Roll No.........................

Time allowed : 3 hours | *Maximum marks : 100*

Total number of questions : 7 | *Total number of printed pages : 7*

NOTE : *1. Answer FIVE questions including Question No.1 which is compulsory. All working notes should be shown distinctly.*

2. Tables showing the present value of Re.1 and the present value of an annuity of Re.1 for 15 years are annexed.

1. Comment on ***any four*** of the following :

   (i) Investment, financing and dividend decisions are inter-related.

   (ii) Total risk is the risk associated with combined leverage.

   (iii) The depository system functions very much like the banking system.

   (iv) Stock options are for speculators.

   (v) Inspite of many advantages, the stable dividend policy suffers from certain limitations.

(5 marks each)

2. (a) The turnover of Zenith Ltd. is Rs.100 lakh of which 72% is on credit. Debtors are allowed one month to clear off the dues. A factoring company is willing to advance 80% of the bills raised on credit for a fee of 1% a month plus a commission of 5% on the total amount of debts. Zenith Ltd. as a result of this arrangement is likely to save Rs.48,000 annually in management costs and avoid bad debts at 1% on the credit sales.

   A bank has come forward to make an advance equal to 80% of the debts at an annual interest rate of 15%. However, its processing fee will be at 1% on the debts. Would you accept factoring or the offer from the bank ?

(8 marks)

   (b) An Indian telecom company had approached Punjab National Bank for forward contract of £5,00,000 delivery on 31st May, 2008. The bank had quoted a rate of Rs.61.60/£ for the purchase of pound sterling from the customer. But on 31st May, 2008, the customer informed the bank that it was not able to deliver the pound sterling as anticipated receivable from London has not materialised and requested the bank to extend the contract for delivery by 31st July, 2008.

The following are the market quotes available on 31st May, 2008 :

Spot *(Rs./£)*	62.60/65
1-month forward premium	20/25
2-month forward premium	42/46
3-month forward premium	62/68

Flat charges for cancellation of forward contract is Rs.500.

You are required to find out the extension charges payable by the telecom company.

(6 marks)

(c) Based on the credit rating of the bonds, Rakshit has decided to apply the following discount rates for valuing bonds :

Credit Rating	*Discount Rate*
AAA	364-day T-bill rate + 3% spread
AA	AAA + 2% spread
A	AAA + 3% spread

He is considering to invest in a AA rated, Rs.1,000 face value bond currently selling at Rs.1,025.86. The bond has five years to maturity and the coupon rate on the bond is 15% per annum payable annually. The next interest payment is due one year from today and the bond is redeemable at par. (Assume the 364-day T-bill rate to be 9%.)

You are required to —

(i) Calculate the intrinsic value of the bond for Rakshit. Should he invest in the bond ?

(ii) Calculate the current yield (CY) and the yield to maturity (YTM) of the bond.

(6 marks)

3. Distinguish between ***any four*** of the following :

(i) 'Commodity futures' and 'financial futures'.

(ii) 'Factoring' and 'securitisation'.

(iii) 'Bilateral netting' and 'multilateral netting'.

(iv) 'Treasury management' and 'financial management'.

(v) 'Current account' and 'capital account' in balance of payment.

(5 marks each)

4. (a) Three Star Co. is to decide between debt funding and equity funding for its expansion programme. Its current position is as under :

	Rs.
5% Debt	4,00,000
Equity capital (Rs.10/share)	10,00,000
Surplus	6,00,000
Total capitalisation	20,00,000
Sales	60,00,000
Less : Costs	53,80,000
Profit before interest and taxes (PBIT)	6,20,000
Less : Interest	20,000
Profit before taxes (PBT)	6,00,000
Less : Income-tax @ 33.99%	2,03,940
Profit after tax (PAT)	3,96,060

The expansion programme is estimated to cost Rs.10,00,000. If it is financed through debt, the rate of interest of new debt will be 7%. If the expansion programme is financed through fresh equity shares, the new shares can be sold netting Rs.25/share. The expansion will generate additional sales of Rs.3,00,000 with after tax return of 5%. If the company is to follow a policy of maximising the market value of its shares, which form of financing should it choose and why ? (Price-earnings ratio is given to be 15.)

(15 marks)

(b) Dhanpat, an investor, is seeking the price to pay for a security, whose standard deviation is 5%. The correlation coefficient for the security with the market is 0.75 and the market standard deviation is 4%. The return from risk-free securities is 6% and from the market portfolio is 11%. Dhanpat knows that only by calculating the required rate of return, he can determine the price to pay for the security. What is the required rate of return on the security ?

(5 marks)

5. (a) Zarina Ltd. sells goods on a gross profit of 25%. It takes depreciation as a part of cost of production. Further information available is as under :

Particulars	*Annual Figures (Rs. in '000)*
Sales (2 months credit)	1,800
Material consumption (one month credit)	450
Wages (Lag in payment - one month)	360
Cash manufacturing expenses (Lag in payment - one month)	480
Administrative expenses (Lag in payment - one month)	120
Sales promotion expenses (Quarterly paid in advance)	60
Tax payable in four instalments of which one lies in next year	150

The company maintains a month's stock each of raw material and finished goods. It also keeps Rs.1,00,000 in cash.

You are required to assess the working capital requirement from the above data.

(15 marks)

(b) Describe the features of 'index futures'. How are interest rate futures settled ?

(5 marks)

6. Akshay Machines Ltd. currently manufactures 10,000 units annually on a machine which has book value of Rs.60,000 (it was purchased for Rs.1,20,000 six years ago). This machine is not fully depreciated for tax purposes. The manufacturing cost per unit is as under :

	Rs.
Direct labour and material	24
Variable overheads	24
Fixed overheads	16

It is expected that old machine can be used for indefinite period after suitable repairs at estimated cost of Rs.40,000 per annum. On the other hand, Modern Machine Tools offers a machine with latest technology at Rs.3,00,000 after trading off old machine for Rs.30,000. The new machine is expected to last for 10 years at the end of which its salvage value will be Rs.20,000. However, the old machine can be sold for Rs.40,000 in open market. The projected cost per unit on the new machine will be as under :

	Rs.
Direct labour and material	14
Variable overheads	24
Fixed overheads	20

The fixed overheads are allocated from other departments plus depreciation on machinery. The cost of old and new machinery will be depreciated in 10 years for tax purposes and the tax rate will be 30%. The minimum rate of return is expected to be 10% and the annual production will stay at 10,000 units. Ignoring capital gains, advise whether new machine should be installed or not.

(20 marks)

7. Write notes on ***any four*** of the following :

    (i) Vertical capital structure

    (ii) Exchange rate forecasting

    (iii) Working capital and dividend policy

    (iv) Semi-strong form of market efficiency

    (v) Bridge loans.

(5 marks each)

——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