

## Test Paper

### FM & ECO Full Syllabus Test - 1

**Details:** Full Test - 1

**Duration:** 180

**Marks:** 100

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## Intructions

All the questions are compulsory

Properly mention test number and page number on your answer sheet

In case of multiple choice questions, mention option number only

Working notes are compulsory wherever required in support of your solution

Donot copy any solution from any material.

Attempt as much as you know to fairly judge your performance.

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SECTION - A

Q. No. 1 is compulsory.

Candidates are also required to answer any four questions from the remaining five questions.

In case, any candidate answers extra question(s)/sub-question(s) over and above the required number, then only the requisite number of questions first answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.

Working Notes should form part of the respective answer.

Q - 1

(a) A company had the following Balance Sheet as on 31st March, 2014:

Liabilities	(Rs in Crores)	Assets	(Rs in Crores)
Equity Share Capital (50 lakhs shares of Rs 10 each)	5		
Reserve and Surplus	1	Fixed Assets (Net)	12.5
15% Debentures	10	Current Assets	7.5
Current Liabilities	4		
	20		20

The additional information given is as under:

Fixed cost per annum (excluding interest)	Rs. 4 crores
Variable operating cost ratio	65%

<b>Total assets turnover ratio</b>	2.5
<b>Income Tax rate</b>	30%

Required:

Calculate the following and comment:

- (i) Earnings Per Share
- (ii) Operating Leverage
- (iii) Financial Leverage
- (iv) Combined Leverage

**(5 Marks)**

**(b)** Using the following information, complete this balance sheet:

<b>Long-term debt to net worth</b>	<b>0.5 to 1</b>
<b>Total asset turnover</b>	<b>2.5x</b>
<b>Average collection period*</b>	<b>18 days</b>
<b>Inventory turnover</b>	<b>9 ×</b>
<b>Gross profit margin</b>	<b>10%</b>
<b>Acid-test ratio</b>	<b>1 to 1</b>

\*Assume a 360-day year and all sales on credit.

	<b>Rs.</b>		<b>Rs.</b>
<b>Cash</b>	-	<b>Notes and payables</b>	<b>1,00,000</b>
<b>Accounts receivable</b>	-	<b>Long-term debt</b>	-
<b>Inventory</b>	-	<b>Common stock</b>	<b>1,00,000</b>
<b>Plant and equipment</b>	-	<b>Retained earnings</b>	<b>1,00,000</b>
<b>Total assets</b>	-	<b>Total liabilities and equity</b>	<b>1,00,000</b>
	-		-

**(5 Marks)**

**(c)** Amita Ltd's operating income is Rs. 5,00,000. The firm's cost of debt is 10% and currently the firm employs Rs. 15,00,000 of debt. The overall cost of capital of the firm is 15%.

You are required to determine:

(i) Total value of the firm.

(ii) Cost of Equity.

**(5 Marks)**

(d) Ganapati Limited is considering three financing plans. The key information is as follows:

(a) Total investment to be raised Rs. 2,00,000

(b) Plans of Financing Proportion:

Plans	Equity	Debt	Preference Shares
A	100%	-	-
B	50%	50%	-
C	50%	-	50%

(c) Cost of debt 8%

Cost of preference shares 8%

(d) Tax Rate 50%

(e) Equity shares of the face value of Rs.10 each will be issued at a premium of Rs. 10 per share.

(f) Expected EBIT is Rs. 80,000.

You are required to determine for each plan: -

(i) Earnings per share (EPS)

(ii) The financial break-even point.

(iii) Indicate if any of the plans dominate and compute the EBIT range among the plans for indifference.

**(5 Marks)**

**Q - 2 (a)** C Ltd. is considering its capital investment programme for 2019 and 2020. The company is financed entirely by equity shares and has a cost of capital of 15% per annum. The company has reduced their initial list of projects to five, the expected cash flows of which are as follows:

Project	Cash flows			
	2010	2011	2012	2013
A	-60,000	+30,000	+25,000	+25,000
B	-30,000	-20,000	+25,000	+45,000
C	-40,000	-50,000	+60,000	+70,000
D	0	-80,000	+45,000	+55,000
E	-50,000	+10,000	+30,000	+40,000

None of the above projects can be delayed. All the projects are divisible, outlays may be reduced by any proportion and net inflows will then be reduced in the same proportion. No project can be undertaken more than once. C Ltd. is able to invest surplus funds in a bank deposit account yielding an annual return of 10%. C Ltd. cost of capital is 15%.

**Required:**

**(i)** Prepare calculations showing which projects C. Ltd. should undertake, if capital is expected

to be available as indefinitely large amounts at 15% per annum during all future periods.

**(ii)** Show how your answer to (i) would vary if capital available for investment was limited to Rs. 1, 00,000 in 2011 but was not limited thereafter.

**(iii)** Provide a mathematical programming formulation which would assist C Ltd. In choosing investment projects if capital available in 2010 is limited to Rs. 1,00,000, capital is available in 2011 is limited to Rs. 90,000, capital available thereafter without limit at 10% per annum, and the shareholders required return from the company was 15% per annum at all relevant times.

Ignore taxation. Present value factors at 15% year 1-0.8696; 2-0.7561; 3-0.6575

**(5 Marks)**

**(b)** Explain Linter Model?

**(5 Marks)**

**Q - 3** Aneja Limited, a newly formed company, has applied to the commercial bank for the first time for financing its working capital requirements. The following information is available about the projections for the current year: Estimated level of activity: 1,04,000 completed units of production plus 4,000 units of work-in-progress. Based on the above activity, estimated cost per unit is:

<b>Raw material</b>	<b>Rs. 80 per units</b>
<b>Direct wages</b>	<b>Rs. 30 per units</b>
<b>Overheads (exclusive of depreciation)</b>	<b>Rs. 60 per units</b>
<b>Total Cost</b>	<b>Rs. 170 per units</b>
<b>Selling Price</b>	<b>Rs. 200 per units</b>

Raw materials in stock: Average 4 weeks consumption, work-in-progress (assume 50% completion stage in respect of conversion cost) (materials issued at the start of the processing).

Finished goods in stock 8,000 units

Credit allowed by suppliers Average 4 weeks

Credit allowed to debtors/receivables Average 8 weeks

Lag in payment of wages Average 1.5 weeks

Cash at banks (for smooth operation) is expected to be Rs. 25,000.

Assume that production is carried on evenly throughout the year (52 weeks) and wages and overheads accrue similarly. All sales are on credit basis only.

You are required to calculate the net working capital required.

**(10 Marks)**

**Q - 4** A company has to make a choice between two projects namely A and B. The initial capital outlay of two Projects are Rs. 1,35,000 and Rs.2,40,000 respectively for A and B.

There will be no scrap value at the end of the life of both the projects. The opportunity Cost of Capital of the company is 16%. The annual incomes are as under:

Year	Project A (Rs.)	Project B (Rs.)	Discounting factors @ 16%
1	--	60,000	0.862
2	30,000	84,000	0.743
3	1,32,000	96,000	0.641
4	84,000	1,02,000	0.552
5	84,000	90,000	0.476

**Required:**

Calculate for each project:

(i) Discounted payback period

(ii) Profitability index

(iii) Net present value

Decide which of these projects should be accepted?

**(10 Marks)**

**Question 5:** M/s. Navya Corporation has a capital structure of 40% debt and 60% equity. The company is presently considering several alternative investment proposals costing less than Rs.20 lakhs. The corporation always raises the required funds without disturbing its present debt equity ratio.

The cost of raising the debt and equity are as under:

Project Cost	Cost of Debit	Cost of equity
Upto Rs. 2 lakhs	10%	12%
Above Rs. 2 lakhs to upto to Rs. 5 lakhs	11%	13%
Above Rs. 5 lakhs to upto to Rs. 10 lakhs	12%	14%
Above Rs. 10 lakhs to upto to Rs. 20 lakhs	13%	14.5%

Assuming the tax rate at 50%, Calculate:

(i) Cost of capital of two projects X and Y whose fund requirements are Rs.6.5 lakhs and Rs.14 lakhs respectively.

(ii) If a project is expected to give after tax return of 10%, DETERMINE under what conditions it would be acceptable?

**(10 Marks)**

**Q - 6 (a)** Discuss the role of a chief financial officer?

**(4 Marks)**

**(b)** Difference between factoring and bill discounting?

**(4 Marks)**

**(c)** Explain the term 'Payback reciprocal'.

**(2 Marks)**

### **SECTION - B**

**Q. No. 7 is compulsory.**

**Answer any three from the rest.**

**In case, any candidate answers extra question(s)/sub-question(s) over and above the required number, then only the requisite number of questions first answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.**

**Working Notes should form part of the respective answer.**

**Q - 7 (a)** What are the major merits of floating exchange rate?

**(3 Marks)**

**(b)** Why do we say that money demand is derived demand?

**(2 Marks)**

**(c)** Distinguish between foreign direct investment and foreign institutional investment? (any four differences)

**(2 Marks)**

**(d)** In a two sector economy, the business sector produces 7000 units at an average price of Rs.

5.

- (a) What is the money value of output?
- (b) What is the money income of households?
- (c) If households spend 80 percent of their income, what is the total consumer expenditure?
- (d) What are the total money revenues received by the business sector?
- (e) What should happen to the level of output?

**(3 Marks)**

**Q - 8**

**(a) (i)** Explain the free rider problem. Give examples

**(3 Marks)**

**(ii)** Explain how higher the interest rate affect the demand for money.

**(2 Marks)**

**(b) (i)** From, the following data calculate the Gross National Product at Market Price using

Value Added method

	<b>Rs. in Crores</b>
<b>Value of output in primary sector</b>	500
<b>Net factor income from abroad</b>	- 20
<b>Value of output in tertiary sector</b>	700
<b>Intermediate consumption in secondary sector</b>	400
<b>Value of output in secondary sector</b>	900
<b>Government Transfer Payments</b>	600
	700
<b>Intermediate consumption in tertiary sector</b>	300
<b>Intermediate consumption in primary sector</b>	250
<b>Value of output in secondary sector</b>	900
<b>Intermediate consumption in secondary sector</b>	300

**(3 Marks)**

**(ii)** Using Ricardian model, explain how two countries can gain from trade? What does the Ricardian model suggest regarding the effect of trade?

**(2 Marks)**

**Q - 9**

**(a) (i)** What are the types of externalities?

**(2 Marks)**

**(ii)** The price index for exports of Country A in year 2012 (2000 base-year), was 116.1 and the price index for Country A's imports was 120.2 (2000 base-year)

(i) What do these figures mean?

(ii) Calculate the index of terms of trade for Country A?

(iii) How do you interpret the index of terms of trade for Country A?

**(3 Marks)**

**(b) (i)** Which types of Government interventions are applied in case of public goods?

**(ii)** For the linear consumption function is  $C = 700 + 0.8Y$ ;  $I$  is Rs. 1200 and Net exports  $X-M = 100$ . Find equilibrium output?

**(2 Marks)**

**Q - 10**

**(a) (i)** Which are the sectors in India where FDI is prohibited? Why?

**(4 Marks)**

**(ii)** Explain the concept of marginal propensity to consume?

**(2 Marks)**

**(b) (i)** Critically examine the post Keynesian theories of demand for money.

**(2 Marks)**

**(ii)** List the components of M1

**(2 Marks)**

**Q - 11**

**(a) (i)** What are the major functions of the WTO?

**(2 Marks)**

**(ii)** What is meant by 'free trade area'?

**(2 Marks)**

**(b) (i)** Define trade policy. What are the main types of trade policy instruments?

**(3 Marks)**

**(ii)** Explain how the exchange value of Indian Rupee will be affected in each of the following cases. What are the possible consequences on exports and imports?

(a) The spot exchange rate changes from Rs 61/1\$ to Rs 64/1\$

(b) The spot exchange rate changes from Rs 66/1\$ to Rs 63/1\$

**(3 Marks)**