

Roll No.....

Time allowed : 3 hours

Maximum marks : 100

Total number of questions : 6

Total number of printed pages : 10

NOTE : 1. Answer **ALL** Questions.

2. Tables showing the present value of ₹ 1 and the present value of an annuity of ₹ 1 for 15 years are annexed.
3. Suitable assumptions, if considered necessary, may be made while answering a question. However, such assumptions must be stated clearly.
4. Working notes should form part of the answer.

1. Comment on the following :

- (a) A Special Purpose Vehicle (SPV) has no advantage for securitization of assets.
- (b) Operations in Foreign Exchange Markets are exposed to a number of risks.
- (c) Economic Value Added (EVA) represents the real profit of an entity.
- (d) Profit maximization is not the only objective of Financial Management.

(5 marks each)

Attempt all parts of either Q. No. 2 or Q. No. 2A

2. Distinguish between the following :

- (a) Global Depository Receipts (GDRs) and American Depository Receipts (ADRs).
- (b) Capital budgeting and Capital rationing.
- (c) Business risk and Financial risk.
- (d) Derivatives management and Portfolio management.

(4 marks each)

OR (Alternate question to Q. No. 2)

- 2A. (i) What are the important aspects for project monitoring ?
(ii) What are the main determinants of dividend policy ?
(iii) Explain the difference between hedging and speculation.
(iv) What are the objectives of treasury management ?

*(4 marks each)***Attempt all parts of either Q. No. 3 or Q. No. 3A**

3. (a) XYZ Ltd. has an annual requirement for a certain material of 500 tonnes. The ordering cost per order is ₹ 6,250 and the stock holding cost is estimated at 25% of the material cost per annum.

You are required to :

- (i) Compute E.O.Q. if the price per tonne is ₹ 5,250.
(ii) Calculate the total number of orders to be placed per year.

(4 marks)

- (b) You are given two financial plans of a company which has two financial situations.

The detailed information are as under :

Installed capacity	10,000 units
Actual production and sales	60% of installed capacity
Selling price per unit	₹ 30
Variable cost per unit	₹ 20
Fixed cost : Situation 'A' = ₹ 20,000; Situation 'B' = ₹ 25,000.	

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Capital structure of the company is as follows :

Particulars	Financial Plans	
	PQ (₹)	MN (₹)
Equity	12,000	35,000
Debt (Cost of debt 12%)	40,000	10,000
	52,000	45,000

You are required to calculate operating leverage and financial leverage of both the plans.

(4 marks)

- (c) Presently, one US \$ is worth 140 Japanese Yen in the spot market. The interest rate in Japan on 90 days government securities is 4% per annum. What is the implied interest rate in the USA if the 3-month forward rate is 138 Yen per US \$ according to the interest rate parity theorem ?

If the actual interest rate is 7% per annum in USA, what action would follow ?

(4 marks)

- (d) Consider the following information of Sunshine Ltd. :

	₹ in lakh
Earning before interest and taxes	2,000
Earning before taxes	600
Fixed Cost	1,400

Calculate the percentage of change in Earnings per share, if sales increase by 2%, disregarding other factors.

(4 marks)

: 4 :

OR (Alternate question to Q. No. 3)

3A. (i) Z invested ₹ 2,40,000 at annual rate of interest of 10 per cent. What is the amount after 3 years if the compounding is done ?

- (a) Annually and
(b) Semi-annually.

(4 marks)

(ii) Following is the capital structure of PQ Gems Ltd. :

Source of finance	Amount (₹)	Cost of Capital after tax (%)
Equity capital (45,000 shares)	4,50,000	14
Retained earnings	1,50,000	14
10% Preference capital	1,00,000	10
9% Debentures	3,00,000	4.5

You are required to calculate the Weighted Average Cost of Capital :

- (a) Based on book values as weights; and
(b) Based on market values as weights (Assuming that the market price of equity share is ₹ 20 per share).

(4 marks)

(iii) Security-A offers an expected rate of return of 14% with a standard deviation of 8%. Security-B offers an expected rate of return of 11% with a standard deviation of 6%. If an investor wishes to construct a portfolio with a 12.8% expected return, what percentage of the portfolio will consist of Security-A ?

(4 marks)

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- (iv) ABC Autos Ltd. started its business one year back with paid-up equity capital of ₹ 40 Lakh.

Other details are as under :

Earnings of the Year	:	₹ 4,00,000
Dividend Paid	:	₹ 3,20,000
Price-earnings ratio	:	12.5
Number of shares	:	40,000

You are required to find out whether the company's dividend payout ratio is optimal using Walter's Model.

(4 marks)

4. (a) The spot exchange rate is ₹ 75 / € and the three months forward exchange rate is ₹ 76.00 / €. The three month interest rate is 8% per annum in India and 5.8% per annum in Germany. Assume that you can borrow as much as ₹ 75 lakh or € 1 lakh.

- (i) Determine whether the interest rate parity is currently holding.
(ii) How would you carry out covered interest arbitrage ? Show all steps and determine the arbitrage profit.

(4 marks)

- (b) Precision Tools Ltd. currently has sales of ₹ 30,00,000 with an average collection period of two months. At present, no discounts are offered to the customers. The management of the company is thinking to allow a discount of 2% on cash sales which will result as under :

- (i) The average collection period would reduce to one month.
(ii) 50% of customers would take advantage of 2% discount.

The company would normally require a 25% return on its investment. Advise the management whether to extend the discount on cash sales.

(4 marks)

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- (c) The operating income of Fine Crockery Ltd. is ₹ 9 lakhs before interest and taxes. The cost of debt is 10 percent and the current borrowing is ₹ 30 lakhs. The cost of capital is 12%. Calculate the cost of equity for Fine Crockery Ltd. Ignore Taxation.

(4 marks)

- (d) Compute the degree of financial leverage for each of the companies Tattoos Ltd. and Gherkins Ltd. based on the following information :

	Tattoos Ltd.	Gherkins Ltd.
Earnings Before Interest and Tax	₹ 50,000	₹ 1,25,000
Debentures @ 8%	₹ 2,50,000	₹ 3,00,000
Preference share capital @ 10%	₹ 1,00,000	₹ 1,50,000
Tax Rate	35%	35%

(4 marks)

5. (a) A Portfolio Manager (PM) has the following four stocks in his portfolio :

Security	No. of Shares	Market Price Per Share (₹)	Beta
Dahlia Ltd.	10,000	50	0.9
Rose Ltd.	5,000	20	1.0
Cauliflower Ltd.	8,000	25	1.5
Apples Ltd.	2,000	200	1.2

Compute the following :

- (i) Portfolio beta.

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- (ii) If the PM seeks to reduce the beta to 0.8, how much risk free investment should he bring in ?
- (iii) If the PM seeks to increase the beta to 1.2, how much risk free investment should he bring in ?

(8 marks)

- (b) The following investment proposals are competing for selection. The Profitability Index (PI) of each of these proposals is also given :

Project	Initial Cash outlay (₹)	PI
A	25,000	1.13
B	35,000	1.11
C	40,000	1.15
D	30,000	1.08

If the budgeted fund is ₹ 60,000. Select the most profitable projects, which completely utilise the available funds.

(8 marks)

6. Gayatri Textiles Limited is a readymade garment manufacturing company. Its production cycle indicates that materials are introduced in the beginning of the production phase; wages and overhead accrue evenly throughout the period of cycle. The following figures for the 12 months ending 31st March, 2019 are given below :

Production of shirts	54,000 units
Selling price per unit	₹ 200
Duration of the production cycle	1 month
Raw material inventory held	2 month's consumption
Finished goods stock held	1 month

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Credit allowed to debtors is 1.5 months and credit allowed by creditors is 1 month
Wages and overheads are paid in the next month following the month of accrual.

In the work-in-progress 50% of wage and overheads are supposed to be conversion costs.

The ratios of cost to sales price are — raw materials 60%, direct wages 10% and overheads 20%.

Cash is to be held to the extent of 40% of current liabilities and an additional safety margin of 15% on net working capital will be maintained.

Calculate amount of working capital required for the company.

(16 marks)

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TABLE - 1 : PRESENT VALUE OF RUPEE ONE

RATE	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
5%	0.9524	0.9070	0.8638	0.8227	0.7835	0.7462	0.7107	0.6768	0.6446	0.6139	0.5847	0.5568	0.5303	0.5051	0.4810					
6%	0.9434	0.8900	0.8396	0.7921	0.7473	0.7050	0.6651	0.6274	0.5919	0.5584	0.5268	0.4970	0.4688	0.4423	0.4173					
7%	0.9346	0.8734	0.8163	0.7629	0.7130	0.6663	0.6227	0.5820	0.5439	0.5083	0.4751	0.4440	0.4150	0.3878	0.3624					
8%	0.9259	0.8573	0.7938	0.7350	0.6806	0.6302	0.5835	0.5403	0.5002	0.4632	0.4289	0.3971	0.3677	0.3405	0.3152					
9%	0.9174	0.8417	0.7722	0.7084	0.6499	0.5963	0.5470	0.5019	0.4604	0.4224	0.3875	0.3555	0.3262	0.2992	0.2745					
10%	0.9091	0.8264	0.7513	0.6830	0.6209	0.5645	0.5132	0.4665	0.4241	0.3855	0.3505	0.3186	0.2897	0.2633	0.2394					
11%	0.9009	0.8116	0.7312	0.6587	0.5935	0.5346	0.4817	0.4339	0.3909	0.3522	0.3173	0.2858	0.2575	0.2320	0.2090					
12%	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066	0.4523	0.4039	0.3606	0.3220	0.2875	0.2567	0.2292	0.2046	0.1827					
13%	0.8850	0.7831	0.6931	0.6133	0.5428	0.4803	0.4251	0.3762	0.3329	0.2946	0.2607	0.2307	0.2042	0.1807	0.1599					
14%	0.8772	0.7695	0.6750	0.5921	0.5194	0.4556	0.3996	0.3506	0.3075	0.2697	0.2366	0.2076	0.1821	0.1597	0.1401					
15%	0.8696	0.7561	0.6575	0.5718	0.4972	0.4323	0.3759	0.3269	0.2843	0.2472	0.2149	0.1869	0.1625	0.1413	0.1229					
16%	0.8621	0.7432	0.6407	0.5523	0.4761	0.4104	0.3538	0.3050	0.2630	0.2267	0.1954	0.1685	0.1452	0.1252	0.1079					
17%	0.8547	0.7305	0.6244	0.5337	0.4561	0.3898	0.3332	0.2848	0.2434	0.2080	0.1778	0.1520	0.1299	0.1110	0.0949					
18%	0.8475	0.7182	0.6086	0.5158	0.4371	0.3704	0.3139	0.2660	0.2255	0.1911	0.1619	0.1372	0.1163	0.0985	0.0835					
19%	0.8403	0.7062	0.5934	0.4987	0.4190	0.3521	0.2959	0.2487	0.2090	0.1756	0.1476	0.1240	0.1042	0.0876	0.0736					
20%	0.8333	0.6944	0.5787	0.4823	0.4019	0.3349	0.2791	0.2326	0.1938	0.1615	0.1346	0.1122	0.0935	0.0779	0.0649					
21%	0.8264	0.6830	0.5645	0.4665	0.3855	0.3186	0.2633	0.2176	0.1799	0.1486	0.1228	0.1015	0.0839	0.0693	0.0573					
22%	0.8197	0.6719	0.5507	0.4514	0.3700	0.3033	0.2486	0.2038	0.1670	0.1369	0.1122	0.0920	0.0754	0.0618	0.0507					
23%	0.8130	0.6610	0.5374	0.4369	0.3552	0.2888	0.2348	0.1909	0.1552	0.1262	0.1026	0.0834	0.0678	0.0551	0.0448					
24%	0.8065	0.6504	0.5245	0.4230	0.3411	0.2751	0.2218	0.1789	0.1443	0.1164	0.0938	0.0757	0.0610	0.0492	0.0397					
25%	0.8000	0.6400	0.5120	0.4096	0.3277	0.2621	0.2097	0.1678	0.1342	0.1074	0.0859	0.0687	0.0550	0.0440	0.0352					

TABLE - 2 : PRESENT VALUE OF AN ANNUITY OF RUPEE ONE

RATE	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
5%	0.9524	1.8594	2.7232	3.5460	4.3295	5.0757	5.7864	6.4632	7.1078	7.7217	8.3064	8.8633	9.3936	9.8986	10.3797				
6%	0.9434	1.8334	2.6730	3.4651	4.2124	4.9173	5.5824	6.2098	6.8017	7.3601	7.8869	8.3838	8.8527	9.2950	9.7122				
7%	0.9346	1.8080	2.6243	3.3872	4.1002	4.7665	5.3893	5.9713	6.5152	7.0236	7.4987	7.9427	8.3577	8.7455	9.1079				
8%	0.9259	1.7833	2.5771	3.3121	3.9927	4.6229	5.2064	5.7466	6.2469	6.7101	7.1390	7.5361	7.9038	8.2442	8.5595				
9%	0.9174	1.7591	2.5313	3.2397	3.8897	4.4859	5.0330	5.5348	5.9952	6.4177	6.8052	7.1607	7.4869	7.7862	8.0607				
10%	0.9091	1.7355	2.4869	3.1699	3.7908	4.3553	4.8684	5.3349	5.7590	6.1446	6.4951	6.8137	7.1034	7.3667	7.6061				
11%	0.9009	1.7125	2.4437	3.1024	3.6959	4.2305	4.7122	5.1461	5.5370	5.8892	6.2065	6.4924	6.7499	6.9819	7.1909				
12%	0.8929	1.6901	2.4019	3.0374	3.6048	4.1114	4.5638	4.9676	5.3282	5.6502	5.9377	6.1944	6.4235	6.6282	6.8109				
13%	0.8850	1.6681	2.3612	2.9745	3.5172	3.9975	4.4226	4.7988	5.1317	5.4262	5.6869	5.9176	6.1218	6.3025	6.4624				
14%	0.8772	1.6467	2.3216	2.9137	3.4331	3.8887	4.2883	4.6389	4.9464	5.2161	5.4527	5.6603	5.8424	6.0021	6.1422				
15%	0.8696	1.6257	2.2832	2.8550	3.3522	3.7845	4.1604	4.4873	4.7716	5.0188	5.2337	5.4206	5.5831	5.7245	5.8474				
16%	0.8621	1.6052	2.2459	2.7982	3.2743	3.6847	4.0386	4.3436	4.6065	4.8332	5.0286	5.1971	5.3423	5.4675	5.5755				
17%	0.8547	1.5852	2.2096	2.7432	3.1993	3.5892	3.9224	4.2072	4.4506	4.6586	4.8364	4.9884	5.1183	5.2293	5.3242				
18%	0.8475	1.5656	2.1743	2.6901	3.1272	3.4976	3.8115	4.0776	4.3030	4.4941	4.6560	4.7932	4.9095	5.0081	5.0916				
19%	0.8403	1.5465	2.1399	2.6386	3.0576	3.4098	3.7057	3.9544	4.1633	4.3389	4.4865	4.6105	4.7147	4.8023	4.8759				
20%	0.8333	1.5278	2.1065	2.5887	2.9906	3.3255	3.6046	3.8372	4.0310	4.1925	4.3271	4.4392	4.5327	4.6106	4.6755				
21%	0.8264	1.5095	2.0739	2.5404	2.9260	3.2446	3.5079	3.7256	3.9054	4.0541	4.1769	4.2784	4.3624	4.4317	4.4890				
22%	0.8197	1.4915	2.0422	2.4936	2.8636	3.1669	3.4155	3.6193	3.7863	3.9232	4.0354	4.1274	4.2028	4.2646	4.3152				
23%	0.8130	1.4740	2.0114	2.4483	2.8035	3.0923	3.3270	3.5179	3.6731	3.7993	3.9018	3.9852	4.0530	4.1082	4.1530				
24%	0.8065	1.4568	1.9813	2.4043	2.7454	3.0205	3.2423	3.4212	3.5655	3.6819	3.7757	3.8514	3.9124	3.9616	4.0013				
25%	0.8000	1.4400	1.9520	2.3616	2.6893	2.9514	3.1611	3.3289	3.4631	3.5705	3.6564	3.7251	3.7801	3.8241	3.8593				