Total No. of Questions – **11**

Time Allowed – **3** Hours

Total No. of Printed Pages – **12**

Maximum Marks – **100**

CLB

Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate who has not opted for Hindi Medium, his/her answers in Hindi will not be valued.

SECTION-A

Marks : 60

Question No. **1** is compulsory.

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

Working notes should form part of the respective answers.

All the calculations should be done upto 3 decimal places.

Marks

1. (a) Following information relates to RM Co. Ltd. **5**

	(₹)
Total Assets employed	10,00,000
Direct Cost	5,50,000
Other Operating Cost	90,000

Goods are sold to the customers at 150% of direct costs.

50% of the assets being financed by borrowed capital at an interest cost of 8% per annum.

Tax rate is 30%

You are required to calculate :

(i) Net profit margin

(ii) Return on Assets

(iii) Asset turnover

(iv) Return on owners' equity

(b) CK Ltd. is planning to buy a new machine. Details of which are as follows : 5

Cost of the Machine at the commencement	₹ 2,50,000
Economic Life of the Machine	8 year
Residual Value	Nil
Annual Production Capacity of the Machine	1,00,000 units
Estimated Selling Price per unit	₹ 6
Estimated Variable Cost per unit	₹ 3
Estimated Annual Fixed Cost (Excluding depreciation)	₹ 1,00,000
Advertisement Expenses in 1st year in addition of annual fixed cost	₹ 20,000
Maintenance Expenses in 5th year in addition of annual fixed cost	₹ 30,000
Cost of Capital	12%

Ignore Tax.

Analyse the above mentioned proposal using the Net Present Value Method and advice.

Marks

P.V. factor @ 12% are as under :

Year	1	2	3	4	5	6	7	8
PV Factor	0.893	0.797	0.712	0.636	0.567	0.507	0.452	0.404

(c) The following figures are extracted from the annual report of RJ Ltd. : 5

Net Profit	₹ 50 Lakhs
Outstanding 13% preference shares	₹ 200 Lakhs
No. of Equity Shares	6 Lakhs
Return on Investment	25%
Cost of Capital (K_e)	15%

$P_0 = \dfrac{DPS + \frac{r}{K_e}(EPS - DPS)}{K_e}$

You are required to compute the approximate dividend pay-out ratio by keeping the share price at ₹ 40 by using Walter's Model.

(d) TT Ltd. issued 20,000, 10% convertible debenture of ₹ 100 each with a maturity period of 5 years. At maturity the debenture holders will have the option to convert debentures into equity shares of the company in ratio of 1 : 5 (5 shares for each debenture). The current market price of the equity share is ₹ 20 each and historically the growth rate of the share is 4% per annum. Assuming tax rate is 25%. Compute the cost of 10% convertible debenture using Approximation Method and Internal Rate of Return Method. 5

PV Factor are as under :

Year	1	2	3	4	5
PV Factor @ 10%	0.909	0.826	0.751	0.683	0.621
PV Factor @ 15%	0.870	0.756	0.658	0.572	0.497

P.T.O.

Marks

2. PK Ltd., a manufacturing company, provides the following information : 10

	(₹)
Sales	1,08,00,000
Raw Material Consumed	27,00,000
Labour Paid	21,60,000
Manufacturing Overhead	32,40,000
(Including Depreciation for the year ₹ 3,60,000)	
Administrative & Selling Overhead	10,80,000

Additional Information :

(a) Receivables are allowed 3 months' credit.

(b) Raw Material Supplier extends 3 months' credit.

(c) Lag in payment of Labour is 1 month.

(d) Manufacturing Overhead are paid one month in arrear.

(e) Administrative & Selling Overhead is paid 1 month advance.

(f) Inventory holding period of Raw Material & Finished Goods are of 3 months.

(g) Work-in-Progress is Nil.

(h) PK Ltd. sells goods at Cost plus $33\frac{1}{3}\%$.

(i) Cash Balance ₹ 3,00,000.

(j) Safety Margin 10%.

You are required to compute the Working Capital Requirements of PK Ltd. on Cash Cost basis.

21,10,000

Marks

3. J Ltd. is considering three financing plans. The key information is as follows : **10**

(a) Total investment to be raised ₹ 4,00,000.

(b) Plans showing the Financing Proportion :

Plans	Equity	Debt	Preference Shares
X	100%	–	–
Y	50%	50%	–
Z	50%	–	50%

(c) Cost of Debt 10%

Cost of preference shares 10%

(d) Tax Rate 50%

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

(f) Expected EBIT is ₹ 1,00,000.

You are required to compute the following for each plan :

(i) Earnings per share (EPS)

(ii) Financial break even point

(iii) Indifference Point between the plans and indicate if any of the plans dominate.

Marks

10

4. A Ltd. is considering two mutually exclusive projects X and Y.

You have been given below the Net Cash flow probability distribution of each project :

Project–X		Project–Y	
Net Cash Flow (₹)	**Probability**	**Net Cash Flow (₹)**	**Probability**
50,000	0.30	1,30,000	0.20
60,000	0.30	1,10,000	0.30
70,000	0.40	90,000	0.50

(i) Compute the following :

(a) Expected Net Cash Flow of each project.

(b) Variance of each project.

(c) Standard Deviation of each project.

(d) Coefficient of Variation of each project.

(ii) Identify which project do you recommend ? Give reason.

0.50

0.25

Marks

5. The following data is available for Stone Ltd. : 10

	(₹)	
Sales	5,00,000	5.5
(–) Variable cost @ 40%	2,00,000	2.2
Contribution	3,00,000	3.3
(–) Fixed cost	2,00,000	2.
EBIT	1,00,000	1.3
(–) Interest	25,000	25K
Profit before tax	75,000	105000

DOL $\frac{\% \text{ EBIT}}{\% \text{ Sales}}$ DOF $\frac{\% \text{ EPS}}{\% \text{ EBIT}}$ DOC $\frac{\% \text{ EPS}}{\% \text{ Sales}}$

Using the concept of leverage, find out

(i) The percentage change in taxable income (EPS) if EBIT increases by 10%. DOF

(ii) The percentage change in EBIT if sales increases by 10%. DOL

(iii) The percentage change in taxable income if sales increases by 10%. DOC

Also verify the results in each of the above case.

6. (a) List out the role of Chief Financial Officer in today's World. 4

(b) Explain in brief the methods of Venture Capital Financing. 4

(c) Distinguish between Unsystematic Risk & Systematic Risk. 2

OR

What is Risk Adjusted Discount Rate ? 2

Marks

SECTION-B

Marks : 40

Question No. **7** is compulsory.

Answer any **three** questions from the rest.

Working notes should form part of the respective answers.

7\. (a) Compute the amount of depreciation from the following data : 3

	(₹ in Crores)
GDP at Market Price (GDP_{MP})	8,76,532
Net factor income from abroad	(–) 232
Aggregate amount of Indirect Taxes	564
Subsidies	30
National Income (NNP_{FC})	8,46,576

(b) Discuss the guiding principle of WTO in relation to trade without discrimination. 2

(c) "Money performs many functions in an economy." Explain those functions briefly. 3

(d) Describe the characteristics of 'Public Goods'. 2

Marks

8. (a) You are given the following information of an economy : **5**

Consumption Function	:	$C = 200 + 0.60\ Yd$
Government Spending	:	$G = 150$
Investment Spending	:	$I = 240$
Tax	:	$Tx = 10 + 0.20Y$
Transfer Payment	:	$Tr = 50$
Exports	:	$X = 30 + 0.2Y$
Imports	:	$M = 400$

Where Y and Yd are National Income and Personal Disposable Income respectively. All figures are in ₹.

$Y = 200 + 0.6(Y - 10 + 0.2Y)$
$+ 150 + 240$

Find :

(i) The equilibrium level of National Income.

(ii) Net Exports at equilibrium level.

(iii) Consumption at equilibrium level.

(5)

(b) (i) Discuss the "Fiscal Policy Measures" which are useful for reduction in inequalities of income and wealth. **3**

(ii) What is the impact of the following on credit multiplier and money supply, if Commercial Banks keep : **2**

(1) Less Reserve ?

(2) Excess Reserve ?

Marks

9. (a) (i) 'The Heckscher Ohlin theory of Foreign Trade' can be stated in the form of two theorems. Explain those briefly. 3

(ii) 'Lemons Problem' is an important source of market failure. How ? 2

(b) (i) Compute M3 from the following data : 3

M_2 +

Component	₹ in Crores
Currency with the public	2,25,432.6
Demand Deposits with Banks	3,40,242.4
Time Deposits with Banks	2,80,736.8
Post office savings Deposits (Excluding National Saving Certificates)	446.7
Other Deposits with RBI (Including Government Deposits)	392.7
Post Office National Saving Certificates	83.7
Government Deposits with RBI	102.5

(ii) Clarify the concept of 'Average Propensity to Save' with the help of formula and example. 2

Marks

10. (a) (i) Explain the various types of externalities. 3

(ii) Which method is used in India for measurement of National Income ? Also, state the method which is considered the most suitable for measurement of National Income of the developed economies. 2

(b) (i) Following exchange rate quotations are available for different periods : 3

(1) The spot exchange rate changes from ₹ 65 per $ to ₹ 68 per $.

(2) The spot exchange rate changes from $ 0.0125 per rupee to $ 0.01625 per rupee.

Answer :

(A) Identify the nature of rate quotations in (1) and (2) above.

(B) Identify the base currency and counter currency in (1) and (2) above.

(C) What are possible consequences on exports and imports of (1) and (2) above.

(ii) "The deposit multiplier and the money multiplier though closely related are not identical". Explain briefly. 2

Marks

11\. (a) (i) What is the meant by 'Statutory Liquidity Ratio' ? In which forms this ratio is maintained ? 3

(ii) Explain the concept of soft peg and hard peg exchange rate policies. 2

(b) (i) In which sectors Foreign Investment is prohibited in India ? 3

(ii) Explain the market outcome of price ceiling through diagram. 2

OR

What is meant by 'Countervailing Duties' ? 2