

**Question 6**

(a) *Stork Capital, a SEBI Registered Mutual Fund, launched its first New Fund Offer (NFO) on June 1, 2024, with a face value of ₹ 10 per unit. The fund received subscriptions for 180 lakh units.*

*An underwriting agreement was in place with Griffin Securities Ltd., which agreed to underwrite the entire issue of 200 lakh units for a commission of 2.0%.*

*The fund's financial activities are summarized below:*

- *Initial investments in various capital market instruments amounted to ₹ 1,780 lakhs.*
- *Marketing expenses for the NFO were ₹ 25 lakhs.*
- *During the financial year ended March 31, 2025, the fund sold securities with a cost of ₹ 250 lakhs for ₹ 280 lakhs.*
- *The fund subsequently purchased new securities for ₹ 265 lakhs.*
- *Management expenses are regulated by SEBI and cannot exceed 0.50% of the average funds invested during the year. The actual management expenses incurred were ₹ 5.50 lakhs, of which ₹ 50,000 was outstanding at year-end.*
- *Dividends earned on investments amounted to ₹ 5.0 lakhs, of which ₹ 40,000 was yet to be collected.*
- *The fund's policy is to distribute 80% of all realized earnings (capital gains and dividends).*
- *The market value of the investment portfolio as of March 31, 2025, was ₹ 2,150.50 lakhs.*

**Required:**

*Determine the closing per unit Net Asset Value (NAV) of the fund as on March 31, 2025. Show all necessary workings. (6 Marks)*

*(Note: Round off all intermediate and final calculations to two decimal places.)*

- (b) *Indian manufacturer TEJ Ltd. has just completed new project. Based on capital budgeting evaluation of the project Present Value is ₹ 500 Lakhs without the abandonment option.*

*However, due to geopolitical issues and international trade war the project may be at risk and company may have to discontinue the project. It is estimated that if favourable conditions remain, Present Value of the project shall increase by 20%. Whereas, if international trade war continues due to geopolitical issues the Present Value of proposal shall reduce by 30%. In case company is not interested to continue the project it can be disposed off for ₹450 Lakhs to avoid future huge losses.*

*The risk-free rate of interest is 8%.*

**Required:**

*Calculate the value of abandonment option using risk neutral method.*

**(4 Marks)**

- (c) *Enumerate the role of government in thriving a sustainable environment for the start-ups in India.*

**(4 Marks)**

OR

- (c) *A Special Purpose Vehicle (SPV) has acquired a large pool of assets and intends to issue securities to investors. The structure of the deal wants to design instruments that can cater to different investor needs. They are considering three alternative structures:*

- (1) A simple structure where all cash flows (principal and interest) from the assets are passed on directly to investors on a proportional basis.*
- (2) A more flexible structure where the SPV can issue its own debt securities with varying maturities, allowing it to manage reinvestment of surplus funds from prepayments.*
- (3) A highly specialized structure where the cash flows from the underlying assets are split into their constituent principal and interest components, which are then sold as separate securities.*

*As a financial advisor, explain the technical name for each of these three securitization instrument structures and describe their key characteristics.*

**(4 Marks)**

**Answer****(a) Working Notes:****(1) Computation of Opening Cash Balance**

Particulars	Amount (₹ in Lakhs)
Proceeds from NFO (200 Lakh units @ ₹ 10)	2000.00
Less: Initial Purchase of Securities	(1780.00)
Less: Underwriting Commission (2% of 2000)	(40.00)
Less: Meeting Expenses	(25.00)
Opening Cash Balance	155.00

**(2) Management Expenses**

	Amount (₹ in Lakhs)
A. Actual Expenses Incurred	5.50
B. SEBI Limit (0.50% of Average Funds)	
- Opening Investment	1780.00
- Closing Investment (1780 – 250 + 265)	1795.00
- Average Fund Invested	1787.50
- SEBI Limit (0.50% of ₹ 1787.50)	8.94
Chargeable Expenses (Lower of A or B)	5.50
Less: Amount unpaid (Outstanding)	(0.50)
Management Expenses Paid	5.00

**(3) Computation of Closing Balance**

Particulars	Amount (₹ in Lakhs)
Opening Cash Balance	155.00
Add: Cash Inflows	
Proceeds from Sale of Securities	280.00
Dividend Received (₹ 5.00 Lakh Earned – ₹ 0.40 Lakh uncollected)	4.60

Less: Cash Outflows	
Cost of New Securities Purchased	(265.00)
Management Expenses	(5.00)
Capital Gains Distributed [80% of (₹ 280 sale – ₹ 250 cost)]	(24.00)
Dividend Distributed (80% of ₹ 5.00 Lakh total earned)	(4.00)
Closing Cash Balance	141.60

Net Asset Value (NAV) as on March 31, 2025

Particulars	Amount (₹ in Lakhs)
Assets:	
Closing Cash Balance	141.60
Closing Market Value of Investment	2150.50
Accrued Dividends (Receivable)	0.40
Total Assets	2292.50
Less: Liabilities	
Outstanding Management Expenses	(0.50)
Closing Net Assets (A)	2292.00
Total Units Outstanding (in Lakhs) (B)	200.00
NAV per Unit (A/B)	₹ 11.46

**Alternative Solution:** In case dividend has been paid excluding the dividend receivable from the Dividend Income then solution will be as follows:

**Working Notes:**

**(1) Computation of Opening Cash Balance**

Particulars	Amount (₹ in Lakhs)
Proceeds from NFO (200 Lakh units @ Rs. 10)	2000.00
Less: Initial Purchase of Securities	(1780.00)

Less: Underwriting Commission (2% of 2000)	(40.00)
Less: Meeting Expenses	(25.00)
Opening Cash Balance	155.00

**(2) Management Expenses**

	<b>Amount (₹ in Lakhs)</b>
A. Actual Expenses Incurred	5.50
B. SEBI Limit (0.50% of Average Funds)	
- Opening Investment	1780.00
- Closing Investment (1780 – 250 + 265)	1795.00
- Average Fund Invested	1787.50
- SEBI Limit (0.50% of ₹ 1787.50)	8.94
Chargeable Expenses (Lower of A or B)	5.50
Less: Amount unpaid (Outstanding)	(0.50)
Management Expenses Paid	5.00

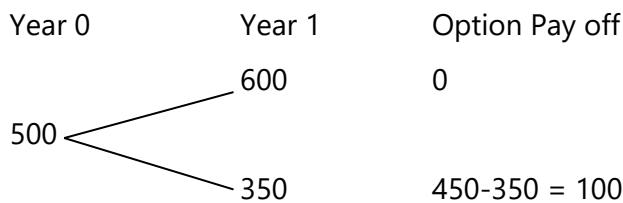
**(3) Computation of Closing Balance**

<b>Particulars</b>	<b>Amount (₹ in Lakhs)</b>
Opening Cash Balance	155.00
<i>Add: Cash Inflows</i>	
Proceeds from Sale of Securities	280.00
Dividend Received (₹ 5.00 Lakh Earned – ₹ 0.40 Lakh uncollected)	4.60
<i>Less: Cash Outflows</i>	
Cost of New Securities Purchased	(265.00)
Management Expenses	(5.00)
Capital Gains Distributed [80% of (₹ 280 sale – ₹ 250 cost)]	(24.00)
Dividend Distributed (80% of ₹ 4.60 Lakh total realised)	(3.68)
Closing Cash Balance	141.92

Net Asset Value (NAV) as on March 31, 2025

Particulars	Amount (₹ in Lakhs)
Assets:	
Closing Cash Balance	141.92
Closing Market Value of Investment	2150.50
Accrued Dividends (Receivable)	0.40
Total Assets	2292.82
Less: Liabilities	
Outstanding Management Expenses	(0.50)
Closing Net Assets (A)	2292.32
Total Units Outstanding (in Lakhs) (B)	200.00
NAV per Unit (A/B)	₹ 11.46

**(b) Decision Tree showing pay off**



First of all we shall calculate probability of high demand (p) using risk neutral method as follows:

$$8\% = p \times 20\% + (1-p) \times (-30\%)$$

$$0.08 = 0.20 p - 0.30 + 0.30p$$

$$p = \frac{0.38}{0.50} = 0.76$$

The value of abandonment option will be as follows:

Expected Payoff at Year 1

$$= p \times 0 + [(1-p) \times 100]$$

$$= 0.76 \times 0 + [0.24 \times 100] = ₹ 24 \text{ Lakhs}$$

Since expected pay off at year 1 is ₹ 24 Lakhs. Present value of expected pay off will be:

$$\frac{24.00}{1.08} = ₹ 22.22 \text{ Lakhs}$$

This is the value of abandonment option (Put Option).

- (c) (i) Start-up India & Stand-Up India scheme was initiated by the Government of India in 2016. It helped in creating widespread awareness in general public about start-ups and gave boost to the entrepreneurial mind-set.
- (ii) Government set up a fund called SIDBI-run Electronic Development Fund (EDF) and became a limited Partner (LP) in a fund.
- (iii) Easy Finance options such as Mudra Scheme, tax benefits such as 100% tax holiday under section 80-IAC and exemption from angel taxation also provided much needed push to the young start-ups.
- (iv) The Department of Promotion of Industry and Internal Trade (DPIIT) created the Start-up India Seed Fund Scheme (SISFS) to provide financial assistance to start-ups for proof of concept, prototype development, product trials, market entry, and commercialization.
- (v) A start-up, recognized by DPIIT, incorporated not more than two years ago at the time of application and having a business idea to develop a product or a service with a market fit, viable commercialization and scope of scaling, can apply for SISFS and get a seed fund of as much as INR 50 Lakhs.

(c) (OR)

- (1) *Pass Through Certificates (PTCs)*: Key characteristics of these instruments are as follows:
- These securities represent direct claim of the investors on all the assets that has been securitized through SPV.
  - Since all cash flows are transferred, the investors carry proportional beneficial interest in the asset held in the trust by SPV.
  - On completion of securitization by the final payment of assets, all the securities are terminated simultaneously.
  - Skewness of cash flows occurs in early stage if principals are repaid before the scheduled time.

**(2) Pay Through Security (PTS):** Key characteristics of these instruments are as follows:

- It can restructure different tranches from varying maturities of receivables.
- This structure permits desynchronization of servicing of securities issued from cash flow generating from the asset. Further, this structure also permits the SPV to reinvest surplus funds for short term as per their requirement.
- In case of early retirement of receivables the surplus cash can be used for short term yield.
- This structure also provides the freedom to issue several debt tranches with varying maturities.

**(3) Stripped Securities:** Stripped Securities are created by dividing the cash flows associated with underlying securities into two or more new securities. Those two securities are as follows:

- (i) Interest Only (IO) Securities
- (ii) Principle Only (PO) Securities

Key characteristics of these instruments are as follows:

- As each investor receives a combination of principal and interest, it can be stripped into two portion of Interest and Principle.
- Being highly volatile in nature these securities are less preferred by investors.
- In case yield to maturity in market rises, PO price tends to fall as borrower prefers to postpone the payment on cheaper loans.
- Whereas if interest rate in market falls, the borrower tends to repay the loans as they prefer to borrow fresh at lower rate of interest.
- In contrast, value of IO's securities increases when interest rate goes up in the market as more interest is calculated on borrowings.
- When interest rate due to prepayments of principals, IO's tends to fall.