2024

COMMERCE

Paper : CC-303

(Financial Markets and Financial Engineering)

Full Marks : 40

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Module - I

Answer ***any two*** questions.

1. (a) Explain briefly the ASBA method in the context of Public Issues.

(b) Issue size of X Company Ltd. 520 crore equity shares including reservations portion of 20 crore equity shares. You are required to make the details of allotment of equity shares among RIIs, NIIs and QIBs under the 'Profitability Route' as well as 'QIBs Route' in accordance with the provision of SEBI(ICDR) Regulations, 2018.

(c) X Company Ltd., an unlisted company, offers an IPO of equity shares under 'Book Building Method' where face value of the equity shares is ₹ 10 and floor price is ₹ 300 decided by the BRLM. You are suggested to calculate the price band with reference to SEBI (ICDR) Regulation, 2018 and explain the relevant factors based on which floor price is decided. 4+3+3

2. The details of Price-based auction of 8.24 per cent 364 days T-Bill 2025 are as under :

Maturity Date : 5 September 2025; Coupon : 8.24 per cent; Auction date : 6 September 2024; Auction settlement date : 9 September 2024 [*September* 7 *and* 8 *being holidays, settlement is done on* 9 *September* 2024 *under* $T+1$ *cycle*]; and Notified amount : ₹ 5,000 crore.

Bidder	Price of Bid (₹)	Amount of Bid (Rupees in Crores)
D	98.90	750
E	98.89	500
F	98.89	500
A	98.93	1,500
B	98.92	1,000
C	98.91	1,250
G	98.88	750
H	98.87	500

You are suggested to find out :

(i) the cut-off price under Uniform Price-Based or Dutch auction method;

(ii) the cut-off price under Multiple Price-Based or French auction method;

(iii) the allotment of T-Bill among bidders under both the methods;

(iv) What cash outflow per ₹ 100 Face Value will each successful bidder pay under Uniform Price-Based and Multiple Price auction method? Also comment on cash outflow comparing both the methods. 2+2+2+4

3. (a) Discuss the IPO Grading Process along with IPO Grading Scale in brief.

(b) X Company Ltd. intends to make a public issue of 10,00,000 equity shares of ₹ 120 each (cut-off price), payable fully on allotment (assuming cut-off price has been decided through book building process). The total number of applications of 20,00,000 shares are received from different categories of investors. In this situation, the company may allot 11,50,000 shares (10,00,000 shares plus maximum 15% of 10,00,000 equity shares) by adopting Green Shoe Option (GSO) as over-allotment option. Here, 1,50,000 shares are to be borrowed by Stabilizing Agent(SA) on behalf of X Company Ltd. from the promoters or pre-issue shareholders of the said company. If the post-listing share price falls, the SA repurchases shares from the market, thus stabilizing the price. Alternatively, in case the SA does not buy shares from the market to the extent of shares over-allotted by the company due to increase in post-listing price or any other reason, the issuer company further allots shares to the extent of the shortfall. These shares shall be returned to the promoters (i.e. Lender) by the SA in lieu of the shares borrowed from them. An expense of Stabilizing Agent incurred by SA in exercising GSO is ₹ 30,000.

In this backdrop, you are suggested to make an analysis of the case by considering the post-listing price (i.e market price) of such shares under two different situations : (i) post-listing price of situation-I : ₹ 100 when 100000 shares are bought from the market and (ii) post-listing price of situation-II : ₹ 140 when no shares are bought from the market. 4+6

4. (a) Explain the concept of Demat Accounts Freezing.

(b) Highlight the role of NSDL in stock market trading under the Depository System.

(c) The following information has been collected regarding two shares, Share-A and Share-B, trading at a stock exchange on 11th March, 2025 :

Share - A

Date	Time	Price (₹)	No. of shares traded
11 March, 2025	14:45:10	385.60	550
11 March, 2025	14:55:35	382.78	1,575
11 March, 2025	15:00:20	380.99	1,514
11 March, 2025	15:01:30	381.79	1,625
11 March, 2025	15:05:40	380.38	1,025
11 March, 2025	15:10:20	381.51	1,390
11 March, 2025	15:20:25	381.42	800
11 March, 2025	15:22:20	384.07	600
11 March, 2025	15:25:55	383.74	1.200

Share - B

Date	Time	Price (₹)	No. of shares traded
11 March, 2025	14:07:30	50.60	250
11 March, 2025	14:11:40	52.10	585
11 March, 2025	14:16:20	49.85	700
11 March, 2025	14:26:25	51.25	425
11 March, 2025	14:45:10	50.75	450
11 March, 2025	14:55:35	49.95	500

You are required to determine the closing prices and last traded prices for both the shares for 11th March, 2025. 3+3+4

Module - II

Answer ***any two*** questions.

5. (a) Mention any two differences between 'Forward Contract' and 'Future Contract'.

(b) A speculator entered into a long position in a stock future at ₹ 2,485. The minimum trading lot on the stock future is 100. The initial margin and maintenance margin were 10% and 8% respectively. The index closed at the following levels on the next eight days.

Day	1	2	3	4	5	6	7	8
Closing value in ₹	2480	2490	2500	2410	2460	2488	2440	2450

Another trader went short at the same level. Calculate the mark to market cash flow and daily closing balances in the account of long and short position holders of the contract. Also calculate the net profit/ loss of the contracts. 2+8

6. (a) On 24th March a refinery needs 1075 barrels of crude oil in the month of September. The current price of crude oil is ₹ 3000 per barrel. September future contract at MCX are trading at ₹ 3200. The firm expects the price to go up further and even beyond ₹ 3200 in September. It has the option of buying the stock now. Alternatively, it can hedge through a future contract. The size of the future contract is 100 barrels.

(i) If the cost of capital, insurance and storage cost is 15% p.a., examine whether it is beneficial for the firm to buy now.

(ii) If the firm decides to hedge through futures, find out the effective price it would pay for crude oil if at the time of lifting the hedge the spot and future prices are (I) ₹ 2900 and ₹ 2910 respectively and (II) ₹ 3300 and ₹ 3315 respectively, ($e^{0.075} = 1.07788$)

(b) Write short notes on Long Hedge and Short Hedge. 7+3

7. (a) An investor wants to create a Bear Spread. He buys a call option on a share X Ltd. of ₹ 110 for a premium of ₹ 5. Also, he sells an identical call option at the exercise price of ₹ 100 for a premium of ₹ 9. Find out the net profit/loss that the investor will make in each of the following conditions :

(i) On the settlement day, the price of share of X Ltd. is ₹ 90.

(ii) On the settlement day, the price of share of X Ltd. is ₹ 108.

(iii) On the settlement day, the price of share of X Ltd. is ₹ 119.

(iv) On the settlement day, the price of share of X Ltd. is ₹ 120.

(b) The following information is available for a call option of XYZ Ltd. :

Time to expiration	3 Months
Risk free interest rate p.a. with continuously compounded	8%
Exercise price	₹ 60
Stock price	₹ 70
Call price	₹ 14

Find out the value of a put option using Call-Put Parity Theory.

(c) Narrate the different types of Combination Option Strategies. 4+3+3

8. (a) Identify the benefits of Swap arrangement.

(b) X Ltd. and Y Ltd. both wish to raise USD 40 million loan for 10 years. X Ltd. has the choice of issuing fixed rate debt at 7.50% of floating rate debt at LIBOR + 0.25%. On the other, Y Ltd. which has a lower credit rating, can issue fixed rate debt of the same maturity at 8.45% or floating rate at LIBOR + 0.37%. X Ltd. prefers to issue floating rate debt and Y Ltd. prefers fixed rate debt with a lower coupon. SBI is in the process of arranging an interest rate swap between these two companies.

X Ltd. negotiates to pay the bank a floating rate of LIBOR while the bank agrees to pay X Ltd. a fixed rate of 7.60%.

Y Ltd. agrees to pay the bank a fixed rate of 7.75% while the bank pays Y Ltd. a floating rate of LIBOR flat.

You are required to:

(i) Present Swap arrangement with the help of a schematic diagram.

(ii) Calculate the interest savings by each company.

(iii) How much would SBI receive? 4+(3+2+1)