

**2021****TWO YEAR M. COM. SEMESTER 3 EXAMINATION***(New Syllabus under CBCS)***Instructions for Examinees from Affiliated Colleges***The students are required to strictly adhere to the following instructions:*

1. Use A4 size paper for giving the examination.
2. Write the following on the top of the first sheet:
  - i) Roll Number: **(as per the Admit Card)**
  - ii) Registration Number: **(as per the Admit Card)**
  - iii) Paper Code and Name of the Paper
  - iv) Date of the Examination
  - v) Duration of Examination **(12 Noon to 2 P.M.)**
3. Put Page number on the top right of each page (including the first page).
4. Only one side of the paper should be used for examination.
5. Put your **full signature with date**, at the bottom right of every page used.
6. Before sending your answer scripts, arrange the pages sequentially. Scan them in the order of page number and convert them into a single **PDF File**.
7. Pdf. file name should be your **Full Roll Number <underscore> paper code**. While submitting the answer scripts, the subject of the mail will be exactly the same with the file name. [e.g., if the roll no of a student is **017/MCM/123456** for third paper **(Paper Code CC303)** the file name will be: **017-MCM-123456\_CC303**.
8. Submit your answer scripts in **PDF Format** within the stipulated time through designated email id given to you.
9. Preserve your answer scripts in soft as well as hard-copy form of all the papers of your examination.

**2021****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***Time: 2 Hours****Duration of Examination: 12noon to 2pm****Module - I**Answer *any two* questions.

1. (a) Elaborate the book-building process and activities of different intermediaries in public issue management of the primary capital market.  
(b) Elaborate upon the IPO Grading Process in the context of public issues. [6+4]
  2. (a) Briefly discuss the main features of 'Certificates of Deposits'.  
(b) (i) Period of maturity of commercial bills is 3 months, discount rate is 15 %. Calculate actual yield of commercial bills, (ii) RBI sold a 364-day T-bill of face value of Rs. 100 at a yield of 10%. What was the issue price and rate of discount? [4 +3+3]
  3. (a) Mr. X is holding 52,000 equity shares of Larsen & Toubro Limited in electronic form. He intends to sell 20,000 shares to Mr. Y and asks you for your support in this regard. You are the financial advisor of Mr. X. Against this backdrop, you are required to discuss the following:  
(i) What do you mean by 'Rolling Settlement Cycle'? Discuss the procedure of settlement of market transactions.  
(b) Highlight the scrip selection criteria in NSE Nifty 50. [2 + 5 + 3]
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4. (a) Discuss briefly 'fresh issue of securities' and 'offer for sale' in the context of public issues.

(b) X Company Ltd. intends to make a public issue of 10,00,000 equity shares of Rs.120 each (cut off price), payable fully on allotment (assuming cut off price has been decided through book building process). The total numbers 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, rather restricting the allotment to 10,00,000 shares. 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 Rs. 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 three different situations: (a) post listing price of situation-I Rs. 100 when 150000 shares are bought from the market; (b) post listing price of situation-II Rs. 140 when no shares are bought from the market; and (c) post listing price of situation-III Rs. 120 when 100000 shares are bought from the market. [3 +7]

**Module-II**Answer *any two* questions.

5. (a) Mention the factors contributing to the growth of financial engineering.
- (b) What are the possible modes of settlement of futures contracts?
- (c) Consider a 6-month gold futures contract of 100 grams. If the spot price of gold ₹550 per gram and that it costs ₹3 per gram for the 6 monthly period to store gold and the cost is incurred at the end of the period.
- (i) If the continuously compounded risk-free rate 10% per annum, compute future price.
- (ii) If futures are available at ₹590 per gram what action would be suggested? If futures are available at ₹560 what action would be suggested?
- [Given:  $e^{-0.05} = 0.951229$ ;  $e^{0.05} = 1.051271$ ] [3 + 3 + 4]

6. (a) Write short notes on basis, contango and backwardation. 3
- (b) An investor buys ten contracts of gold at the MCX of India. Each contract is for 100 grams. The price quotation is Rs.15,550 per 10 gram. Initial margin is set at 4%, while maintenance margin is 90% of initial margin. Find out the gain or loss on a daily basis for short and long positions in ten contracts of gold if the clearing prices for next 10 days are as follows:

Day	1	2	3	4	5	6	7	8	9	10
Price (Rs.)	15,520	15,305	15,410	15,220	15,440	15,340	15,600	15,630	15,670	15,870

Indicate the position of the margin account and margin calls, if any, on a daily basis when the contracts are market to market. Assuming that investors square off their positions at a price of Rs.15,780 on the 10th day. [3 + 7]

7. (a) An investor creates a bull spread by way of buying a call option on stock with an exercise price of Rs.200 for Rs.10 and selling a call option on it involving an exercise price of Rs.220 for Rs.4. Find out how much net profit/loss he makes in each of the following conditions:

- (i) On settlement day, the price of the underlying stock is Rs.180.
- (ii) On settlement day, the price of the underlying stock is Rs.200.
- (ii) On settlement day, the price of the underlying stock is Rs.215.
- (iii) On settlement day, the price of the underlying stock is Rs. 225

You are requested to find out the breakeven price of the stock.

(b) What are the effects on the price of European Call Option and American Put Option if current stock price, strike price, time to expiration, volatility, amount of future dividends and risk free-rate changes? Explain. [Assume that if one variable changes other variables remain fixed.] [5 + 5]

8. (a) Explain the concept of Swaps. Briefly discuss the different types of Swaps.

(b) P Ltd. and Q Ltd. have the same requirement for funds of Rs.50 Crore each. They have been offered the following debt rates in the fixed and floating rate markets for debt:

Company	Fixed Rate	Floating Rate
P Ltd.	10.00%	MIBOR+50bps
Q Ltd.	12.00%	MIBOR+150 bps

P Ltd. wants funds at a floating rate, while Q Ltd. is happy to raise funds on a fixed rate basis.

A bank is willing to act as intermediary with 20 bps as its remuneration.

You are requested to depict the Swap sharing the gains equally and find out the cost of funds for P Ltd. and Q Ltd. What would be the saving cost for each firm be? [5 + 5]