110Q + 70$ and the cost function is given by: $C = 22Q$. Find the number of tins to be produced by the manufacturer.

- (a) 2
- (b) 6
- (c) 10
- (d) 14

20. $\frac{x^2}{16} + \frac{y^2}{4} = 1$ is an Implicit function. The derivative of this function is —

- (a) $\frac{x}{4y}$
- (b) $-\frac{x}{4y}$
- (c) $\frac{x}{2y}$
- (d) $-\frac{x}{2y}$

21. Raw data is _____.

- (a) Information which can be interpreted to take decision
- (b) Information which can't be put to use directly
- (c) Information which is not amenable to conversion
- (d) Information which are useless

22. Tabulation Condenses classified data so that _____.

- (a) Data may be more easily understood
- (b) Data may be easily presented textually
- (c) Data may be more easily synchronized
- (d) More comprehensive secondary result could be obtained

23. Which one of the following is a characteristic of a good classification?

- (a) Classification should be heterogeneous
- (b) Classified groups must have overlapping data
- (c) Classification should be stable
- (d) Classification should not be inclusive

24. Because of heavy rain on Sunday average rainfall of a city for the week increased to 0.6 inch from the average rainfall 0.3 inch measured from Monday to Saturday. The rainfall on Sunday was-

- (a) 2.4 inch
- (b) 0.3 inch
- (c) 2.1 inch
- (d) 1.5 inch

25. The pass result of 50 students who took up a class test is given below:

Marks	No of Students
4	8
5	10

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



6	9
7	6
8	4
9	3

If the average marks for all the fifty students were 5.16, the average marks of the students who failed is _____.

- (a) 0.42
- (b) 3.06
- (c) 4.74
- (d) 2.1

26. The mean of a certain number of items is 42. If one more item 64 is added to the data, the mean becomes 44. The no of items in the original data is _____.

- (a) 20
- (b) 10
- (c) 43
- (d) 440

27. Which one of the following is not a feature of Arithmetic Mean (AM)?

- (a) AM is affected very much by extreme values;
- (b) AM is widely used in the study of qualitative phenomenon;
- (c) AM provides a good basis for comparison;
- (d) AM is rigidly defined so different interpretation by different people are not possible;

28. For a certain frequency table which has only been partly reproduced below for which the mean is 1.46

No of accidents	Frequency
0	46
1	f_1
2	f_2
3	25
4	10
5	5

If $\sum f = 200$ Unknown frequencies are

- (a) $f_1 = 0, f_2 = 114$;
- (b) $f_1 = 114, f_2 = 0$;
- (c) $f_1 = 76, f_2 = 38$;
- (d) $f_1 = 57, f_2 = 57$;

29. $\sum_{x=1}^{20} x = 54120$; While computing this, it was observed that two entries were wrongly entered as 850 and 320 instead of 580 and 230. Correct value of x is _____.

- (a) 2688;
- (b) 2746.5;
- (c) 2720;
- (d) 2662

30. Which one of the following is a Positional Average?

- (a) Geometric Mean;
- (b) Harmonic Mean;
- (c) Mode;
- (d) Progressive Average

31. If b_{xy} and b_{yx} are regression coefficients of series X on series Y and regression coefficients of series Y on series X respectively then which one of the following is correct?

- (a) b_{xy} and b_{yx} will be either both positive or both negative
- (b) b_{xy} will be positive and b_{yx} will be negative
- (c) b_{xy} will be negative and b_{yx} will be positive
- (d) Nothing can be said like this, it depends on X & Y values

32. If $r = 0.52, \sigma_x = 4.6$ & $\sigma_y = 36.8$ then b_{xy} is equal to:

- (a) 0.24
- (b) 4.16
- (c) 1
- (d) 0.065

33. $X = 1.36Y - 5.2$ & $Y = 0.61X + 1.51$ are two regression equations. Correlation coefficient between X & Y is:

- (a) -0.67
- (b) -0.911
- (c) 0.911
- (d) 0.67

34. Consider the following results:

$N = 12, \sum dx = 0, \sum dy = 4, \sum dx^2 = 1344, \sum dy^2 = 215, \sum dxdy = -4360$ Appropriate regression coefficient of y on x is -

- (a) -0.821
- (b) 1
- (c) 5.67
- (d) -3.244

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



35. Consider the following results:

$$N=6, \Sigma y=42, \Sigma y^2=318, b_{yx} = -\frac{11}{34}, \Sigma x^2 - \frac{1}{n}(\Sigma x)^2 = 34$$

Then b_{xy} is

- (a) $-\frac{11}{34}$
- (b) $\frac{11}{24}$
- (c) $-\frac{34}{11}$
- (d) $-\frac{11}{24}$

36. If b_{xy} & b_{yx} are regression coefficients between X on Y and Y on X respectively and r is the correlation coefficient between X and Y, then:

- (a) $(b_{xy} + b_{yx})/2 \leq r$
- (b) $(b_{xy} + b_{yx})/2 \geq r^2$
- (c) $(b_{xy} + b_{yx})/2 \geq r$
- (d) $(b_{xy} + b_{yx})/2 \geq r^2$

37. In a regression equation:

- (a) Regression coefficient represents the increment in the value of the independent variable for a unit change in the value of the dependent variable
- (b) Regression coefficient represents the increment in the value of the dependent variable for a unit change in the value of the independent variable
- (c) Regression coefficient represents the mean value of the independent variable for a unit change in the value of the dependent variable
- (d) Regression coefficient represents the mean value of the dependent variable for a unit change in the value of the independent variable

38. In a bivariate regression analysis $\Sigma XY = 1355.25$, $(\Sigma X)(\Sigma Y) = 6396$, $\Sigma X^2 = 591.50$ & $\Sigma X = 52$. If there are 5 items, then b_{yx} is _____.

- (a) 1
- (b) 0.97
- (c) 0.667
- (d) 1.5

39. If $P(A) = 0.3$, $P(B) = 0.2$ and $P(C) = 0.1$, then assuming A, B and C are independent events, the probability of occurrence of at least one of the three events is:

- (a) 0.7

- (b) 0.8
- (c) 0.006
- (d) 0.496

40. In IPL Kolkata Knight Riders plays 70% of their games at night (8 O'clock slot) and 30% during the day (4clock slot). The team wins 50% of their night games and 90% of their day games. According to today's newspaper they own yesterday. The probability that the game was played at night is:

- (a) 0.4667
- (b) 0.5645
- (c) 0.35
- (d) 0.5

41. If p: q are the odds in favour of an event, then the probability of that event is :

- (a) p/q
- (b) p/ (p + q)
- (c) q/ (p + q)
- (d) None of these

42. 4 coins are tossed. The probability that there are 2 heads is :

- (a) 1/2
- (b) 3/8
- (c) 1/8
- (d) None of these

43. A bag contains 10 red and 10 green balls. A ball is drawn from it. The probability that it will be green is:

- (a) 1/10
- (b) 1/3
- (c) 1/2
- (d) None of these

44. Probability of throwing an even number with an ordinary six faced die is:

- (a) 1/2
- (b) 1
- (c) 0
- (d) -1/2

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



45. A bag contains 30 balls numbered from 1 to 30. One ball is drawn at random. The probability that the number of the drawn ball will be multiple of 3 or 7 is :

- (a) 7/15
- (b) 13/30
- (c) 1/2
- (d) None of these

46. Consider the following series of observation:

Year 1 2 3 4 5 6 7 8 9 10 11
Sales (₹) 2 6 15 3 7 2 6 4 8 3

4-year centred moving average against year 6 is

- (a) 5.125
- (b) 3.875
- (c) 3.625
- (d) 4.375

47. From the following series find out a three-year weighted moving average against year 4 with weights 1,4,1 is:

Year 1 2 3 4 5 6 7
Values 12 14 15 17 18 20 23

- (a) 20.17
- (b) 16.83
- (c) 18.17
- (d) 15.17

48. From the following data the four year centred moving average against year 6

Year 1 2 3 4 5 6 7 8 9
Sales (₹) 36 43 43 34 44 54 34 24 14

- (a) 40.25
- (b) 40.625
- (c) 35.25
- (d) 40

49. From the following four year centered moving average against year 4 is

Year 1 2 3 4 5 6 7
Import (₹ m) 229 231 206 191 195 184 193

- (a) 190.671
- (b) 199.875
- (c) 192.375
- (d) 210

50. From the following find the Simple average (AM) of Relative Quantity index

Item	Base Year Quantity	Current Year Quantity
A	8	12
B	10	11
C	15	10

- (a) 111.45
- (b) 108.89
- (c) 32.45
- (d) 115.46

Don't miss a thing!
Join our Telegram channel for
more Mcqs,
Tests, solutions, exclusive tips
and updates. 🚀

<https://t.me/dseducationcom>
[merceclasses](https://t.me/merceclasses)

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



Answers

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
b	b	c	b	b	a	b	a	c	d
11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
c	b	a	d	a	a	a	d	b	b
21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
a	b	a	a	d	b	b	c	a	c
31.	32.	33.	34.	35.	36.	37.	38.	39.	40.
a	d	c	d	d	c	b	d	d	b
41.	42.	43.	44.	45.	46.	47.	48.	49.	50.
b	b	c	a	b	d	c	a	b	b

D'S Educational

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral

1. Given $B : C = 4 : 5$ and $C : D = 7 : 9$, what is the combined ratio $B : C : D$?

- (a) $4 : 5 : 7$
- (b) $8 : 10 : 12$
- (c) $28 : 35 : 45$
- (d) $20 : 25 : 35$

2. The Universe of Discourse (or Universal Set) refers to:

- (a) A fixed set containing all elements under consideration, whose subsets include every relevant set
- (b) A set under consideration for a topic
- (c) A fixed set containing no elements
- (d) A set that is always finite

3. When the number 1580 is increased in the ratio 5: 9, the new number is:

- (a) 788
- (b) 2488
- (c) 878
- (d) 2844

4. Given:

$$Q = \{1, 2, 3, 5\}$$

$$W = \{3, 4, 5, 7\}$$

What is the union QUW ?

- (a) $\{1,2,3,4,5\}$
- (b) $\{1,2,3,5,7\}$
- (c) $\{1,2,3,4,5,7\}$
- (d) $\{3,4,5\}$

5. In how many ways can the letters of the word SIGNAL be arranged so that the vowels occupy only the odd positions?

- (a) 144
- (b) 240
- (c) 480
- (d) 1,440

6. What formula is used to calculate the present value under compound interest?

- (a) $PV = A \times r \times n$
- (b) $PV = A \div ((1 + r)^n)$
- (c) $PV = A - (r \times A)$
- (d) $PV = A + (1 + r)^n$

7. In Venn diagram, Universal Set is represented by

- (a) Stars
- (b) Squares
- (c) Rectangle
- (d) Circles

8. Find the sum of the first 9 terms for the series: 5, 10, 20, 40, 80

- (a) 2550
- (b) 2560
- (c) 2610
- (d) 2555

9. Let A be the set of all positive integers and B be the set of all negative integers. Then $A \cup B$ is:

- (a) The set of all integers
- (b) $\{0\}$
- (c) None of these
- (d) The set of all integers except zero

10. The ratio of the number of faces to the number of edges of a box is

- (a) 3: 8
- (b) 8: 3
- (c) 1: 2
- (d) 2: 1

11. In how many ways can 6 customers stand in a queue at a bank?

- (a) 240
- (b) 720
- (c) 1,440
- (d) 360

12. For any sum of roots of quadratic equation, 'a' represents -

- (a) Coefficient of x
- (b) Coefficient of x^2
- (c) Constant term
- (d) None of the above

Study smarter  and track progress .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



13. A class consists of 48 male students and 23 female students. Find the ratio of female students to total strength of the class.

- (a) 23: 48
- (b) 48: 23
- (c) 48: 71
- (d) 23: 71

14. Choose the correct condition for any equation to be Quadratic equation-

- (a) 5 constants and all constants > 0 .
- (b) 5 constants and all constants < 0 .
- (c) 3 constants and $a > 0$
- (d) 3 constants and $a \neq 0$.

15. The compound ratio of 1.2: 2.5, 2.1 3.2, 5: 3 is:

- (a) 5:12
- (b) 21:40
- (c) 25:36
- (d) 6:7

16. In a hall there are 10 lamps, each can be switched on independently. In how many ways can the hall be illuminated (i.e., with at least one lamp on)?

- (a) 1023
- (b) 210
- (c) -10
- (d) 1022

17. y is the yardstick to measure the performance of two vehicles, where $y = \text{Speed} \times \text{Time} \times \text{Distance}$. If Distance travelled by one of the vehicle (2nd Vehicle) is increased by 2%, what would be the impact on the yardstick?

- (a) 1st Vehicle would travel 4% more distance
- (b) 2nd Vehicle would travel 4% more distance
- (c) No change in the distance travelled by any of the vehicle
- (d) None of the above

18. Find the value of $\frac{(10! - 9!)}{(8!)}$

- (a) 81
- (b) 80
- (c) 10
- (d) 9

19. $y = (4x - 3)^3 + (5x - 2)^2$ Calculate y_1

- (a) $182x^2 + 13x + 29$
- (b) $96x^2 + 13x + 29$
- (c) $12x^2 + 26x + 29$
- (d) $192x^2 + 26x + 58$

20. Find whether the function is minimum or maximum - $f(x) = 6x^2 + 11x - 35$

- (a) Maximum
- (b) Minimum
- (c) No Curvature
- (d) None of the above

21. A person walks 8 km at 4km an hour, 6km at 3km an hour and 4km at 2km an hour. Average speed per hour is

- (a) 0.33
- (b) 2
- (c) 3
- (d) 0.5

22. Which one of the following is not a feature of Arithmetic Mean (AM)?

- (a) AM is affected very much by extreme values;
- (b) AM is widely used in the study of qualitative phenomenon;
- (c) AM provides a good basis for comparison;
- (d) AM is rigidly defined so different interpretation by different people are not possible;

23. Which one of the following is a Positional Average?

- (a) Geometric Mean
- (b) Harmonic Mean
- (c) Mode
- (d) Progressive Average

24. The mean daily salary paid to all employees in a certain company was Rs.600. The mean daily salaries paid to the male and female employees were Rs.620 and Rs.520 respectively. Male to female employees ratio in the company is

- (a) 3:2;
- (b) 4:5;
- (c) 5:7;
- (d) 4:1;

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



25. $\Sigma (X - \bar{X})$ is always equal to

- (a) 1;
- (b) -1;
- (c) 0;
- (d) ∞ ;

26. In a bivariate regression analysis the difference between actual value of dependent variable and the predicted value of the dependent variable is called

- (a) Outlier
- (b) Slope
- (c) Residual
- (d) Scattered point

27. Probability theory is often referred to as

- (a) Science of prediction
- (b) Science of uncertainty
- (c) Science of chance
- (d) Science of decision making

28. If $r^2 = 0.3$ & $b_{XY} = -1.5$ then b_{YX} is equal to

- (a) +1
- (b) -0.2
- (c) -1
- (d) -0.45

29. The weighted average from the following observation is Rs.46.23.

Price per tonne (₹)	45.60	50.70	?
Tonnes Purchased	40	25	135

Simple average of the observation is

- (a) ₹46.23;
- (b) ₹46.26;
- (c) ₹66.63;
- (d) ₹46.24;

30. In a bivariate regression analysis comprising of series X & Y, if $\Sigma (X - \bar{X})^2 = \Sigma (Y - \bar{Y})^2$ then

- (a) $b_{XY} = b_{YX}$
- (b) $b_{XY} > b_{YX}$
- (c) $b_{XY} < b_{YX}$
- (d) Correlation coefficient =1

31. In general probability is

- (a) A numerical value between 0 and 1, exclusive,

describing the absolute possibility an event will occur

(b) A numerical value between 0 and 1, inclusive, describing the absolute possibility an event will occur

(c) A numerical value between 0 and 1, exclusive, describing the relative possibility an event will occur

(d) A numerical value between 0 and 1, inclusive, describing the relative possibility an event will occur

32. If b_{XY} & b_{YX} are regression coefficients between X on Y and Y on X respectively then

- (a) $\sqrt{b_{XY} \times b_{YX}} \leq 1$
- (b) $\sqrt{b_{XY} \times b_{YX}} \geq 1$
- (c) $\sqrt{b_{XY} \times b_{YX}} = -1$
- (d) $\sqrt{b_{XY} \times b_{YX}} = 1$

33. If two unbiased coins are tossed once, the probability of getting both the heads is

- (a) 0.25
- (b) 0.50
- (c) 0.75
- (d) 1

34. Consider the following:

Year :	1	2	3	4	5	6	7	8
Annual Sales (₹ '0000)	3.6	4.3	4.3	3.4	4.4	5.4	3.4	2.4

5 year moving average against year 4 is :

- (a) 3.8
- (b) 4
- (c) 4.36
- (d) 4.18

35. Fisher's ideal index for prices from the following data is :

Item	Base Year		Current Year	
	Unit Price	Quantity	Unit Price	Quantity
A	8	6	12	5
B	10	5	11	6
C	15	8	10	5

- (a) 97.72
- (b) 80.15
- (c) 95.67
- (d) 89.14

Study smarter and track progress .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



36. The probability that a leap year selected at random contain 53 Sundays is

- (a) 0.143
- (b) 1
- (c) 0.286
- (d) 0.48

37. From the following data the five year moving average against year 5

Year	1	2	3	4	5	6	7	8	9
Sales (₹)	36	43	43	34	44	54	34	24	14

- (a) 40
- (b) 43.6
- (c) 34
- (d) 41.8

38. A person walks 8 km at 4km an hour, 6km at 3km an hour and 4km at 2km an hour. Average speed per hour is

- (a) 0.33;
- (b) 2;
- (c) 3;
- (d) 0.5;

39. In a bivariate analysis if two regression equations are $mx - y + 10 = 0$ & $-2x + 5y = 14$. If coefficient of correlation between x & y is $\frac{1}{\sqrt{10}}$, then value of m is

- (a) 10
- (b) $5/2$
- (c) 4
- (d) 1

40. The sum of the deviations of a certain number of observations measured from 4 is 72 and the sum of the deviations of the observations from 7 is -3. Mean of the observations is

- (a) 6.88;
- (b) 25;
- (c) 3.63;
- (d) Cannot be ascertained with given data;

41. Which one of the following is correct?

- (a) Regression equation predicts maximum probable values of one variable for specified values of other variable
- (b) Regression equation predicts most likely values of one variable for specified values of other

variable

(c) Regression equation predicts maxi-min values of one variable for specified values of other variable

(d) Regression equation predicts minimum probable values of one variable for specified values of other variable

42. Sum of probability of an event A and its complement is __

- (a) 1
- (b) 0
- (c) $1/2$
- (d) $-1/2$

43. From the following find the Simple average (GM) of Relative Quantity index

Item	Base Year Quantity	Current Year Quantity
A	8	12
B	10	11
C	15	10

- (a) 32.76
- (b) 72.34
- (c) 82.89
- (d) 12.74

44. From the following find the Fisher's Quantity index

Item	Base Year		Current Year	
	Unit Price	Quantity	Unit Price	Quantity
A	8	6	12	5
B	10	5	11	6
C	17	8	8	5

- (a) 32.76
- (b) 72.34
- (c) 82.89
- (d) 12.72

45. Two dice are thrown together. The probability of the event that the sum of numbers shown is greater than 5 is

- (a) $13/18$
- (b) $15/18$
- (c) 1
- (d) None

Study smarter and track progress .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



46. It is the most suitable average when it is desired to give greater weight to smaller observations and less weight to larger ones. It is

- (a) AM;
- (b) HM;
- (c) GM;
- (d) Median;

47. The range of the correlation coefficient is:

- (a) 0 to 1
- (b) -1 to $+1$
- (c) $-\infty$ to $+\infty$
- (d) 0 to ∞

48. Three coins are tossed together. The probability of getting exactly two heads is

- (a) $5/8$
- (b) $3/8$
- (c) $1/8$
- (d) None

49. The sum of the squares of deviations of a set of observations is the minimum when deviations are taken from the LL

- (a) Geometric Mean;
- (b) Harmonic Mean;
- (c) Arithmetic Mean;
- (d) Mode;

50. Which of the following is not a property of the correlation coefficient?

- (a) It is independent of the origin and scale
- (b) It lies between -1 and $+1$
- (c) It measures only linear relationships
- (d) It depends on the units of measurement

Don't miss a thing!
Join our Telegram channel for
more Mcqs,
Tests, solutions, exclusive tips
and updates. 🚀

<https://t.me/dseducationcom>
[merceclasses](https://t.me/dseducationcom)

Study smarter 😊 and track progress 👁️ .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



Answers

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
c	a	d	c	a	b	c	d	d	c
11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
b	b	d	d	b	a	d	a	d	b
21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
c	b	c	d	c	c	b	b	b	a
31.	32.	33.	34.	35.	36.	37.	38.	39.	40.
d	a	a	c	a	c	d	c	c	a
41.	42.	43.	44.	45.	46.	47.	48.	49.	50.
b	a	d	c	a	b	b	b	c	d

D'S Educational

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral

1. A woman can complete a task by working 6 hours a day for 12 days. If she increases her working hours to 9 hours per day, how many days will it take her to finish the same task?

- (a) 9 Days
- (b) 12 Days
- (c) 8 Days
- (d) 10 Days

2. A Laptop depreciated in value each year at 20% of its previous value and at the end of third year, the value was Rs. 12,288. Find its original value.

- (a) 24,000
- (b) 18,000
- (c) 20,000
- (d) 30,000

3. If a student is travelling at a speed of 45 km/hr., how long should it take to travel 90 km?

- (a) 3 hours
- (b) 2 hours
- (c) 100 minutes
- (d) 90 minutes

4. An enterprise produced 500 units in the 2nd year of its existence and 800 units in its 6th year. If production follows an Arithmetic Progression (AP), what was the production in the 1st year?

- (a) 425
- (b) 450
- (c) 475
- (d) 490

5. Two numbers are in the ratio of 3:5, and if 10 is subtracted from each of them, the remainders are in the ratio of 1:5. Find the numbers.

- (a) 9 and 15
- (b) 10 and 16
- (c) 15 and 25
- (d) 12 and 20

6. DRS & Co. makes a monthly payment for Rs.11,350 for one year at 11% annual interest, compounded monthly. Find the amount borrowed by them.

- (a) 1,31,889
- (b) 1,22,025
- (c) 1,22,802
- (d) 1,38,284

7. A Train covered 300 km at a speed of 60 km/h, and a Bus covered 180 km at a speed of 45 km/h. Which one of them took more time to cover the distance, and what was the time taken?

- (a) Bus, 6 hours
- (b) Train, 6 hours
- (c) Train, 5 hours
- (d) Bus, 4 hours

8. Find the next 6 terms for the series: 50, 67, 84, 101, 118, 135.

- (a) 150, 167, 184, 201, 218, 235
- (b) 160, 177, 194, 211, 228, 245
- (c) 153, 170, 187, 204, 221, 238
- (d) 152, 169, 186, 203, 220, 237

9. In a group of 50 people, 30 speak Hindi, 22 speak English and 8 speak neither Hindi nor English. How many people can speak both English and Hindi.

- (a) 10
- (b) 17
- (c) 15
- (d) 12

10. If $\log t + \log(t-3) = 1$. Find 't'.

- (a) -1
- (b) -3
- (c) -2
- (d) 0

11. How many words can be formed by using the letters of the word 'ALLAHABAD', so that vowels will occupy even places.

- (a) 80
- (b) 40
- (c) 120
- (d) 60

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



12. Solve: $\log_{10} (8y + 3) = 3$

- (a) 992/3
- (b) 997/8
- (c) 1008/3
- (d) 1003/8

13. If Set $B = \{B, G, R, E, O, K\}$ is a subset of Set $A = \{Q, E, R, T, Y, U, I, O, P, K, G, B\}$, find B' .

- (a) Set $B' = \{Q, T, Y, U, I, P\}$
- (b) Set $B' = \{E, R, T, Y\}$
- (c) Set $B' = \{Q, E, G, B\}$
- (d) Set $B' = \{B, G, R, E\}$

14. Find the number of permutations can be made by selecting 5 bikes from a set of 11 bikes?

- (a) 45,580
- (b) 60,720
- (c) 55,440
- (d) 50,400

15. Find the base when 3 is the logarithm of 729.

- (a) 9
- (b) 11
- (c) 7
- (d) 3

16. Simplify $3(a^1)^2 b^1 / 6b^2(a^3)^1$

- (a) $1/2 \times ab$
- (b) $1/(2 ab)$
- (c) $2 ab$
- (d) None of the above

17. Out of 18 points in plane, no three are in the same straight line except 5 points which are collinear. Then the number of straight lines obtained by joining them is _____

- (a) 147
- (b) 163
- (c) 144
- (d) 159

18. If $A = \{8, 11, 14, 17\}$; $B = \{5, 7, 9, 15\}$; $C = \{19, 21, 17, 15\}$. Find $A \cap (B \cap C)$.

- (a) $A \cap (B \cap C) = \{8, 5, 7, 9, 15\}$
- (b) $A \cap (B \cap C) = \{8, 11, 14, 15, 17\}$
- (c) $A \cap (B \cap C) = \{11, 19, 21, 17, 15\}$
- (d) $A \cap (B \cap C) = \{11, 19, 21, 15, 8\}$

19. Given: $C(x) = 9x + 350$ and $P = 14$. Find the condition of getting break-even point

- (a) $7x - 350 = 0$
- (b) $-14x - 350 = 0$
- (c) $9x - 350 = 0$
- (d) $5x - 350 = 0$

20. $F(x) = \frac{-x^3}{3} + 4x^2 - 15x$

- (a) Maximum, $x = 1$; Minimum, $x = 3$
- (b) Maximum, $x = 5$; Minimum, $x = 3$
- (c) Maximum, $x = -3$; Minimum, $x = -5$
- (d) No curvature

21. Dichotomous Classification is

- (a) When data is classified according to presence or absence of two attributes
- (b) When data is classified into two groups containing all the attributes
- (c) When data is classified according to presence of two attributes
- (d) When data is classified into two groups according to presence or absence of one attribute

22. Which of the following could be classified as a discrete variable?

- (a) Number of children in a family
- (b) Temperature in Celsius
- (c) Amount of rainfall in a year
- (d) Height of a person

23. Which of the following would not be an example of temporal classification?

- (a) Data on annual rainfall
- (b) Population statistics by decade
- (c) Sales data categorized by product type
- (d) Unemployment rates over different years

24. \bar{X} of 20 terms was found to be 35. But afterwards it was detected that two terms 42 and 34 were misread as 46 and 39 respectively. Find correct \bar{X} .

- (a) 34.55
- (b) 36.67
- (c) 31.63
- (d) 35.51

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



25. The mean of 2 numbers. is 20 and their S.D 5, What are the two numbers?

- (a) 20 and 12
- (b) 25 and 15
- (c) 22 and 18
- (d) 30 and 10

26. In a moderately skewed frequency distribution, the mean is 30, the median is 20, and the coefficient of variation is 70%. What is the Karl Pearson's coefficient of skewness?

- (a) 1.51
- (b) 2.23
- (c) 2.57
- (d) 1.43

27. The mean daily salary paid to all employees in a certain company was Rs.600. The mean daily salaries paid to the male and female employees were Rs.620 and Rs.520 respectively. Male to female employees ratio in the company is

- (a) 3:2;
- (b) 4:5;
- (c) 5:7;
- (d) 4:1;

28. Which is the value of M.D, when $Q_3 = 40$ & $Q_1 = 15$.

- (a) 15
- (b) 14
- (c) 12
- (d) 13

29. The mean of wages in factory A of 100 workers is Rs.720 per week. The mean wages of 30 female workers in the factory is Rs.650 per week. Find out average wage of male workers in the factory:

- (a) 850
- (b) 700
- (c) 750
- (d) 800

30. The mean of a certain number of items is 42. If one more item 64 is added to the data, the mean becomes 44. The no of items in the original data is

- (a) 20
- (b) 30
- (c) 10
- (d) 40

31. In a bi-variate analysis if two regression equations are $8x - 10y + 66 = 0$ & $40x - 18y - 214 = 0$. Then \bar{x}, \bar{y} the mean of the series x & y are respectively

- (a) 13,17
- (b) 17,17
- (c) 8,18
- (d) 9,13

32. Consider the following results: $N = 12$, $\sum dx = 0$, $\sum dy = 4$, $\sum dx^2 = 1344$, $\sum dy^2 = 215$, $\sum dxdy = -4360$ Appropriate regression coefficient is

- (a) 1
- (b) - 3.244
- (c) - 0.821
- (d) 5.67

33. The regression equation of profit (X) on sales (Y) of a certain firm is $3Y - 5X + 108 = 0$. The average sales of the firm was Rs.44,000 and the variance of profits is $9/16$ th of the variance of sales. Find the average profit.

- (a) 25,220.40
- (b) 26,421.60
- (c) 32,500
- (d) 28,527.50

34. $X = 1.36Y - 5.2$ & $Y = 0.61X + 1.51$ are two regression equations. Correlation coefficient between X & Y is.

- (a) - 0.67
- (b) - 0.911
- (c) 0.67
- (d) 0.911

35. If $R = 0.8$, $\sum D^2 = 33$, find N

- (a) 10
- (b) 11
- (c) 12
- (d) 13

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



36. If the regression equation relates one dependent variable with more than one independent variable, it is called:

- (a) Simple Regression
- (b) Partial Regression
- (c) Multiple Regression
- (d) Complex Regression

37. Which of the following best describes Partial Regression?

- (a) A regression analysis where the relationship between one dependent variable and multiple independent variables is studied.
- (b) A regression analysis between a single independent variable and dependent variable.
- (c) A regression analysis in which all variables are considered simultaneously.
- (d) A regression analysis where the relationship of more than two variables is studied but only two variables are analyzed at a time, keeping others constant.

38. Suppose it is 11 to 5 against a person A who is now 38 years of age living till he is 73 and 5 to 3 against B who is 43 living till he is 78. Find the chance that at least one of these persons will be alive 35 years hence.

- (a) 55%
- (b) 57%
- (c) 43%
- (d) 49%

39. Two cards are drawn at random one by one without replacement from a well shuffled pack of 52 cards. What is the probability that both are red:

- (a) $\frac{26}{52}$
- (b) $\frac{25}{102}$
- (c) $\frac{25}{51}$
- (d) $\frac{26}{102}$

40. A survey reveals that 80% of the football team's matches are played in the evening (7 PM slot) and 20% during the afternoon (3 PM slot). The team wins 60% of their evening games and 85% of their afternoon games. According to today's newspaper, the team won their last match. What is

the probability that the match was played in the evening?

- (a) 0.7385
- (b) 0.7291
- (c) 0.7371
- (d) 0.7413

41. Three events A, B & C are mutually exclusive, equally likely & exhaustive. What is the Probability of complementary of event A

- (a) $\frac{1}{3}$
- (b) 0
- (c) $\frac{2}{3}$
- (d) None of these

42. The odds in favour of a certain event are 2 to 5 and the odds against another event independent of the former are 5 to 6. Find the chance that at least one of the events will happen.

- (a) 0.655
- (b) 0.675
- (c) 0.645
- (d) 0.695

43. In a scenario where A speaks the truth 70% of the time and B speaks the truth 80% of the time, what percentage of the time are they likely to contradict each other?

- (a) 36%
- (b) 50%
- (c) 45%
- (d) 38%

44. An ordinary die is tossed twice and the difference between the number of spots turned up is noted. What is the probability that the difference between the numbers rolled is 3?

- (a) $\frac{1}{6}$
- (b) $\frac{1}{36}$
- (c) $\frac{1}{9}$
- (d) $\frac{1}{18}$

45. If an unbiased coin is tossed once, then the two events head and tail are

- (a) Mutually exclusive
- (b) Exhaustive
- (c) Equally likely
- (d) All these

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



46. In 2022, the average price of a commodity was 20% more than in 2021 but 50% more than in 2023. Find price relatives by using 2021 & 2022 as base year.

- (a) 62.67
- (b) 91.65
- (c) 72.77
- (d) 90.88

47. Net monthly income of an employee was Rs. 8,000 P.M in 2003. The consumer price index number was 80 in 2003. It became 300 in 2023. Calculate the additional D.A to be paid to the employee if he has to be compensated.

- (a) Rs.20,000
- (b) Rs.22,000
- (c) Rs.21,000
- (d) Rs.25000

48. Which of the following describes Paasche's index?

- (a) The index uses fixed quantities from the base year and compares them with current year prices.
- (b) The index uses current year quantities and compares them with base year prices.
- (c) The index uses both current year prices and base year quantities.
- (d) The index calculates the average of all prices and quantities.

49. The price of a commodity in 2020 was ₹30, and in 2021, the price increased to ₹36. The quantity in 2020 was 20 units and in 2021 it was 22 units. Calculate Fisher's Ideal Index for 2021 using 2020 as the base year.

- (a) 125
- (b) 130
- (c) 135
- (d) 145

50. In 2020, the price of a commodity was ₹10, and in 2021, the price increased to ₹15. The quantity of the commodity in 2020 was 20 units, and in 2021, it was 25 units. Calculate the price index for 2021 using Laspeyre's Method with 2020 as the base year.

- (a) 175
- (b) 125
- (c) 250
- (d) 150

Don't miss a thing!
Join our Telegram channel for
more Mcqs,
Tests, solutions, exclusive tips
and updates. 
<https://t.me/dseducationcom>
[merceclasses](https://t.me/dseducationcom)

Study smarter  and track progress .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



Answers

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
c	a	b	a	d	b	c	d	a	c
11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
d	b	a	c	a	b	c	b	d	b
21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
d	a	c	a	b	d	d	a	c	c
31.	32.	33.	34.	35.	36.	37.	38.	39.	40.
a	b	b	d	a	c	d	b	b	a
41.	42.	43.	44.	45.	46.	47.	48.	49.	50.
c	b	d	a	d	c	b	b	a	d

DS Education

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral

1. The Monthly incomes of two persons Ram and Raja are in the ratio 5:7 and their monthly expenditures are in the ratio 7:11. If each of them saves Rs.60 per month. Find their monthly income.

- (a) ₹200 and ₹280
- (b) ₹250 and ₹350
- (c) ₹300 and ₹400
- (d) ₹150 and ₹210

2. Using the properties of proportion, solve the

following equation for y, given $\frac{341}{91} = \frac{y^3+3y}{3y^2+1}$

- (a) 14
- (b) 12
- (c) 11
- (d) 10

3. Divide Rs.2,760 in two parts such that simple interest on one part at 12.5% p.a for 2 years is equal to the simple interest on the other part at 12.5% p.a for 3 years

- (a) ₹1,500 and ₹1,260
- (b) ₹1,656 and ₹1,104
- (c) ₹1,700 and ₹1,060
- (d) ₹1,800 and ₹960

4. The annual birth and death rate per 1000 are 39.4 & 19.4. How many years population will be double.

- (a) 25
- (b) 35
- (c) 40
- (d) 30

5. Find the sum of the first 9 terms of the geometric series: 5,10,20,40,80,...

- (a) ₹2555
- (b) ₹2355
- (c) ₹2455
- (d) ₹2755

6. A man secures an interest free loan of Rs. 14,500 from a friend and agrees to repay it in 10 installments. He pays Rs.1,000 as first instalment and then increases each instalment by equal amount over the preceding instalment.

What will be his last instalment?

- (a) ₹1500
- (b) ₹2000
- (c) ₹2200
- (d) ₹1900

7. The distance between two terminal stations of Metro is 240 km. A metro rail takes 2 hours to cover the distance. Calculate the total distance covered in 5 days, if 10 trips to and fro takes place between the two stations in a day?

- (a) 6,000 km
- (b) 12,000 km
- (c) 24,000 km
- (d) 18,000 km

8. The distance between two terminal metro stations A & B is 300 km. A metro rail takes 1.50 hours to cover the distance. Calculate the total time worked by the driver (in terms of days) in a week, if 6 trips from Station A to Station B takes place in a day?

- (a) 5.25 days
- (b) 2.50 days
- (c) 3.50 days
- (d) 4.25 days

9. How many triangles can be made by using 8 points, in which no point lie on a straight line.

- (a) 63
- (b) 45
- (c) 70
- (d) 56

10. From a group of 15 men, how many selections of 9 men can be made so as to exclude 3 particular men?

- (a) 150
- (b) 220
- (c) 180
- (d) 210

11. Find 'k' for which roots are equal of $4x^2 - 12x + k = 0$

- (a) 9
- (b) 10
- (c) 8
- (d) 7

Study smarter  and track progress .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



12. In Venn diagram, Universal Set is represented by _____

- (a) Stars
- (b) Squares
- (c) Circles
- (d) Rectangle

13. Find the value of $(1.25)^q$, when $(1/3)^{4q} = (6561)^{-1}$

- (a) $1.5 + 0.0625$
- (b) 1.5625
- (c) $(1.25)^2$
- (d) All of the above

14. Compute $\frac{12!}{(8! \times 4!)}$

- (a) 450
- (b) 495
- (c) 512
- (d) 505

15. If $b^2 - 4ac > 0$, is a perfect square, the nature of roots would be

- (a) Real and Unequal
- (b) Imaginary
- (c) Real and Equal
- (d) Unreal

16. There are two groups in a question paper, each group contains 7 questions. A candidate has to answer questions but taking not more than 5 from any group. The total number of selections of 9 questions is

- (a) 1050
- (b) 1260
- (c) 1470
- (d) 1680

17. Find the base when 3 is the logarithm of 729

- (a) 7
- (b) 11
- (c) 9
- (d) 3

18. In a class of 100 students, 45 students read Physics, 52 students read Chemistry and 15 students read both the subjects. Find the number of students who study neither Physics nor Chemistry

- (a) 18
- (b) 10
- (c) 28
- (d) 22

19. A function is defined as follows : $f(x) = 2x - 1, x < 3$
 $= k, x = 3$
 $= 8 - x, x > 3$.

For what value of k, f(x) is continuous at $x = 3$

- (a) 4
- (b) 5
- (c) 3
- (d) 6

20. For a firm the Total Revenue (TR) and Total Cost (TC) functions are given as $TR = 20Q$ and $TC = Q^2 + 4Q + 20$ where Q = Output. Find the maximum profit.

- (a) 30
- (b) 36
- (c) 44
- (d) 50

21. Statistics is a tool in the hands of mankind

- (a) To translate complex facts into simple and understandable statements of facts
- (b) To translate statistical information into mathematical statements of facts
- (c) To translate business information into simple and understandable statements of facts
- (d) To translate complex facts into presentable forms through tables and diagrams

22. In Statistics classification

- (a) Separates data into different unrelated parts
- (b) Separates data into different dispersed groups
- (c) Separates data into different modal groups
- (d) Separates data into different but related parts

23. The sum of deviations of a certain number of observations (ungrouped data) measured from 4 is 72 and the sum of the deviations of the observations from 7 is -3. Find the number of observations and their mean.

- (a) 30 observations, mean = 7.2
- (b) 25 observations, mean = 6.88
- (c) 25 observations, mean = 7
- (d) 30 observations, mean = 6.5

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



24. In a class of 60 students, 12 students failed with an average of 3 marks. The total marks of the class were 300. Find the average marks of the passed students.

- (a) 4
- (b) 4.5
- (c) 5.5
- (d) 5

25. Find the coefficient of the mean deviation about the median for the first 5 natural numbers.

- (a) 0.4
- (b) 0.5
- (c) 0.2
- (d) 0.3

26. A class has 50 students with average weight of 45 kgs. Out of these there are 30 girls with average weight of 42.5 kgs. Find average weight of boys.

- (a) 48.25
- (b) 49.50
- (c) 50.90
- (d) 48.75

27. Mean weight of students in a class is 48 kg. If mean weight of girl students is 40 kg. and that of boys is 60 kg.

- (a) Boys = 50%, Girls = 50%
- (b) Boys = 40%, Girls = 60%
- (c) Boys = 30%, Girls = 70%
- (d) Boys = 60%, Girls = 40%

28. It is the most suitable average when it is desired to give greater weight to smaller observations and less weight to larger ones. It is

- (a) AM;
- (b) HM;
- (c) GM;
- (d) Median;

29. If $A = 500$, $i = 1000$ & $\sum fd' = 232$ & $\sum f = 120$ \bar{x} is

- (a) 527.84;
- (b) 2433.33;
- (c) 501.93;
- (d) 1017.24;

30. A group of friends recorded the number of hours spent studying each week: 8, 12, 10, 9, 8, 11, 15, 9. What is the range of study hours?

- (a) 7
- (b) 5
- (c) 8
- (d) 6

31. In a bivariate regression analysis for dependent variable if $d = \text{Actual value} - \text{Predicted value}$ then at different values of independent variable

- (a) Best fit curve occurs when $d_1^2 + d_2^2 + \dots + d_n^2$ is minimum
- (b) Best fit curve occurs when $d_1^2 + d_2^2 + \dots + d_n^2$ is maximum
- (c) Best fit curve occurs when $d_1^2 + d_2^2 + \dots + d_n^2$ is zero
- (d) Best fit curve occurs when $d_1^2 + d_2^2 + \dots + d_n^2$ is one

32. Find 'r' from the regression line $2x + 3y = 5$

- (a) 1
- (b) 0
- (c) 0.5
- (d) -1

33. If the covariance between X and Y variables is 10 and the variance of X and Y are respectively 16 and 9, find the coefficient of correlation.

- (a) $\frac{2}{3}$
- (b) $\frac{5}{6}$
- (c) $\frac{1}{2}$
- (d) $\frac{3}{4}$

34. For certain X and Y series which are correlated, the two lines of regression are: $5X - 6Y + 90 = 0$ and $15X - 8Y - 130 = 0$. Find the means of the two series.

- (a) 40,50
- (b) 20,40
- (c) 30,40
- (d) 30,50

35. If $b_{yx} = 0.2$, $b_{xy} = 0.3$ & $\sigma_x = 2$, find σ_y .

- (a) -0.821
- (b) 1
- (c) 5.67
- (d) -1

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



36. In a bi-variate regression analysis, the difference between actual value of dependent variable and the predicted value of the dependent variable is called:

- (a) Outlier
- (b) Slope
- (c) Residual
- (d) Scattered point

37. In a regression equation

- (a) Regression coefficient represents the increment in the value of the independent variable for a unit change in the value of the dependent variable
- (b) Regression coefficient represents the increment in the value of the dependent variable for a unit change in the value of the independent variable
- (c) Regression coefficient represents the mean value of the independent variable for a unit change in the value of the dependent variable
- (d) Regression coefficient represents the mean value of the dependent variable for a unit change in the value of the independent variable

38. Two cards are drawn from a pack of cards at random. What is the probability that it will be

- (a) a diamond and a heart.
- (a) $13/102$
- (b) $2/102$
- (c) $13/221$
- (d) $2/221$

39. "Sun will disappear from blue sky today forever". With our available information & belief which one of the following value is most appropriate as probability to this event?

- (a) 0.2
- (b) 0.8
- (c) 1
- (d) 0

40. What is the chance that a leap year, selected at random will contain 53 Sundays?

- (a) $1/7$
- (b) $4/53$
- (c) $2/53$
- (d) $2/7$

41. The probability that X and Y will be alive ten years hence is 0.5 and 0.8 respectively. What is the probability that both of them will be alive ten years hence?

- (a) 0.4
- (b) 0.6
- (c) 0.3
- (d) 0.5

42. A class consists of 100 students, 25 of them are girls and 75 boys, 20 of them are rich and remaining poor, 40 of them are fair complexioned. What is the probability of selecting a fair complexioned rich girl?

- (a) 0.05
- (b) 0.25
- (c) 0.02
- (d) 0.52

43. For an event Odds in favour are "five to two" This means that

- (a) In a total of seven trials the event will occur five times
- (b) In a total of seven trials the event will occur two times
- (c) In a total of five trials the event will occur two times
- (d) In a total of seven trials the event will not occur five times

44. A lot contains 10 items of which 3 are defective. Three items are chosen from the lot at random one after another without replacement. The probability that all the three are defective is

- (a) 0.992
- (b) 0.067
- (c) 0.008
- (d) 0.05

45. From the following find the Fisher's Quantity index:

Item	Base Year (₹)		Current Year (₹)	
	Unit Price	Quantity	Unit Price	Quantity
A	8	6	12	5
B	10	5	11	6
C	17	8	8	5

- (a) 32.76

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



- (b) 72.34
- (c) 12.74
- (d) 78.12

46. From the following find the Simple average (GM) of Relative Quantity index:

Item	Base Year Quantity	Current Year Quantity
A	8	12
B	10	11
C	15	10

- (a) 100.23
- (b) 111.45
- (c) 190.15
- (d) 103.23

47. Consider the following:

Commodity	Base Price (₹)	Current Price (₹)	Weight
A	22	45	8
B	15	15	6
C	80	90	7
D	110	130	3
E	125	30	5

Weighted A.M of price relative index number is:

- (a) 123.34
- (b) 156.11
- (c) 176.52
- (d) 142.89

48. From the following data the five year moving average against year 5:

Years	1	2	3	4	5	6	7	8	9
Sales (₹)	36	43	43	34	44	54	34	24	14

- (a) 40
- (b) 43.6
- (c) 34
- (d) 41.8

49. The weighted average from the following observation is Rs.46.23

Price per tonne (Rs.)	45.60	50.70	7
Tonnes Purchased	135	40	25

Simple average of the observation is?

- (a) ₹66.63
- (b) ₹46.23
- (c) ₹46.26
- (d) ₹46.24

50. Consider the following:

Commodity	Base Price (₹)	Current Price (₹)	Weight
A	22	45	8
B	15	15	6
C	80	90	7
D	110	130	3
E	125	30	5

Weighted aggregative index number is:

- (a) 156.11
- (b) 123.34
- (c) 176.52
- (d) 142.89

Don't miss a thing!
Join our Telegram channel for
more Mcqs,
Tests, solutions, exclusive tips
and updates. 🚀

<https://t.me/dseducationcom>
[merceclasses](https://t.me/dseducationcom)

Study smarter 😊 and track progress 👁️ .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



Answers

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
a	c	b	b	a	d	c	c	d	b
11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
a	d	d	b	a	c	c	a	b	c
21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
a	d	b	c	a	d	d	b	b	a
31.	32.	33.	34.	35.	36.	37.	38.	39.	40.
b	d	b	c	d	c	b	a	d	d
41.	42.	43.	44.	45.	46.	47.	48.	49.	50.
a	c	a	c	d	d	a	d	b	b

D'S Educational

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral

1. Two numbers are in the ratio 7: 9, if the sum of the numbers is 288, then the smaller number is:

- (a) 126
- (b) 288
- (c) 162
- (d) 144

2. Find the next 6 terms for the series: 128, 139, 150, 161, 172, 183.

- (a) 194, 205, 216, 228, 240, 252 O
- (b) 194, 205, 217, 229, 242, 256
- (c) 194, 205, 218, 231, 245, 259
- (d) 194, 205, 216, 227, 238, 249

3. y is the yardstick to measure the performance of two vehicles, where $y = \text{Speed} \times \text{Time} \times \text{Distance}$. If Time taken by one of the vehicle (1st Vehicle) is increased by 10%, what would be the impact on the yardstick?

- (a) No change
- (b) 1st vehicle would be better than 2nd Vehicle
- (c) 2nd Vehicle would be better than 1st Vehicle
- (d) None of the Above

4. If $A \propto B$ and $A = 7$ when $B = 3$, then when $B = 2$, A is _____

- (a) $3/7$
- (b) 3
- (c) 9
- (d) 1

5. Find the Duplicate ratio of : 8 : $a\sqrt{4b}$

- (a) $64a^2:2b^2$
- (b) $16a^2:b^2$
- (c) $32a^2:4b^2$
- (d) $32a^2:8b^2$

6. Find the amount and the compound interest of Rs.9, 350 at the rate of 8% p.a. compounded half-yearly for four years.

- (a) Rs. 12,795 and Rs. 3,445
- (b) Rs. 12,720 and Rs. 3,370
- (c) Rs. 12,758 and Rs. 3,408
- (d) Rs. 12,835 and Rs. 3,485

7. For any series having 50 terms forming A.P. with first term equal to 25, what will be the value of 'n'?

- (a) 50
- (b) 25
- (c) 75
- (d) 100

8. A Train takes 35 hours to reach Punjab from Kolkata (1940 km) and takes 42 hours to reach Kolkata from Gujarat (2160 km). But it took 25 hours from Punjab to Gujarat (1420 km). How many days it take for a trip from Kolkata-Punjab-Gujarat Kolkata and what is the distance covered?

- (a) 4 days 6 hours and 5520 km
- (b) 3 days 18 hours and 5520 km
- (c) 4 days and 2680 km
- (d) 5 days and 2680 km

9. What will be the value of $3^6 \times 3^4 \times 3^{-2} \times 3^{-3} \times 3^6$?

- (a) 321
- (b) 316
- (c) 319
- (d) 311

10. For any sum of roots of quadratic equation, 'a' represents -

- (a) Coefficient of x
- (b) Coefficient of x^2
- (c) Constant term
- (d) None of the above

11. If $\log_4(t-1)+1 = 2 \times \log_4 t$, find the value of t .

- (a) 1
- (b) 0
- (c) 4
- (d) 2

12. Find t when $\log_t 3125 = 5$

- (a) 5
- (b) 125
- (c) 25
- (d) 625

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



13. Which one of the following is Discriminant of a quadratic equation?

- (a) $-b + b^2 - 4ac$
- (b) $-b + b^2 - 4ac$
- (c) $b^2 - 4ac$
- (d) $\sqrt{b^2} + 4ac$

14. Form the equation whose roots are 9, -4

- (a) $x + 5x - 36 = 0$
- (b) $x^2 - 5x - 36 = 0$
- (c) $x^2 - 5x + 36 = 0$
- (d) $x^2 + 5x + 36 = 0$

15. Form quadratic equation with roots as $a - t, a + t$

- (a) $x^2 - 2ax + a^2 - t^2 = 0$
- (b) $x^2 + 2ax + a^2 - t^2 = 0$
- (c) $x^2 - 2ax - a^2 + t^2 = 0$
- (d) $x^2 + 2ax - a^2 + t^2 = 0$

16. Find the LCM of {12!, 14!, 13!}

- (a) 11!
- (b) 15!
- (c) 12!
- (d) 14!

17. If ${}^n P_7 : {}^n P_8 = 4:1$, find the value of n.

- (a) 12
- (b) 10
- (c) 11
- (d) 13

18. $\lim_{x \rightarrow 3} (x^3 + 1)$

- (a) 52
- (b) 53
- (c) 55
- (d) 54

19. When $y = 4^x$ then derivative of y is —

- (a) $x(4^{x-1})$
- (b) $\frac{4^x}{2 \log 2}$
- (c) $4^x 2 \log 2$
- (d) None of these

20. $y = (4x - 3)^3 + (5x - 2)^2$. Calculate y_1

- (a) $182x^2 + 13x + 29$
- (b) $96x^2 + 13x + 29$
- (c) $12x^2 + 26x + 29$
- (d) $192x^2 + 26x + 58$

21. A demand function is given by: $P = a - bQ$ and the cost function is given by $C = Q^2$. Find the value of Q for which profit will be maximum under perfect competition.

- (a) $\frac{a}{(a+1)}$
- (b) $\frac{a}{2(b+1)^2}$
- (c) $\frac{a}{2(b+1)}$
- (d) $\frac{b}{2(a+1)}$

22. There are four person named A, B, C, & D. A is a sales person whereas B, C, D are students. A collected sales figures for his region and B, C, D used these data in order to study sales pattern. Which one of the following is correct?

- (a) B uses secondary data
- (b) A & B both are using primary data
- (c) A, B, C, D all are using secondary data
- (d) B, C, D are using primary data

23. Find the odd man out from the following :

- (a) Regression
- (b) Kurtosis
- (c) Sampling
- (d) Central Tendency

24. "The pass result of 50 students who took up a class test is given below:

Marks : 4 5 6 7 8 9
No of Students: 8 10 9 6 4 3 "

- (a) 0.42
- (b) 3.06
- (c) 4.74
- (d) 2.1

25. Assumed mean is 35, $\sum fd = -425$ & $\sum f = 63$. \bar{x} is:

- (a) 20
- (b) 25.87
- (c) 28.25
- (d) 19.34

26. The mean daily salary paid to all employees in a certain company was Rs.600. The mean daily salaries paid to the male and female employees were Rs.620 and Rs.520 respectively. Male to female employees ratio in the company is:

Study smarter and track progress .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



- (a) 3:2;
- (b) 4:5
- (c) 5:7;
- (d) 4:1;

27. In a certain factory a unit of work is completed by A in 4 minutes, by B in 5 minutes, by C in 6 minutes, by D in 10 minutes, and by E in 12 minutes. Average number of units of work completed per minute is

- (a) 25/4
- (b) 5/48
- (c) 4/25
- (d) 25/48

28. $\Sigma(X - \bar{X})$ is always equal to:

- (a) 1;
- (b) -1;
- (c) 0;
- (d) ∞ ;

29. Which one of the following is a Positional Average?

- (a) Geometric Mean;
- (b) Harmonic Mean;
- (c) Mode;
- (d) Progressive Average;

30. While computing this, it was observed that two entries were wrongly entered as 850 and 320 instead of 580 and 230. Correct value of x is :

- (a) 2688;
- (b) 2746.5;
- (c) 2720;
- (d) 2662;

31. If b_{XY} and b_{YX} are regression coefficients of series X on series Y and regression coefficients of series Y on series X respectively then which one of the following is correct?

- (a) $b_{XY} \times b_{YX} = r$, where r is the correlation coefficient
- (b) $b_{XY} \times b_{YX} = r^2$, where r is the correlation coefficient
- (c) $b_{XY} \times b_{YX} = -r$, where r is the correlation coefficient

(d) $b_{XY} \times b_{YX} = 1/r$, where r is the correlation coefficient

32. If $r^2 = 0.3$ & $b_{XY} = -1.5$ then b_{YX} is equal to :

- (a) + 1
- (b) - 0.2
- (c) - 1
- (d) - 0.45

33. In a bivariate regression analysis comprising of series X & Y, if $\Sigma(X - \bar{X})^2 = \Sigma(Y - \bar{Y})^2$ then :

- (a) $b_{XY} = b_{YX}$
- (b) $b_{XY} > b_{YX}$
- (c) $b_{XY} < b_{YX}$
- (d) Correlation coefficient = 1

34. "Consider the following results: $N = 12$, $\Sigma dx = 0$, $\Sigma dy = 4$, $\Sigma dx^2 = 1344$, $\Sigma dy^2 = 215$, $\Sigma dxdy = -4360$ Appropriate regression coefficient is -"

- (a) -0.821
- (b) 1
- (c) 5.67
- (d) -3.244

35. "Consider the following results: $N = 6$, $\Sigma y = 42$, $\Sigma y^2 = 318$, $b_{yx} = -11/34$, $\Sigma x^2 - 1/n (\Sigma x)^2 = 34$ Then b_{xy} is"

- (a) -11/34
- (b) 11/24
- (c) -34/11
- (d) -11/24

36. " $X = 1.36Y - 5.2$ & $Y = 0.61X + 1.51$ are two regression equations. Correlation coefficient between X & Y is :"

- (a) - 0.67
- (b) - 0.911
- (c) 0.911
- (d) 0.67

37. In a bivariate analysis if two regression equations are $8x - 10y + 66 = 0$ & $40x - 18y - 214 = 0$. Then x, y, the mean of the series \bar{x} & \bar{y} are respectively:

- (a) 13,17
- (b) 17,17
- (c) 5/4, 20/9
- (d) 8,18

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



38. If an experiment has a set of events that includes every possible outcomes, then the set is called :

- (a) Mutually Exclusive set
- (b) Mutually Exhaustive set
- (c) Collectively Exhaustive set
- (d) Exhaustive & Exclusive set

39. Addition rule for mutually exclusive events A & B is :

- (a) $P(A \text{ or } B) = P(A) + P(B)$
- (b) $P(A \text{ or } B) = P(A+B)$
- (c) $P(A \text{ or } B) = P(A) + P(B) - P(AB)$
- (d) $P(A \text{ or } B) = P(A+B - AB)$

40. The probability that a leap year selected at random contain 53 Sundays is:

- (a) 0.143
- (b) 1
- (c) 0.286
- (d) 0.48

41. Three coins are tossed together. The probability of getting exactly two heads is:

- (a) $5/8$
- (b) $3/8$
- (c) $1/8$
- (d) None

42. A bag contains 10 red and 10 green balls. A ball is drawn from it. The probability that it will be green is:

- (a) $1/10$
- (b) $1/3$
- (c) $1/2$
- (d) None of these

43. A survey by Air travelers' association revealed that 60% of its member made airline reservations last year. Two members are selected at random. The probability that both the members made airline reservations last year is:

- (a) 0.6
- (b) 0.4
- (c) 0.36
- (d) 0.16

44. If p: q are the odds in favour of an event, then the probability of that event is:

- (a) p/q
- (b) $p/(p + q)$
- (c) $q/(p + q)$
- (d) None of these

45. If $P(A) = 0.3, P(B) = 0.2$ and $P(C) = 0.1$, then assuming A,B and C are independent events, the probability of occurrence of at least one of the three events is :

- (a) 0.7
- (b) 0.8
- (c) 0.006
- (d) 0.496

46. "By using arithmetic mean method the index number from the following data is

Commodity Base price Current price Weight

Rice	30	52	8
Wheat	25	30	6
Fish	130	150	3
Potato	35	49	5
Oil	70	105	7

- (a) 144.92
- (b) 202.34
- (c) 161.87
- (d) 115.22

47. Consider the following series of observation.

Year	1	2	3	4	5	6	7	8	9	10	11
Sales (Rs.)	2	6	1	5	3	7	2	6	4	8	3

5 year moving average against year 6 is:

- (a) 3.6
- (b) 4.6
- (c) 4.4
- (d) 5.4

48. "From the following series find out a three year weighted moving average against year 4 with weights 1,4,1 is:

Year	1	2	3	4	5	6	7
Values	12	14	15	17	18	20	23

- (a) 20.17
- (b) 16.83
- (c) 18.17
- (d) 15.17

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



49. " Fisher's ideal index for prices from the following data is:

Item	Base Year		Current Year	
	Unit Price	Quantity	Unit Price	Quantity
A	8	6	12	5
B	10	5	11	6
C	15	8	10	5 "

- (a) 97.72
- (b) 80.15
- (c) 95.67
- (d) 89.14

50. "Consider the following table:

Commodity	Weights	Base price (Rs.)	Cur. price (Rs.)
A	40	16	30
B	25	40	70
C	5	0.5	1.5
D	20	5.12	7.25
E	10	2	2.5

Weighted A.M price relative index is "

- (a) 146.98
- (b) 174.7
- (c) 124.33
- (d) 156.01

Don't miss a thing!
Join our Telegram channel for
more Mcqs,
Tests, solutions, exclusive tips
and updates. 🚀

<https://t.me/dseducationcom>
[merceclasses](https://t.me/dseducationcom)

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



Answers

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
a	d	a	b	b	a	a	a	d	a
11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
d	a	c	b	a	d	a	c	c	d
21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
c	a	c	d	c	d	c	c	c	a
31.	32.	33.	34.	35.	36.	37.	38.	39.	40.
b	b	a	d	d	c	a	c	a	c
41.	42.	43.	44.	45.	46.	47.	48.	49.	50.
b	c	c	b	d	a	b	b	a	b

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral

1. Find the fourth proportional to 6, 8, 9 is:

- (a) 18
- (b) 12
- (c) 7
- (d) 13

2. AB LLP is expecting to receive a certain sum of money five years from now. If the present value of this sum is Rs.38,400 at current market interest rate of 6% when the interest is compounded monthly, then how much amount they will receive after 5 years?

- (a) Rs.52,684
- (b) Rs.52,884
- (c) Rs.51,904
- (d) Rs.51,794

3. "For the given series: 66, 71, 76, 81, 86, 91, 96 ...666, 671, 676. With 'n' terms in the series, what will be the value of 'd' ?"

- (a) -5
- (b) 15
- (c) -3
- (d) 5

4. Consider the following:

Year	1	2	3	4	5	6	7	8
Annual Sales (Rs.0000)	3.6	4.3	4.3	3.4	4.4	5.4	3.4	2.4

4 year centered moving average against year 6 is

- (a) 4.00
- (b) 4.24
- (c) 4.26
- (d) 4.03

5. If the sum of the series is 297, how many terms are there in the series?

- (a) 8
- (b) 9
- (c) 10
- (d) 7

6. With 5% increase in Distance and 2.50% increase in Time, what would be the impact on Speed?

- (a) Decrease by 2.44%
- (b) Increase by 2.44%
- (c) Increase by 2.38%
- (d) Decrease by 2.38%

7. If a Toto travels for 6 hours on a working day to cover 1.5 times the distance travelled on holiday and on a holiday it takes 4 hours to cover 110 km. than for a span of 7 days: (5 Working and 2 Holidays), how much distance is covered?

- (a) 1054 km
- (b) 1045 km
- (c) 880 km
- (d) 990 km

8. When the effective rate of interest is 7.82% payable quarterly, what would be the nominal rate of interest?

- (a) 8.00%
- (b) 7.60%
- (c) 7.00%
- (d) 8.20%

9. Find the square of the difference of the roots of $115 + 5(x^2 - 12x) = 0$

- (a) 24
- (b) 48
- (c) 26
- (d) 52

10. What would be the factorial notation for: $11 \times 10 \times 9 \times 8 \times 7$

- (a) $11! / 6!$
- (b) $11! / 5!$
- (c) $10! / 5!$
- (d) $11! / 6!$

11. In how many different ways can 4 different cars, one of each of the 4 manufacturers, be parked in a parking lane?

- (a) 20 ways
- (b) 22 ways
- (c) 24 ways
- (d) 26 ways

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



12. If $b^2 - 4ac > 0$, is a perfect square, the nature of roots would be

- (a) Real and Equal
- (b) Imaginary
- (c) Unreal
- (d) Real and Unequal

13. Find the value of $11^{78}/11^{81}$?

- (a) 11^3
- (b) $1/11^3$
- (c) 1331
- (d) -1331

14. If $\log_y 32 = 10$, then which of the following is the value of y ?

- (a) 4
- (b) 2
- (c) $\sqrt{4}$
- (d) $\sqrt{2}$

15. Find the number of permutations for 11 bikes if 5 bikes are to be taken at a time.

- (a) 54540
- (b) 55440
- (c) 44550
- (d) 45450

16. Choose the correct form (From the alternatives given below) in which quadratic equation is generally written -

- (a) $ax^2 + bx + c = 0$
- (b) $x^2 + ax - b = 0$
- (c) $ax^2 - bx + c = 0$
- (d) $x - bx + c = 0$

17. Solve: $\log(9t - 2) = 2$

- (a) $\frac{102}{9}$
- (b) $\frac{98}{9}$
- (c) $\frac{109}{2}$
- (d) $\frac{91}{2}$

18. When α and β are the roots of $5x^2 - 7x + 9 = 0$ then find the values of $1/\beta + 1/\alpha$

- (a) $7/9$
- (b) $-7/9$
- (c) $9/7$
- (d) $-9/7$

19. If $y = xe^x$ then $\frac{dy}{dx} = ?$

- (a) xe^x
- (b) $e^x(x+1)$
- (c) $e^x(x-1)$
- (d) e^x/x

20. A soft-drink manufacturer has a revenue function $R = 7Q^2 - 19Q + 30$ and the cost function is given by $9Q$. Find the number of cans produced by the firm, under perfect competition.

- (a) 2
- (b) 4
- (c) 6
- (d) 8

21. "f(x) = $x^2/3 + 2x^2 + 3x + 7$ "

- (a) Maximum, $x = -3$; Minimum, $x = -1$
- (b) Maximum, $x = 1/2$; Minimum, $x = 2$
- (c) Maximum, $x = 1$; Minimum, $x = 4$
- (d) No curvature

22. With respect to accuracy :

- (a) Diagrammatic presentation is preferable to Tabular presentation
- (b) Textual presentation is preferable to diagrammatic presentation
- (c) Tabular presentation is preferable to Diagrammatic presentation
- (d) Textual presentation is preferable to Tabular presentation

23. Which one of the following is a method of collecting primary data?

- (a) Information collected through newspapers and periodicals
- (b) Information obtained from the publications of trade associations
- (c) Information collected by Government through Census
- (d) Information gathered from research paper published in research journal

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



24. "The weighted average from the following observation is Rs.46.23.

Price per tonne (Rs.) : 45.60 50.70 ?
Tonnes Purchased : 135 40 25

Simple average of observation is "

- (a) Rs. 46.23
- (b) Rs. 46.26
- (c) Rs. 66.63
- (d) Rs. 46.24

25. The mean of the frequency distribution ((x_1, f_1), (x_2, f_2), (x_3, f_3).....(x_n, f_n)) is:

- (a) $\Sigma x / \Sigma f$
- (b) $\Sigma x / n$
- (c) $\Sigma fx / n$
- (d) $\Sigma fx / \Sigma f$

26. The sum of the deviations of a certain number of observations measured from 4 is 72 and the sum of the deviations of the observations from 7 is -3. Mean of the observations is

- (a) 6.88
- (b) 25
- (c) 3.63
- (d) Cannot be ascertained with given data;

27. A person walks 8 km at 4km an hour, 6km at 3km an hour and 4km at 2km an hour. Average speed per hour is

- (a) 0.33
- (b) 2
- (c) 3
- (d) 0.5

28. Because of heavy rain on Sunday average rainfall of a city for the week increased to 0.6 inch from the average rainfall 0.3 inch measured from Monday to Saturday. The rainfall on Sunday was-

- (a) 2.4 inch;
- (b) 0.3 inch;
- (c) 2.1 inch;
- (d) 1.5 inch

29. The sum of the squares of deviations of a set of observations is the minimum when deviations are taken from the:

- (a) Geometric Mean;
- (b) Harmonic Mean;
- (c) Arithmetic Mean;
- (d) Mode;

30. If b_{xy} & b_{yx} are regression coefficients between X on Y and Y on X respectively then

- (a) $\sqrt{b_{xy}} \times b_{xy} \leq r$
- (b) $\sqrt{b_{xy}} \times b_{yx} \geq r$
- (c) $\sqrt{b_{xy}} \times b_{xy} = -r$
- (d) None of the Above

31. Consider the following table:

Item	Year 1		Year 2	
	Unit Price	Quantity	Unit Price	Quantity
I	1	16	3	15
II	3	15	8	20
III	5	18	10	21

Pasche's price index of year 2 with respect to year 1 is

- (a) 189.13
- (b) 230.56
- (c) 245.12
- (d) 256.78

32. Which one of the following is correct?

- (a) Regression equation predicts maximum probable values of one variable for specified values of other variable
- (b) Regression equation predicts most likely values of one variable for specified values of other variable
- (c) Regression equation predicts maxi-min values of one variable for specified values of other variable
- (d) Regression equation predicts minimum probable values of one variable for specified values of other variable

33. From the following find the Fisher's Quantity index

Item	Base Year		Current Year	
	Unit Price (P_0)	Quantity (Q_0)	Unit Price (P_1)	Quantity (Q_1)
A	8	6	12	5
B	10	5	11	6
C	17	8	8	5

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



- (a) 32.76
- (b) 72.34
- (c) 82.89
- (d) 12.74

34. If $r = 0.52$, $\sigma_X = 4.6$ & $\sigma_Y = 36.8$ then b_{XY} is equal to:

- (a) 0.24
- (b) 4.16
- (c) 1
- (d) 0.065

35. If Mean = 50 cm and C.V. = 60%, then the S.D. is

- (a) 25 cm
- (b) 30 cm
- (c) 28 cm
- (d) 20 cm

36. The regression equation of y on x is $3x - 5y = -12$ and regression equation of x on y is $2x - y = 7$. The value of y when $x = 10$ is

- (a) 8.4
- (b) 6.5
- (c) 7
- (d) 9

37. For a given frequency distribution C.V = 30%, variance = 36 and Pearson's Coefficient of Skewness = - 0.25, the mode of the distribution is

- (a) 24
- (b) 20
- (c) 21.5
- (d) 24.5

38. When $\text{Var}(x) = 2.25$, $\text{Var}(y) = 1$ and $\text{Cov}(x, y) = 0.9$, then correlation coefficient is

- (a) 0.45
- (b) 0.8
- (c) 0.6
- (d) 0.75

39. The value of the correlation coefficient lies between

- (a) 0 and 1
- (b) - 1 and 1
- (c) -1 and 0
- (d) - 0.5 and 0.5

40. If $y = 3x + 30$ and mean of x is 20, then the mean of y is

- (a) 90
- (b) 80
- (c) 70
- (d) 100

41. The probability of two events A and B are 0.05 and 0.95 respectively. We can infer that

- (a) Event A is more probable to happen
- (b) Event B is more improbable to happen
- (c) Event B is more probable to happen
- (d) Event A & B are sure to happen

42. A bag contains 30 balls numbered from 1 to 30. One ball is drawn at random. The probability that the number of the drawn ball will be multiple of 3 or 7 is :

- (a) $7/15$
- (b) $13/30$
- (c) $1/2$
- (d) None of these

43. In IPL Kolkata Knight Riders plays 70% of their games at night (8 O'clock slot) and 30% during the day (4clock slot). The team wins 50% of their night games and 90% of their day games. According to today's newspaper they own yesterday. The probability that the game was played at night is :

- (a) 0.4667
- (b) 0.5645
- (c) 0.35
- (d) 0.5

44. 4 coins are tossed. The probability that there are 2 heads is :

- (a) $1/2$
- (b) $3/8$
- (c) $1/8$
- (d) None of these

45. The regression equation of profit (X) on sales (Y) of a certain firm is $3Y - 5X + 108 = 0$. The average sales of the firm were Rs.44,000 and the variance of profits is $9/16^{\text{th}}$ of the variance of sales. Find the average profit .

- (a) Rs. 25642.60
- (b) Rs. 24621.60
- (c) Rs.26421.60
- (d) None of these

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



46. What is the chance of getting a king in a draw from a pack of 52 cards?

- (a) $1/16$
- (b) $1/52$
- (c) $1/13$
- (d) $3/26$

47. A bag contains 7 red, 12 white and 4 green balls. What is the probability that 3 balls drawn are one of each colour ?

- (a) 0.1897
- (b) 1.999
- (c) 0.1998
- (d) 1.00

48. A petrol pump proprietor sells on an average Rs. 80,000 worth of petrol on rainy days and an average of Rs. 95,000 on clear days. Statistics from the Meteorological Department show that the probability is 0.76 for clear weather and 0.24 for rainy weather on coming Monday. Find the expected value of petrol sale on coming Monday.

- (a) Rs. 49,100
- (b) Rs. 91,400
- (c) Rs. 1,00,400
- (d) Rs. 19,400

49. Calculate a 1st four quarter weighted moving average for the number of shares outstanding for a company. The data are reported in thousands. Apply weights of 0.1, 0.2, 0.3 and 0.4 respectively for Q1, Q2, Q3 & Q4.

Year	Quarter	No of shares Outstanding
2023	Q1	28766
	Q2	30057
	Q3	31336
	Q4	33240

- (a) 31584.8
- (b) 35841.8
- (c) 30441.8
- (d) 31854.8

50. From the data given below the wholesale price index number for the year 1 taking year 0 as base using simple arithmetic average of relatives' method is

Commodity	Price year 0	Price year 1
A	80	120
B	120	150
C	40	80
D	100	150
E	200	240

- (a) 180
- (b) 112
- (c) 134
- (d) 149

Don't miss a thing!
Join our Telegram channel for
more Mcqs,
Tests, solutions, exclusive tips
and updates. 🚀

<https://t.me/dseducationcom>
[merceclasses](https://t.me/dseducationcom)

Study smarter 😊 and track progress 👁️ .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



Answers

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
b	d	d	d	b	b	b	b	d	a
11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
c	d	b	d	b	a	a	a	b	a
21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
a	c	c	b	d	a	c	a	c	a
31.	32.	33.	34.	35.	36.	37.	38.	39.	40.
b	b	c	d	b	a	c	c	b	a
41.	42.	43.	44.	45.	46.	47.	48.	49.	50.
c	b	b	b	c	c	a	b	a	d

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral

1. The ratio of the number of faces to the number of edges of a box is :

- (a) 3:8
- (b) 8:3
- (c) 1:2
- (d) 2:1

2. What will be the value of $(9^3)^2$?

- (a) 59004×9
- (b) 59049×9
- (c) 49005×9
- (d) 49059×9

3. Find the value of the logarithm of 2nd number (b) for 3 consecutive numbers (a, b, c).

- (a) $\log(1+ ac)$
- (b) $\frac{1}{2} \times 2 \times \log(1+ ac)$
- (c) $\frac{1}{2} \times \log(1+ ac)$
- (d) $2 \times \log(1+ ac)$

4. A loan of ₹20,000 has been issued for 5 years. Compute the amount to be repaid to the lender if simple interest is charged @ 8% per year.

- (a) ₹ 28,000
- (b) ₹ 25,000
- (c) ₹ 27,000
- (d) ₹ 24,000

5. If $\log(7y - 5) = 2$, find the value of y.

- (a) 15
- (b) 10
- (c) 8
- (d) 7

6. The First term is 748, Last Term is 28, and the value between two consecutive terms is 9 deducted, find the number of terms in the series.

- (a) 9
- (b) 8
- (c) 10
- (d) None of these

7. When a Bike had travelled for 78 km in 3 hours 45 minutes in the evening, how much distance would the Bike travelled in 2 hours?

- (a) 41.60 km
- (b) 48.88 km
- (c) 52 km
- (d) 55 km

8. If A takes 3 hours to cover a distance of 60 km, B takes 2 hours to cover a distance of 50 km, how much time would A take more than B to cover 300 km?

- (a) 6 hours
- (b) 12 hours
- (c) 15 hours
- (d) 3 hours

9. Compute $\frac{12!}{(8! \times 4!)}$

- (a) 3960
- (b) 495
- (c) 99
- (d) 440

10. Find the number of permutations for 15 scooters if 3 scooters are to be considered at a time.

- (a) 2730
- (b) 2370
- (c) 2184
- (d) 2814

11. A cycle travels a distance of 300 m in every second. What is the distance covered in an hour by the cycle?

- (a) 3000 km
- (b) 1080 km
- (c) 1800 km
- (d) 2160 km

12. In Venn diagram, Universal Set is represented by _____.

- (a) Stars
- (b) Squares
- (c) Rectangle
- (d) Circles

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



13. How many ways can 8 people get vaccinated from 8 vaccinators, assuming no vaccinator is idle?

- (a) 40320 ways
- (b) 5040 ways
- (c) 5760 ways
- (d) 35280 ways

14. Identify the type of series: $1+2+3+4+5$:

- (a) H.P.
- (b) G.P.
- (c) Either of 'a' or 'b'
- (d) A.P

15. If $b^2 - 4ac > 0$, is a perfect square, the nature of roots would be _____.

- (a) Real and Equal
- (b) Imaginary
- (c) Unreal
- (d) Real and Unequal

16. When are nature of roots real rather than imaginary?

- (a) If Discriminant is negative
- (b) If Discriminant is less than zero
- (c) If Discriminant is not a perfect square
- (d) If Discriminant is more than or equal to zero

17. In how many different ways can 4 different cars, one of each of the 4 manufacturers, be parked in a parking lane?

- (a) 20 ways
- (b) 22 ways
- (c) 24 ways
- (d) 26 ways

18. The demand function is given by: $P = 1400 - 25Q$ and the cost function is given by $C = 10Q^2$. Find the value of Q at the equilibrium point.

- (a) 10
- (b) 20
- (c) 30
- (d) 40

19. Which one of the following has synonymous words?

- (a) Status, Staistik, Statista
- (b) Staistik, Statista, Stats
- (c) Statistic, Statistia, Stats
- (d) Statistic, Statistia, Status

20. A firm has a fixed production cost of ₹ 90 and a marginal variable production cost of ₹ 9. The price of the product is ₹18. Find the cost function, revenue function, and the value of Q at the Break Even point.

- (a) $2Q + 20$; $9Q$; 10
- (b) $9Q + 90$; $18Q$; 10
- (c) $4Q + 90$; $36Q$; 20
- (d) $Q + 10$; $5Q$; 50

21. With respect to accuracy :

- (a) Diagrammatic presentation is preferable to Tabular presentation
- (b) Textual presentation is preferable to diagrammatic presentation
- (c) Tabular presentation is preferable to Diagrammatic presentation
- (d) Textual presentation is preferable to Tabular presentation

22. A manufacturer has a monthly fixed cost of ₹1,00,000 and a production cost of ₹50 per unit produced. The product is sold at ₹75. Find the cost function and the number of products be sold by the manufacturer to have break even.

- (a) $25x + 50,000$; 2000
- (b) $50x + 1,00,000$; 4000
- (c) $5x + 1,00,000$; 3000
- (d) $2.5x + 10,000$; 5000

23. Because of heavy rain on Sunday average rainfall of a city for the week increased to 0.6 inch from the average rainfall 0.3 inch measured from Monday to Saturday. The rainfall on Sunday was-

- (a) 2.4 inch;
- (b) 0.3 inch;
- (c) 2.1 inch;
- (d) 1.5 inch

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



24. A person walks 8 km at 4km an hour, 6km at 3km an hour and 4km at 2km an hour. Average speed per hour is _____.

- (a) 0.33
- (b) 2
- (c) 3
- (d) 0.5

25. The mean daily salary paid to all employees in a certain company was ₹600. The mean daily salaries paid to the male and female employees were ₹620 and ₹520 respectively. Male to female employees ratio in the company is :

- (a) 3:2;
- (b) 4:5
- (c) 5:7;
- (d) 4:1;

26. In a certain factory a unit of work is completed by A in 4 minutes, by B in 5 minutes, by C in 6 minutes, by D in 10 minutes, and by E in 12 minutes. Average number of units of work completed per minute is _____.

- (a) 25/4
- (b) 5/48
- (c) 4/25
- (d) 25/48

27. Which one of the following is a feature of Harmonic Mean (HM)?

- (a) GM is affected much by the presence of externally small or large observations;
- (b) GM gives the actual value of the series;
- (c) GM is useful when a given phenomenon has a limit for lower value;
- (d) GM is imaginary if any of the observations is zero;

28. It is the most suitable average when it is desired to give greater weight to smaller observations and less weight to larger ones. It is _____.

- (a) AM
- (b) HM
- (c) GM
- (d) Median

29. Raw data is :

- (a) Information which can be interpreted to take decision
- (b) Information which can't be put to use directly
- (c) Information which is not amenable to conversion
- (d) Information which are useless

30. The sum of the deviations of a certain number of observations measured from 4 is 72 and the sum of the deviations of the observations from 7 is -3. Mean of the observations is

- (a) 6.88
- (b) 25
- (c) 3.63
- (d) Cannot be ascertained with given data

31. If b_{XY} and b_{YX} are regression coefficients of series X on series Y and regression coefficients of series Y on series X respectively then which one of the following is correct?

- (a) b_{XY} and b_{YX} will be either both positive or both negative
- (b) b_{XY} will be positive and b_{YX} will be negative
- (c) b_{XY} will be negative and b_{YX} will be positive
- (d) Nothing can be said like this, it depends on X & Y values

32. If $r^2 = 0.3$ & $b_{XY} = -1.5$ then b_{YX} is equal to :

- (a) + 1
- (b) - 0.2
- (c) - 1
- (d) - 0.45

33. In a bivariate regression analysis for dependent variable if $d = \text{Actual value} - \text{Predicted value}$ then at different values of independent variable _____.

- (a) Best fit curve occurs when $d_1^2 + d_2^2 + \dots + d_n^2$ is minimum
- (b) Best fit curve occurs when $d_1^2 + d_2^2 + \dots + d_n^2$ is maximum
- (c) Best fit curve occurs when $d_1^2 + d_2^2 + \dots + d_n^2$ is zero
- (d) Best fit curve occurs when $d_1^2 + d_2^2 + \dots + d_n^2$ is one

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



34. In a bivariate regression analysis $\Sigma XY = 1355.25$, $(\Sigma X)(\Sigma Y) = 6396$, $\Sigma X^2 = 591.50$ & $\Sigma X = 52$. If there are 5 items then b_{YX}

- (a) 1
- (b) 0.97
- (c) 0.667
- (d) 1.5

35. If b_{XY} and b_{YX} are regression coefficients of series X on series Y and regression coefficients of series Y on series X respectively then which one of the following is correct?

- (a) $b_{XY} \times b_{YX} = r$, where r is the correlation coefficient
- (b) $b_{XY} \times b_{YX} = r^2$, where r is the correlation coefficient
- (c) $b_{XY} \times b_{YX} = -r$, where r is the correlation coefficient
- (d) $b_{XY} \times b_{YX} = 1/r$, where r is the correlation coefficient

36. In a bivariate regression analysis, the difference between actual value of dependent variable and the predicted value of the dependent variable is called _____.

- (a) Outlier
- (b) Slope
- (c) Residual
- (d) Scattered point

37. In a regression equation:

- (a) Regression coefficient represents the increment in the value of the independent variable for a unit change in the value of the dependent variable
- (b) Regression coefficient represents the increment in the value of the dependent variable for a unit change in the value of the independent variable
- (c) Regression coefficient represents the mean value of the independent variable for a unit change in the value of the dependent variable
- (d) Regression coefficient represents the mean value of the dependent variable for a unit change in the value of the independent variable

38. In IPL Kolkata Knight Riders plays 70% of their games at night (8 O'clock slot) and 30% during the day (4clock slot). The team wins 50% of their night games and 90% of their day games. According to today's newspaper they own yesterday. The probability that the game was played at night is :

- (a) 0.4667
- (b) 0.5645
- (c) 0.35
- (d) 0.5

39. A bag contains 30 balls numbered from 1 to 30. One ball is drawn at random. The probability that the number of the drawn ball will be multiple of 3 or 7 is :

- (a) 7/15
- (b) 13/30
- (c) 1/2
- (d) None of these

40. A bag contains 10 red and 10 green balls. A ball is drawn from it. The probability that it will be green is :

- (a) 1/10
- (b) 1/3
- (c) 1/2
- (d) None of these

41. If an unbiased coin is tossed once, then the two events head and tail are:

- (a) Mutually exclusive
- (b) Exhaustive
- (c) Equally likely
- (d) All these

42. A survey by Air travelers' association revealed that 60% of its member made airline reservations last year. Two members are selected at random. The probability that both the members made airline reservations last year is :

- (a) 0.6
- (b) 0.4
- (c) 0.36
- (d) 0.16

43. A lot contains 10 items of which 3 are defective. Three items are chosen from the lot at random one after another without replacement. The probability that all the three are defective is

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



- (a) 0.008
- (b) 0.992
- (c) 0.067
- (d) 0.05

44. Addition rule for mutually exclusive events A & B is :

- (a) $P(A \text{ or } B) = P(a) + P(b)$
- (b) $P(A \text{ or } B) = P(A+B)$
- (c) $P(A \text{ or } B) = P(a) + P(b) - P(AB)$
- (d) $P(A \text{ or } B) = P(A+B - AB)$

45. Probability theory is often referred to as :

- (a) Science of prediction
- (b) Science of uncertainty
- (c) Science of chance
- (d) Science of decision making

46. From the following four year centered moving average against year 4 is

Year	1	2	3	4	5	6	7
Import (₹ m)	229	231	206	191	195	184	193

- (a) 190.671
- (b) 199.875
- (c) 192.375
- (d) 210

47. By using arithmetic mean method, the index number from the following data is

Commodity	Base price	Current price	Weight
Rice	30	52	8
Wheat	25	30	6
Fish	130	150	3
Potato	35	49	5
Oil	70	105	7

- (a) 144.92
- (b) 202.34
- (c) 161.87
- (d) 115.22

48. Consider the following:

Commodity	Base Price (Rs.)	Current Year (Rs.)	Weight
A	22	40	8
B	15	15	6
C	80	90	7

D	110	130	3
E	25	30	5

Weighted aggregative index number is :

- (a) 123.34
- (b) 156.11
- (c) 176.52
- (d) 142.89

49. From the following find the Simple average (GM) of Relative Quantity index

Item	Base Year Quantity	Current Year Quantity
A	8	12
B	10	11
C	15	10

- (a) 100.23
- (b) 111.45
- (c) 190.15
- (d) 103.23

50. From the data given below the wholesale price index number for the year 1 taking year 0 as base using simple arithmetic average of relatives method is :

Commodity	Price year 0	Price year 1
A	80	120
B	120	150
C	40	80
D	100	150
E	200	240

- (a) 180
- (b) 112
- (c) 134
- (d) 149

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



Answers

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
(c)	(b)	(c)	(a)	(a)	(a)	(a)	(d)	(b)	(a)
11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
(b)	(c)	(a)	(d)	(d)	(d)	(c)	(b)	(a)	(b)
21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
(c)	(b)	(a)	(c)	(d)	(c)	(c)	(b)	(b)	(a)
31.	32.	33.	34.	35.	36.	37.	38.	39.	40.
(a)	(b)	(a)	(d)	(b)	(c)	(b)	(b)	(b)	(c)
41.	42.	43.	44.	45.	46.	47.	48.	49.	50.
(d)	(c)	(a)	(a)	(b)	(b)	(a)	(a)	(d)	(d)

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral

1. For an event Odds in favour are “five to two”

This means that:

- (a) In a total of seven trials the event will occur five times
- (b) In a total of seven trials the event will occur two times
- (c) In a total of five trials the event will occur two times
- (d) In a total of seven trials the event will not occur five times

2. $X = 1.36Y - 5.2$ & $Y = 0.61X + 1.51$ are two regression equations. Correlation coefficient between is:

- (a) -0.67
- (b) -0.911
- (c) 0.911
- (d) 0.67

3. With respect to accuracy

- (a) Diagrammatic presentation is preferable to Tabular presentation
- (b) Textual presentation is preferable to diagrammatic presentation
- (c) Tabular presentation is preferable to Diagrammatic presentation
- (d) Textual presentation is preferable to Tabular presentation

4. From the following find the Fisher’s Quantity index:

Item	Base Year (₹)		Current Year (₹)	
	Unit Price	Quantity	Unit Price	Quantity
A	8	6	12	5
B	10	5	11	6
C	17	8	8	5

- (a) 32.76
- (b) 72.34
- (c) 78.12
- (d) 12.74

5. Probability theory is often referred to as

- (a) Science of prediction
- (b) Science of uncertainty
- (c) Science of chance
- (d) Science of decision making

6. In a bivariate analysis if two regression equations are $mx - y + 10 = 0$ & $-2x + 5y = 14$. If coefficient of correlation between x & y is $1/\sqrt{10}$, then value of m is:

- (a) 10
- (b) 5/2
- (c) 4
- (d) 1

7. The probability of two events A and B are 0.05 and 0.95 respectively. We can infer that

- (a) Event A is more probable to happen
- (b) Event B is more improbable to happen
- (c) Event B is more probable to happen
- (d) Event A & B are sure to happen

8. From the following find the Simple average (GM) of Relative Quantity index:

Item	Base Year Quantity	Current Year Quantity
A	8	12
B	10	11
C	15	10

- (a) 100.23
- (b) 111.45
- (c) 190.15
- (d) 103.23

9. Consider the following results $N = 12$, $\sum dx = 0$, $\sum dy = 4$, $\sum dx^2 = 1344$, $\sum dy^2 = 215$, $\sum dx dy = -4360$ Appropriate regression coefficient is:

- (a) -0.821
- (b) 1
- (c) 5.67
- (d) -3.244

10. Classical probability is based on the assumption that

- (a) The outcomes of an experiment are already known
- (b) The probability of an outcome of an experiment is always 0.5
- (c) The probability of all outcomes in an experiment is always 1
- (d) The outcomes of an experiment are equally likely

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



11. In IPL Kolkata Knight Riders plays 70% of their games at night (8 O'clock slot) and 30% during the day (4clock slot). The team wins 50% of their night games and 90% of their day games. According to today's newspaper they own yesterday. The probability that the game was played at night is:

- (a) 0.4667
- (b) 0.5645
- (c) 0.35
- (d) 0.5

12. Consider the following:

Commodity	Base Price (₹)	Current Price (₹)	Weight
A	22	45	8
B	15	15	6
C	80	90	7
D	110	130	3
E	25	30	5

Weighted aggregative index number is

- (a) 123.34
- (b) 156.11
- (c) 176.52
- (d) 142.89

13. Consider the following:

Commodity	Base Price (₹)	Current Price (₹)	Weight
A	22	45	8
B	15	15	6
C	80	90	7
D	110	130	3
E	25	30	5

Weighted A.M of price relative index number is:

- (a) 123.34
- (b) 128.79
- (c) 130.92
- (d) 182.13

14. If $r^2 = 0.3$ & $b_{XY} = -1.5$ then b_{YX} is equal to

- (a) +1
- (b) -0.2
- (c) -1
- (d) -0.45

15. "Sun will disappear from blue sky today forever". With our available information & belief which one of the following value is most appropriate as probability to this event?

- (a) 0.2
- (b) 0.8
- (c) 1
- (d) 0

16. From the following data the five year moving average against year 5:

Years	1	2	3	4	5	6	7	8	9
Sales (₹)	36	43	43	34	44	54	34	24	14

- (a) 40
- (b) 43.6
- (c) 34
- (d) 41.8

17. In a bivariate regression analysis, the difference between actual value of dependent variable and the predicted value of the dependent variable is called:

- (a) Outlier
- (b) Slope
- (c) Residual
- (d) Scattered point

18. Because of heavy rain on Sunday average rainfall of a city for the week increased to 0.6 inch from the average rainfall 0.3 inch measured from Monday to Saturday. The rainfall on Sunday was-

- (a) 2.4 inch;
- (b) 0.3 inch;
- (c) 2.1 inch;
- (d) 1.5 inch

19. In general probability is:

- (a) A numerical value between 0 and 1, exclusive, describing the absolute possibility an event will occur
- (b) A numerical value between 0 and 1, inclusive, describing the absolute possibility an event will occur
- (c) A numerical value between 0 and 1, exclusive, describing the relative possibility an event will occur
- (d) A numerical value between 0 and 1, inclusive, describing the relative possibility an event will occur

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



20. In a bivariate regression analysis for dependent variable if $d = \text{Actual value} - \text{Predicted value}$ then at different values of independent variable:

- (a) Best fit curve occurs when $d_1^2 + d_2^2 + \dots + d_n^2$ is minimum
- (b) Best fit curve occurs when $d_1^2 + d_2^2 + \dots + d_n^2$ is maximum
- (c) Best fit curve occurs when $d_1^2 + d_2^2 + \dots + d_n^2$ is zero
- (d) Best fit curve occurs when $d_1^2 + d_2^2 + \dots + d_n^2$ is one

21. Raw data is:

- (a) Information which can be interpreted to take decision
- (b) Information which can't be put to use directly
- (c) Information which is not amenable to conversion
- (d) Information which are useless

22. There are four person named A, B, C, & D. A is a sales person whereas B, C, D are students. A collected sales figures for his region and B, C, D used these data in order to study sales pattern. Which one of the following is correct?

- (a) B uses secondary data
- (b) A & B both are using primary data
- (c) A, B, C, D all are using secondary data
- (d) B, C, D are using primary data

23. If two unbiased coins are tossed once, the probability of getting both the heads is?

- (a) 0.25
- (b) 0.50
- (c) 0.75
- (d) 1

24. The mean daily salary paid to all employees in a certain company was Rs.600. The mean daily salaries paid to the male and female employees were Rs.620 and Rs.520 respectively. Male to female employees ratio in the company is:

- (a) 3:2;
- (b) 4:5;
- (c) 5:7;
- (d) 4:1;

25. The sum of the deviations of a certain number of observations measured from 4 is 72 and the sum of the deviations of the observations from 7 is -3. Mean of the observations is:

- (a) 6.88
- (b) 25
- (c) 3.63
- (d) Cannot be ascertained with given data;

26. The mean of a certain number of items is 42. If one more item 64 is added to the data, the mean becomes 44. The no of items in the original data is:

- (a) 20
- (b) 10
- (c) 43
- (d) 440

27. The weighted average from the following observation is Rs.46.23.

Price per tonne (₹)	45.60	50.70	7
Tonnes Purchased	135	40	25

Simple average of the observation is?

- (a) ₹46.23
- (b) ₹46.26
- (c) ₹66.63
- (d) ₹46.24

28. The sum of the squares of deviations of a set of observations is the minimum when deviations are taken from the

- (a) Geometric Mean;
- (b) Harmonic Mean;
- (c) Arithmetic Mean;
- (d) Mode;

29. Which one of the following is correct?

- (a) Regression equation predicts maximum probable values of one variable for specified values of other variable
- (b) Regression equation predicts most likely values of one variable for specified values of other variable
- (c) Regression equation predicts maxi-min values of one variable for specified values of other variable
- (d) Regression equation predicts minimum probable values of one variable for specified values of other variable

Study smarter 😊 and track progress 👁 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



30. It is the most suitable average when it is desired to give greater weight to smaller observations and less weight to larger ones. It is

- (a) AM
- (b) HM
- (c) GM
- (d) Median

31. In how many different ways can 4 different cars, one of each of the 4 manufacturers, be parked in a parking lane?

- (a) 20 ways
- (b) 22 ways
- (c) 24 ways
- (d) 26 ways

32. In how many ways 6 customers stand in a queue for depositing cash in bank?

- (a) 680 ways
- (b) 480 ways
- (c) 600 ways
- (d) 720 ways

33. Examine the nature of the roots for the following equation $16x^2 - 24x + 9 = 0$.

- (a) Real and unequal
- (b) Real, Irrational and Equal
- (c) Real, Rational and Equal
- (d) Unreal and Imaginary

34. For what value of c , would the product of roots be zero?

- (a) $a = 1, b = 1, c = 1$
- (b) $a = 1, b = 0, c = 1$
- (c) $a = 1, b = 1, c = 0$
- (d) $a = 1, b = 2, c = 2$

35. Form the equation whose roots are 9, -4:

- (a) $x + 5x - 36 = 0$
- (b) $x^2 - 5x - 36 = 0$
- (c) $x^2 - 5x + 36 = 0$
- (d) $x^2 + 5x + 36 = 0$

36. Choose the correct condition for any equation to be Quadratic equation-

- (a) 5 constants and all constants > 0 .
- (b) 5 constants and all constants < 0 .
- (c) 3 constants and $a > 0$.
- (d) 3 constants and $a \neq 0$.

37. When are nature of roots real rather than imaginary?

- (a) If Discriminant is negative
- (b) If Discriminant is less than zero
- (c) If Discriminant is not a perfect square
- (d) If Discriminant is more than or equal to zero

38. Find the monthly profit function if a firm's yearly fixed cost is ₹ 60,000 and yearly production cost is ₹ 120 per piece. Each unit is sold at ₹ 15.

- (a) $\pi = 5x - 5000$
- (b) $\pi(x) = 15x - 5000$
- (c) $\pi(x) = 20x - 5000$
- (d) $\pi(x) = 25x - 5000$

39. A manufacturer has a monthly fixed cost of ₹ 1,00,000 and a production cost of ₹ 50 per unit produced. The product is sold at ₹ 75. Find the cost function and the number of products be sold by the manufacturer to have break even.

- (a) $25x + 50,000$; 2000
- (b) $50x + 1,00,000$; 4000
- (c) $5x + 1,00,000$; 3000
- (d) $2.5x + 10,000$; 5000

40. A cement industry has a yearly fixed cost of ₹ 96,000 and a monthly production cost of ₹ 13 per unit produced. The product is sold at ₹ 39 per unit. Find the cost function.

- (a) $13x + 8000$
- (b) $13x + 96,000$
- (c) $39x + 96,000$
- (d) $39x + 8000$

41. A class consists of 48 male students and 23 female students. Find the ratio of female students to total strength of the class.

- (a) 23:48
- (b) 48:23
- (c) 48:71
- (d) 23:71

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



42. If 4, 6, p, 27, q are in continued proportion, find the values of p and q.

- (a) $p = 9, q = 9$
- (b) $p = 9, q = 81$
- (c) $p = 81, q = 9$
- (d) $p = 81, q = 81$

43. If a Stadium having spectators divided into groups of Young Generation and Old Generation and the number of young spectators are 1525 and old spectators are 1875. Find the ratio of Total Spectators to Young Spectators.

- (a) 136:75
- (b) 136:85
- (c) 75:61
- (d) 136:61

44. Find two numbers whose mean proportional is 8 and the 1st number is square of the 2nd number.

- (a) 8,8
- (b) 4,2
- (c) 16,4
- (d) 64,8

45. The ratio of the pocket money saved by Rakesh and his sister is 5:6. If the sister saves ₹60 more, how much more the brother should save in order to keep the ratio of their savings unchanged?

- (a) ₹60
- (b) ₹40
- (c) ₹50
- (d) ₹70

46. AMS & Co. borrows ₹1,20,000 for one year at 15% annual interest, compounded monthly. Find their monthly payment.

- (a) ₹ 11,380
- (b) ₹ 10,830
- (c) ₹ 11,430
- (d) ₹ 10,740

47. A certain sum of money invested at a certain rate of compound interest doubles in 8 years. In how many years will it become 16 times?

- (a) 31 years
- (b) 28 years
- (c) 30 years
- (d) 32 years

48. Find the value of a, if $(a - 2)! \times 24 = (a + 1)!$

- (a) 0
- (b) 2
- (c) 4
- (d) 3

49. What would be the factorial notation for: $11 \times 10 \times 9 \times 8 \times 7$

- (a) $11! / 6!$
- (b) $11! / 5!$
- (c) $10! / 6!$
- (d) $10! / 5!$

50. How many ways can 8 people get vaccinated from 8 vaccinators, assuming no vaccinator is idle?

- (a) 40320 ways.
- (b) 5040 ways.
- (c) 5760 ways.
- (d) 35280 ways.

Don't miss a thing!
Join our Telegram channel for
more Mcqs,
Tests, solutions, exclusive tips
and updates. 🚀

<https://t.me/dseducationcommerceclasses>

Study smarter 😊 and track progress 👁️ .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral



Answers

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
(a)	(c)	(c)	(c)	(b)	(c)	(c)	(d)	(d)	(d)
11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
(b)	(a)	(c)	(b)	(d)	(d)	(c)	(a)	(d)	(a)
21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
(b)	(a)	(a)	(d)	(a)	(b)	(b)	(c)	(b)	(b)
31.	32.	33.	34.	35.	36.	37.	38.	39.	40.
(c)	(d)	(c)	(c)	(b)	(d)	(d)	(a)	(b)	(a)
41.	42.	43.	44.	45.	46.	47.	48.	49.	50.
(d)	(b)	(d)	(c)	(c)	(b)	(d)	(d)	(a)	(a)

Study smarter 😊 and track progress 📊 .

For more updates Download our mobile app for online MCQs Tests

https://dedu.on-app.in/app/home?orgCode=dedu&referrer=utm_source=copy-link&utm_medium=tutor-app-referral