

Roll No.....

Time allowed : 3 hours

Maximum marks : 100

Total number of questions : 6

Total number of printed pages : 8

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.

1. Comment on the following :

- (a) The main function of a treasury manager is management of funds efficiently.
- (b) Working capital of a firm depends upon the length of its operating cycle.
- (c) Dividend and growth are conflicting goals to each other.
- (d) Speculation is the prime reason for foreign exchange rate fluctuations.

(5 marks each)

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

2. Distinguish between the following :

- (a) 'Capital structure' and 'financial structure'.
- (b) 'Systematic risk' and 'unsystematic risk'.
- (c) 'Net present value' and 'internal rate of return'.
- (d) 'Commodity derivatives' and 'financial derivatives'.

(4 marks each)

OR (Alternate question to Q.No. 2)

2A. (i) Capital asset pricing model is based on certain critical assumptions. Mention any four assumptions.

(ii) Define the following tools with respect to option derivatives :

- (a) *Delta*
- (b) *Gamma*
- (c) *Theta*
- (d) *Vega*.

(iii) State the activities undertaken by merchant bankers.

(iv) Describe the role of information technology in treasury management.

(4 marks each)

Attempt all parts of either Q.No. 3 or Q.No. 3A

3. (a) Net profit before tax of Acumen Ltd. is ₹17,50,000. The company has 1,00,000 equity shares of face value ₹10 each, fully paid-up. Current market price of the shares is ₹85 per share. Income-tax @ 30% applies to the company. Compute the P/E ratio for the company.

(4 marks)

- (b) Zoya Ltd. has obtained capital from the following sources and the specific costs are given against them :

<i>Type of capital</i>	<i>Book value (₹ in lakh)</i>	<i>Market value (₹ in lakh)</i>	<i>Cost of capital (%)</i>
Debentures	4	3.8	5
Preference shares	1	1.1	8
Equity shares	6	9.0	13
Retained earnings	2	3.0	9
Total	<u>13</u>	<u>16.9</u>	

You are required to calculate weighted average cost of capital using —

- (i) Book value weight; and
(ii) Market value weight.

(4 marks)

- (c) Equity shares of Shrill Ltd. are being currently sold for ₹450 per share. Both the call option and put option for a 3-month period are available for a strike price of ₹485 at a premium of ₹15 per share and ₹10 per share respectively. Naresh, an investor, wants to create a straddle position in this share. Find out his net pay-off at expiration of the option period, if the share price on that day happens to be ₹450 or ₹525.

(4 marks)

: 3 :

- (d) Following details are available to you for two companies, Beauty Ltd. and Pretty Ltd. :

	<i>Beauty Ltd.</i>	<i>Pretty Ltd.</i>
Internal rate of return (%)	15	10
Capitalisation rate (%)	15	10
Earnings per share (₹)	12	10
Cash dividend per share (₹)	5	2

Calculate the value of an equity share for the companies.

(4 marks)

OR (Alternate question to Q.No. 3)

- 3A.** (i) Aalia Ltd. has two alternative projects under consideration. Project-A requires a capital outlay of ₹1,60,000 and Project-B needs ₹1,80,000. Both are estimated to provide a cash flow for five years; Project-A : ₹45,000 per year and Project-B: ₹58,000 per year. The cost of capital is 10%. Show which project is preferable from the view point of net present value.

(4 marks)

- (ii) Priyanka Ltd. has 25,000 shares outstanding at current market price of ₹100 per share. It belongs to a risk class with capitalisation rate of 20%. The company expects to earn a net profit of ₹5,00,000 during the year. What will be the price per share if dividend is not paid ?

(4 marks)

- (iii) A manufacturing firm has credit sales of ₹360 lakh and its average collection period is 30 days. The financial controller estimates bad-debt losses at around 2% of credit sales. The firm spends ₹1,40,000 annually on debtors' administration. This cost comprises of telephone and internet bills along with salaries of staff members.

A factoring firm has offered to buy the firm's receivables. The factor will charge 1% commission and will pay an advance against receivables on an interest @15% p.a. after withholding 10% as reserve.

What should the firm do ? Assume 360 days in a year.

(8 marks)

4. (a) A company is considering selective inventory control using the following data :

<i>Item No.</i>	<i>Units</i>	<i>Unit Cost (₹)</i>
1	6,000	4.00
2	61,200	0.05
3	16,800	2.10
4	3,000	6.00
5	55,800	0.20
6	22,680	0.50
7	26,640	0.65
8	14,760	0.40
9	20,520	0.40
10	90,000	0.10
11	29,940	0.30
12	24,660	0.50

Arrange the data for presentation to management for implementation of ABC technique of inventory management.

(4 marks)

- (b) Kareena Softwares, a technology firm, has three divisions with the following characteristics :

<i>Division</i>	<i>Beta</i>	<i>Market Value</i> (₹ in lakh)
Personal computers	1.40	120
Software	1.90	160
Computer mainframes	1.00	260
Total		<u>540</u>

You are required to answer the following —

- (i) What is *beta* of the equity of the firm ?
- (ii) What would happen to the *beta* of equity if the firm divested itself of its software business ?

If you were asked to value the software business for the divestiture, which *beta* would you use in your valuation ? Restrict calculations to two decimal points.

(4 marks)

: 5 :

(c) Briefly describe the determinants of dividend policy.

(4 marks)

(d) Discuss the measures of financial viability of a project.

(4 marks)

5. (a) Alliance Ltd. having annual sales of ₹80 lakh extends 30 days credit period to its debtors. The variable cost is estimated at 80% on sales and fixed costs are ₹8 lakh. The company intends to change the credit policy for which the following information is given :

<i>Credit policy</i>	<i>Average collection period (days)</i>	<i>Annual sales (₹ in lakh)</i>
A	45	86
B	60	90
C	75	92

Rate of return (*pre-tax*) required on investment is 20%.

You are required to assess the most profitable policy with the help of incremental approach. Calculations may be restricted to two decimal points. Assume 365 days in a year.

(8 marks)

- (b) Joy Ltd. is supplying goods worth US \$1,00,000 to a US importer and the amount is payable after 4 months time. The current spot rate of US \$ is ₹57.68. It is expected that the rupee will appreciate in the next 4 months and would be quoted at ₹56.84. The importer accepts to pay immediately if 2% cash discount is offered by Joy Ltd. The current borrowing rate is 8% per annum. Advise the course of action.

(8 marks)

6. Himalaya Ltd. approached their banker for working capital requirement. The bank has agreed to sanction the same by retaining margins as under :

Raw materials	18%
Work-in-progress	30%
Finished goods	20%
Debtors	10%

Following projections are available :

<i>Estimate</i>	₹
Annual sales	18,00,000
Cost of production	14,40,000
Raw materials purchased	9,35,000
Monthly expenditure	50,000
Anticipated opening stock of raw materials	1,80,000
Anticipated closing stock of raw materials	1,55,000
<i>Inventory norms</i>	
Raw material	2 months
Work-in-progress	15 days
Finished goods	1 month

The firm enjoys a credit of 15 days on its purchases and allows one month credit on its supplies. On sales orders, the company has received an advance of ₹2,50,000.

You are required to calculate —

- (a) Working capital required by the company; and
- (b) Working capital limits likely to be approved by the banker.

State your assumptions, if any.

(16 marks)

—————0—————

:: 7 ::

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
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
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 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 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	2.4018	3.0373	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

..
∞
..