335

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.

3. Suitable assumptions, if considered necessary, may be made while answering a question. However, such assumptions must be stated clearly.

1. (*a*) "The EVA is a tool to underline the shareholders value." Comment.

(*b*) "Working Capital Leverage measures the sensitivity of return on investment in working capital." Comment with example.

(*c*) "Does the Balance Sheet give a true picture of Current Assets ?" Comment.

(*d*) "The Sharpe ratio is a risk-adjusted measure of return." Comment.

(*5 marks each*)

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

2. (*a*) Differentiate between Pyramid Shaped Capital Structure and Inverted Pyramid Shaped Capital Structure.

(*b*) Differentiate between spot rate and forward rate of foreign exchange rate system.

(*c*) Differentiate between Regression Analysis Method and Percent of Sales Method for estimating Working Capital needs.

(*d*) Differentiate between Commodity Futures Contracts and Commodity Option Contracts.

(*4 marks each*)

OR (Alternate question to Q. No. 2)

2A. (*i*) Discuss the controllable factors those support to optimise the cost of capital of a firm.

(*4 marks*)

(*ii*) Explain the concept of financial insolvency and compare it with technical bankruptcy. (*4 marks*)

(*iii*) "Social Cost and Benefit Analysis of Project has great importance in the Project Planning." Discuss. (*4 marks*)

(*iv*) What do you understand by Pegging of currency and describe its various arrangements. (*4 marks*)

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

3. (*a*) An analyst is evaluating the stocks of two companies for inclusion in the diversified portfolio that he manages for a pension fund. He wishes to use the price/earnings multiple (PE ratio) to compare the stocks. The analyst has collected the following information about Company A and Company B :

Particulars	**Company A**	**Company B**
Historical and expected return on equity (ROE)	16%	11%
Historical and expected dividend payout ratio	40%	40%
Beta	1.35	1.05

The expected return on the market index is 11.5 percent and the expected risk-free return is 5.25 percent. You are required to calculate the Cost of Equity. (*4 marks*)

(*b*) The following are the data on capital expenditure of a project being evaluated by Management of Vivaan Limited :

Particulars	
Annual cost savings	₹ 40,00,000
Useful life	4 years
Internal Rate of Return	15%
Profitability Index	1.064

From the above information find out the following by assuming that salvage value is zero :

(*i*) Cost of project

(*ii*) Payback period

(*iii*) Cost of capital

(*iv*) Net present value.

(*4 marks*)

(*c*) RBI sold a 91 days T-bill of face value of ₹ 100 at a yield of 6%. What was the issue price ?

(*4 marks*)

(*d*) King has purchased a bond for ₹ 1,000 with a coupon payment of ₹ 250 and sold for ₹ 1,200.

(*i*) What is the holding return of King ?

(*ii*) If King sells the bond for ₹ 800 after receiving the ₹ 250 as coupon payment, then what is the holding return of King ?

(*4 marks*)

OR (Alternate question to Q. No. 3)

3A. (*i*) A firm has sales of ₹ 10 lacs and fixed cost of ₹ 1.5 lacs. Contribution margin is 30%. It has 10% debt of ₹ 8 lacs. Find out Operating leverage, Financial leverage and Combined leverage.

Also find out that if the firm wants to double the EBIT, how much percent increase in sales is needed ?

(*4 marks*)

(*ii*) Futures contract expiring on 28 October in U.S. Dollar at NSE is selling for ₹ 68.68. Your Banker has offered a forward contract for delivery on 28 October at ₹ 68.90/ Dollar. How can you take advantage of disparity in the futures and forward market ? How do you think the position would correct if on 28 October actual rate is ₹ 69 or ₹ 68 per U.S. Dollar.

(*4 marks*)

(*iii*) Assuming that the firm pays tax at 40%, compute the Weighted Average Cost of Capital from the following :

5,000 Equity shares of ₹ 100 each	₹ 5,00,000
10% Preference Shares	₹ 1,00,000
12% debentures	₹ 4,00,000

The current market price of the share is ₹ 120. The Company is expected to declare a dividend of ₹ 12 at the end of the current year, with an expected growth rate of 8%. Use book value weights.

(*4 marks*)

(*iv*) Calculate the Minimum stock level, Maximum stock level, Reordering level and Average stock level from the following information :

(1) Minimum Consumption = 100 units per day

(2) Maximum Consumption = 150 units per day

(3) Normal Consumption = 120 units per day

(4) Re-order period = 10(min)–15(max) units per day

(5) Re-order quantity = 1500 units per day

(6) Normal re-order period = 12 days

(*4 marks*)

4. (*a*) The following information pertains to M/s Kanagana Limited :

Earnings of the company	₹ 5 lakh
Dividend payout ratio	60%
No. of shares outstanding	1,00,000
Equity capitalisation rate	12%
Rate of return on investment	15%

What would be the market value per share as per Walter's model ?

(*b*) Consider a firm X Ltd., having the following details :

EBIT = ₹ 1,00,000

Debt borrowed at the rate of 10% = ₹ 5,00,000

Overall Capitalisation rate (Ko) = 12.5%

Find the value of the firm when :

(1) Debt is increased by ₹ 2,00,000

(2) Debt is decreased by ₹ 2,00,000

Also calculate cost of equity in each case.

(*c*) How is the marking to market settlement going to affect the margin balance of the trader ? Explain.

(*d*) "Finance Manager has no role to play in manufacturing company." Comment.

(*4 marks each*)

5. (*a*) Under a factoring arrangement Ranki Factors Services Limited has advanced a sum of ₹ 140 lakh against the receivable purchased from Aangi Limited. The factoring agreement provides for an advance payment of 80% (maintaining factor reserve of 20% to provide for disputes and deductions relating to the bills assigned) of the value of factored receivable and for guaranteed payment after three months from the date of purchasing the receivables. The advance carries a rate of interest of 12% per annum compounded quarterly and the factoring commission is 2.5% of the value of factored receivables. Both the interest and commission are collected upfront.

You are required to :

(*i*) Compute the amount of advance payable to Aangi Limited.

(*ii*) Calculate per annum the effective cost of funds made available to Aangi Limited.

(*8 marks*)

(*b*) The following information is available in respect of Security-X and Security-Y :

Security	*b*	Expected Rate of Return
X	1.8	22.00%
Y	1.6	20.40%

Rate of return of market portfolio is 15.3%

If risk free rate of return is 7%, are these securities correctly priced ?

What would be the risk free rate of return, if they are correctly priced ?

(*8 marks*)

6. Calculate the Net Working Capital requirement for Vertical Ltd. from the following information :

	₹ (per unit)
Raw Material	160
Direct Labour	60
Overhead	120
Total Cost	340
Profit	60
Selling Price	400

Raw material is held in stock on an average for four weeks. Materials are in process on an average for two weeks. Finished goods are in stock on an average for four weeks. Credit allowed by supplier four weeks. Credit allowed by Debtors eight weeks. Work in progress comprise 100% material cost and 50% conversion cost. Lag in Payment of Wages 1½ week. Time lag in payment of overhead expense, four weeks.

Other information :

Cost of Sales	¼ of total sales
Cash in hand/bank	₹ 50,000
Expected level of production	1,04,000 units

One year is taken as 52 weeks.

Production is carried evenly throughout the year.

State your assumptions, if any.

(*16 marks*)

———— o ————

TABLE - 1 : **PRESENT VALUE 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	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