

**MOCK TEST PAPER 1**  
**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) An Indian company needs \$ funds for six months and it obtains the following quotes (Rs./\$)
- Spot: 35.90/36.10
- 3 - Months forward rate: 36.00/36.25
- 6 - Months forward rate: 36.10/36.40
- \$ or Rs. Interest rates:
- 3 - Months interest rate : Rs. : 12%, \$ : 6%
- 6 - Months interest rate : Rs. : 11.50%, \$ : 5.5%
- (i) Advise whether the company should borrow in INR or USD.
- (ii) Evaluate the rate of interest after 3-months to make the company indifferent between 3-months borrowing and 6-months borrowing in the case of:
- (i) Rupee borrowing
- (ii) Dollar borrowing

**Note:** For the purpose of calculation, please take the units of dollar and rupee as 100 each.

**(8 Marks)**

- (b) A mutual fund raised Rs. 150 lakhs on April 1, 2018 by issue of 15 lakh units at Rs. 10 per unit. The fund invested in several capital market instruments to build a portfolio of Rs. 140 lakhs, Initial expenses amounted to Rs. 8 lakhs. During the month of April, the fund sold certain instruments costing Rs. 44.75 lakhs for Rs. 47 lakhs and used the proceeds to purchase certain other securities for Rs. 41.6 lakhs. The fund management expenses for the month amounted to Rs. 6 lakhs of which Rs. 50,000 was in arrears. The fund earned dividends amounting to Rs. 1.5 lakhs and it distributed 80% of the realized earnings. The market value of the portfolio on 30<sup>th</sup> April, 2018 was Rs. 147.85 lakhs.

An investor subscribed to 1000 units on April 1 and disposed it off at closing NAV on 30<sup>th</sup> April. Determine his annual rate of earnings.

**(8 Marks)**

- (c) Explain the specific steps that make an organisation sustainable. **(4 Marks)**

2. (a) C Ltd. & D Ltd. are contemplating a merger deal in which C Ltd. will acquire D Ltd. The relevant information about the firms are given as follows:

	C Ltd.	D Ltd.
Total Earnings (E) (in millions)	Rs. 96	Rs. 30
Number of outstanding shares (S) (in millions)	20	14
Earnings per share (EPS) (Rs.)	4.8	2.143
Price earnings ratio (P/E)	8	7
Market Price per share (P)(Rs.)	38.4	15

- (i) Advise the maximum exchange ratio that will be acceptable to the shareholders of C Ltd., if the P/E ratio of the combined firm is 7?
- (ii) Advise the minimum exchange ratio that will be acceptable to the shareholders of D Ltd., if the P/E ratio of the combined firm is 9? **(12 Marks)**
- (b) A future contract is available on R Ltd. that pays an annual dividend of Rs. 4 and whose stock is currently priced at Rs. 125. Each future contract calls for delivery of 1,000 shares to stock in one year, daily marking to market. The corporate treasury bill rate is 8%.
- Required:
- (i) Using the above information, calculate theoretical price of one future contract.
- (ii) Determine the price of one futures contract if the company stock price decreases by 6%.
- (iii) Determine the amount of gain or loss of an investor as a result of the company stock price decrease who has a long position in one futures contract of R Ltd.
- (Ignore margin and taxation, if any) **(4 Marks)**
- (c) Reconcile differences between Carve-out and Spin Off. **(4 Marks)**
3. (a) The following data are available for three bonds A, B and C. These bonds are used by a bond portfolio manager to fund an outflow scheduled in 6 years. Current yield is 9%. All bonds have face value of Rs.100 each and will be redeemed at par. Interest is payable annually.

Bond	Maturity (Years)	Coupon rate
A	10	10%
B	8	11%
C	5	9%

- (i) Calculate the duration of each bond.
- (ii) Advise the percentage amount to bond portfolio manager to be invested in bonds B and C to immunise the portfolio and he has been asked to keep 45% of the portfolio money in Bond A.
- (iii) Evaluate whether the portfolio is still immunized if after the portfolio has been formulated, an interest rate change occurs, increasing the yield to 11%. The new duration of bonds are: Bond A = 7.15 Years, Bond B = 6.03 Years and Bond C = 4.27 years.
- (iv) Advise the new percentage of B and C bonds that are needed to immunize the portfolio. Bond A remaining at 45% of the portfolio.

Present values be used as follows :

Present Values	$t_1$	$t_2$	$t_3$	$t_4$	$t_5$
$PVIF_{0.09, t}$	0.917	0.842	0.772	0.708	0.650

Present Values	$t_6$	$t_7$	$t_8$	$T_9$	$t_{10}$
$PVIF_{0.09, t}$	0.596	0.547	0.502	0.460	0.4224

**(12 Marks)**

- (b) Eager Ltd. has a market capitalization of Rs. 1,500 crores and the current market price of its share is Rs. 1,500. It made a PAT of Rs. 200 crores and the Board is considering a proposal to buy back 20% of the shares at a premium of 10% to the current market price. It plans to fund this through a 16% bank loan. The company's corporate tax rate is 30%. Calculate the post buy back Earnings Per Share (EPS). **(4 Marks)**
- (c) Identify how different stakeholders view the financial risk? **(4 Marks)**

4. (a) The Treasury desk of a global bank incorporated in UK wants to invest GBP 200 million on 1<sup>st</sup> January, 2019 for a period of 6 months and has the following options:
- (1) The Equity Trading desk in Japan wants to invest the entire GBP 200 million in high dividend yielding Japanese securities that would earn a dividend income of JPY 1,182 million. The dividends are declared and paid on 29<sup>th</sup> June. Post dividend, the securities are expected to quote at a 2% discount. The desk also plans to earn JPY 10 million on a stock borrow lending activity because of this investment. The securities are to be sold on June 29 with a T+1 settlement and the amount remitted back to the Treasury in London.
  - (2) The Fixed Income desk of US proposed to invest the amount in 6-month G-Secs that provides a return of 5% p.a.

The exchange rates are as follows:

Currency Pair	1-Jan-2019 (Spot)	30-Jun-2019 (Forward)
GBP- JPY	148.0002	150.0000
GBP- USD	1.28000	1.30331

As a treasurer, advise the bank on the best investment option from risk perspective.

You may ignore taxation.

**(10 Marks)**

- (b) Ms. Preeti, a school teacher, after retirement has built up a portfolio of Rs. 1,20,000 which is as follow:

Stock	No. of shares	Market price per share (Rs.)	Beta
ABC Ltd.	1000	50	0.9
DEF Ltd.	500	20	1.0
GHI Ltd.	800	25	1.5
JKL Ltd.	200	200	1.2

Suppose she has been advised to bring down the beta of her portfolio to 0.8.

Advise how much risk-free investment should be bought in to reduce the beta to 0.8? **(6 Marks)**

- (c) Explain Angel Investors.

**(4 Marks)**

5. (a) Mr. Kapoor owns a portfolio with the following characteristics:

	Security X	Security Y	Risk Free Security
Factor 1 sensitivity	0.75	1.50	0
Factor 2 sensitivity	0.60	1.10	0
Expected Return	15%	20%	10%

It is assumed that security returns are generated by a two factor model.

- (i) Analyse the sensitivity of Mr. Kapoor's portfolio to the two factors if he has Rs. 1,00,000 to invest and sells short Rs. 50,000 of security Y and purchases Rs. 1,50,000 of security X.
  - (ii) Evaluate the sensitivity of the portfolio to the two factors if Mr. Kapoor borrows Rs. 1,00,000 at the risk free rate and invests the amount he borrows along with the original amount of Rs. 1,00,000 in security X and Y in the same proportion as described in part (i).
  - (iii) Determine the expected return premium of factor 2? **(12 Marks)**
- (b) A dealer quotes 'All-in-cost' for a generic swap at 6% against six month LIBOR flat. If the notional principal amount of swap is Rs. 8,00,000:
- (i) Calculate semi-annual fixed payment.

- (ii) Find the first floating rate payment for (i) above if the six month period from the effective date of swap to the settlement date comprises 181 days and that the corresponding LIBOR was 5% on the effective date of swap.
- (iii) In (ii) above, if the settlement is on 'Net' basis, how much the fixed rate payer would pay to the floating rate payer? Generic swap is based on 30/360 days basis. **(4 Marks)**
- (c) Discuss about the Primary Participants in the process of Securitization.

**OR**

What is a startup to avail the benefits of government scheme? **(4 Marks)**

6. (a) **IM** is an American firm having its subsidiary in Japan and **JI** is a Japanese firm having its subsidiary in USA: They face the following interest rates

	<b>IM</b>	<b>JI</b>
USD Floating rate	LIBOR+0.5%	LIBOR+2.5%
JPY Fixed rate	4%	4.25%

IM wishes to borrow USD at floating rate and JI JY at fixed rate. The amount required by both the companies is same at the current Exchange Rate. A financial institution requires 75 basis points as commission for arranging Swap. The companies agree to share the benefit/ loss equally.

Advise:

- (i) How a beneficial swap can be arranged?
- (ii) The effective interest cost for both IM and JI if swap arrangement is entered into. **(8 Marks)**
- (b) You are interested in buying some equity stocks of RK Ltd. The company has 3 divisions operating in different industries. Division A captures 10% of its industries sales which is forecasted to be Rs. 50 crore for the industry. Division B and C captures 30% and 2% of their respective industry's sales, which are expected to be Rs. 20 crore and Rs. 8.5 crore respectively. Division A traditionally had a 5% net income margin, whereas divisions B and C had 8% and 10% net income margin respectively. RK Ltd. has 3,00,000 shares of equity stock outstanding, which sell at Rs. 250.

The company has not paid dividend since it started its business 10 years ago. However, from the market sources you come to know that RK Ltd. will start paying dividend in 3 years time and the pay-out ratio is 30%. Expecting this dividend, you would like to hold the stock for 5 year. By analysing the past financial statements, you have determined that RK Ltd.'s required rate of return is 18% and that P/E ratio of 10 for the next year and on ending P/E ratio of 20 at the end of the fifth year are appropriate.

Evaluate:

- (i) Whether you will be in purchasing RK Ltd. equity at this time based on your one year forecast?
- (ii) Price you will like to pay for the stock of RK Ltd if you expect earnings to grow @ 15% continuously.

Ignore taxation.

PV factors are given below:

Years	1	2	3	4	5
PVIF@ 18%	0.847	0.718	0.609	0.516	0.437

**(8 Marks)**

- (c) Explain the different methods for evaluating the performance of a mutual fund. **(4 Marks)**