MOCK TEST PAPER 2

FINAL (NEW) COURSE: GROUP – I

PAPER – 2: STRATEGIC FINANCIAL MANAGEMENT

*Question No. **1** is compulsory. Attempt any **four** questions from the remaining **five** questions.*

Working notes should form part of the answer.

Time Allowed – 3 Hours **Maximum Marks – 100**

1. (a) In March 2020, XYZ Bank sold some 7% Interest Rate Futures underlying Notional 7.50% Coupon Bonds. The exchange provides following details of eligible securities that can be delivered:

Security	Quoted Price of Bonds	Conversion Factor
7.96 GOI 2023	1037.40	1.0370
6.55 GOI 2025	926.40	0.9060
6.80 GOI 2029	877.50	0.9195
6.85 GOI 2026	972.30	0.9643
8.44 GOI 2027	1146.30	1.1734
8.85 GOI 2028	1201.70	1.2428

Recommend the Security that should be delivered by the XYZ Bank if Future Settlement Price is 1000. **(8 Marks)**

(b) Following is the data regarding six securities:

	A	B	C	D	E	F
Return (%)	8	8	12	4	9	8
Risk (Standard deviation)	4	5	12	4	5	6

(i) Assuming three will have to be selected, advise which ones will be picked.

(ii) Assuming perfect correlation, evaluate whether it will be preferable to invest 75% in A and 25% in C or to invest 100% in E. **(8 Marks)**

(c) The idea of Quant Fund is stock-picking free from human intervention. Discuss. **(4 Marks)**

2. (a) On 1 October 2019 Mr. X an exporter enters into a forward contract with a BNP Bank to sell US$ 1,00,000 on 31 December 2019 at Rs. 70.40/$ and bank simultaneously entered into a cover deal at Rs. 70.60/$. However, due to the request of the importer, Mr. X received amount on 28 November 2019. Mr. X requested the bank the take delivery of the remittance on 30 November 2019 i.e. before due date. The inter-banking rates on 28 November 2019 were as follows:

Spot	Rs. 70.22/70.27
One Month Swap Points	15/10

If bank agrees to take early delivery, then determine the net inflow to Mr. X assuming that the prevailing prime lending rate is 10% and deposit rate is 5%.

Note: (i) While exchange rates to be considered upto two decimal points the amount to be rounded off to Rupees i.e. no paisa shall be involved in computation of any amount.

(ii) Assume 365 days a year. **(8 Marks)**

(b) ABC Ltd. wants to issue 9% Bonds redeemable in 5 years at its face value of Rs. 1,000 each. The annual spot yield curve for similar risk class of Bond is as follows:

Year	Interest Rate
1	12%
2	11.62%
3	11.33%
4	11.06%
5	10.80%

(i) Evaluate the expected market price of the Bond if it has a Beta value of 1.10 due to its popularity because of lesser risk.

(ii) Interpret the nature of the above yield curve and reasons for the same.

Note: Use PV Factors upto 4 decimal points and value in Rs. upto 2 decimal points. **(8 Marks)**

(c) Explain key decisions falling within the scope of Financial Strategy. **(4 Marks)**

3. (a) C Ltd. and P Ltd. both companies operating in the same industry decided to merge and form a new entity S Ltd. The relevant financial details of the two companies prior to merger announcement are as follows:

	C Ltd.	P Ltd.
Annual Earnings after Tax (Rs. lakh)	10000	5800
No. Shares Outstanding (lakh)	4000	1000
PE Ratio (No. of Times)	8	10

The merger will be affected by means of stock swap (exchange) of 3 shares of C Ltd. for 1 share of P Ltd.

After the merger it is expected that due to synergy effects, Annual Earnings (Post Tax) are expected to be 8% higher than sum of the earnings of the two companies individually. Further, it is expected that P/E Ratio of S Ltd. shall be average of P/E Ratios of two companies before the merger.

Evaluate the extent to which shareholders of P Ltd. will be benefitted per share from the proposed merger. **(8 Marks)**

(b) Cinderella Mutual Fund has the following assets in Scheme Rudolf at the close of business on 31[st]March, 2019.

Company	**No. of Shares**	**Market Price Per Share**
Nairobi Ltd.	25000	Rs. 20
Dakar Ltd.	35000	Rs. 300
Senegal Ltd.	29000	Rs. 380
Cairo Ltd.	40000	Rs. 500

The total number of units of Scheme Rudol fare 10 lacs. The Scheme Rudolf has accrued expenses of Rs. 2,50,000 and other liabilities of Rs. 2,00,000. Calculate the NAV per unit of the Scheme Rudolf. **(8 Marks)**

(c) Explain the strategy of Portfolio rebalancing under which the value of a portfolio shall not below a specified value in normal market conditions. **(4 Marks)**

4. (a) Mr. Dayal is interested in purchasing equity shares of ABC Ltd. which are currently selling at Rs. 600 each. He expects that price of share may go upto Rs. 780 or may go down to Rs. 480 in three months. The chances of occurring such variations are 60% and 40% respectively. A call option on the shares of ABC Ltd. can be exercised at the end of three months with a strike price of Rs. 630.

(i) Advise what combination of share and option should Mr. Dayal select if he wants a perfect hedge?

(ii) Evaluate the value of option today (the risk free rate is 10% p.a.)?

(iii) Interpret the expected rate of return on the option? **(8 Marks)**

(b) The following information is given for 3 companies that are identical except for their capital structure:

	Orange	Grape	Apple
Total invested capital	1,00,000	1,00,000	1,00,000
Debt/assets ratio	0.8	0.5	0.2
Shares outstanding	6,100	8,300	10,000
Pre tax cost of debt	16%	13%	15%
Cost of equity	26%	22%	20%
Operating Income (EBIT)	26,600	25,500	26,000
Net Income	8,970	12,350	14,950

The tax rate is uniform 35% in all cases.

(i) Compute the Weighted average cost of capital for each company.

(ii) Compute the Economic Valued Added (EVA) for each company.

(iii) Based on the EVA, which company would be considered for best investment? Give reasons.

(iv) If the industry PE ratio is 11x, estimate the price for the share of each company. Also give your observation on using same PE Ratio to estimate the price for the share of all companies.

(v) Calculate the estimated market capitalisation for each of the Companies. **(8 Marks)**

(c) Distinguish between Pass Through Certificates (PTCs) and Pay Through Securities (PTSs).

(4 Marks)

5. (a) The closing value of Sensex for the month of October, 2007 is given below:

Date Closing	Sensex Value
1.10.07	2800
3.10.07	2780
4.10.07	2795
5.10.07	2830
8.10.07	2760
9.10.07	2790
10.10.07	2880
11.10.07	2960
12.10.07	2990
15.10.07	3200

16.10.07	3300
17.10.07	3450
19.10.07	3360
22.10.07	3290
23.10.07	3360
24.10.07	3340
25.10.07	3290
29.10.07	3240
30.10.07	3140
31.10.07	3260

With the help of above data evaluate the weak form of efficient market hypothesis by applying the run test at 5% and 10% level of significance.

Following value can be used:

Value of t at 5% is 2.101 at 18 degrees of freedom

Value of t at 10% is 1.734 at 18 degrees of freedom **(12 Marks)**

(b) ABC Ltd. is considering a project X, which is normally distributed and has mean return of Rs. 2 crore with Standard Deviation of Rs. 1.60 crore.

In case ABC Ltd. loses on any project more than Rs. 1.00 crore there will be financial difficulties. Determine the probability the company will be in financial difficulty.

Given: Standard Normal Distribution Table (Z-Score) providing area between Mean and Z score

Z Score	Area
1.85	0.4678
1.86	0.4686
1.87	0.4693
1.88	0.4699
1.89	0.4706

(4 Marks)

(c) Modified Duration is a proxy not an accurate measure of change in price of a Bond due to change interest rate. Discuss.

OR

Explain the term Business Model with help of an example. **(4 Marks)**

6. (a) On 1st February 2020, XYZ Ltd. a laptop manufacturer imported a particular type of Memory Chips from SKH Semiconductor of South Korea. The payment is due in one month from the date of Invoice, amounting to 1190 Million South Korean Won (SKW). Following Spot Exchange Rates (1st February) are quoted in two different markets:

USD/ INR	75.00/ 75.50	in Mumbai
USD/ SKW	1190.00/ 1190.75	in New York

Since hedging of Foreign Exchange Risk was part of company's strategic policy and no contract for hedging in SKW was available at any in-shore market, it approached an off-shore Non-Deliverable Forward (NDF) Market for hedging the same risk.

In NDF Market a dealer quoted one-month USD/ SKW at 1190.00/1190.50 for notional amount of USD 100,000 to be settled at reference rate declared by Bank of Korea.

After 1 month (1st March 2020) the dealer agreed for SKW 1185/ USD as rate for settlement and on the same day the Spot Rates in the above markets were as follows:

USD/ INR	75.50/ 75.75	in Mumbai
USD/ SKW	1188.00/ 1188.50	in New York

Analyze the position of company under each of the following cases, comparing with Spot Position of 1st February:

(i) Do Nothing.

(ii) Opting for NDF Contract.

Note: Both Rs./ SKW Rate and final payment (to be computed in Rs. Lakh) to be rounded off upto 4 decimal points. **(10 Marks)**

(b) Odessa Limited has proposed to expand its operations for which it requires funds of $ 15 million, net of issue expenses which amount to 2% of the issue size. It proposed to raise the funds though a GDR issue. It considers the following factors in pricing the issue:

(i) The expected domestic market price of the share is Rs. 300.

(ii) 3 shares (having face value of Rs. 10 each) underly each GDR.

(iii) Underlying shares are priced at 10% discount to the market price.

(iv) Expected exchange rate is Rs. 60/$.

You are required to compute the number of GDR's to be issued and cost of GDR to Odessa Limited, if 20% dividend is expected to be paid with a growth rate of 20%. **(4 Marks)**

(c) Explain the methods in which a Startup firm can bootstrap. **(6 Marks)**