NEW SYLLABUS

Roll	No		
α			

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 71 for 15 years are annexed.
- 1. Comment on the following:
 - Financial sector performs basic economic function of intermediation through transformation mechanisms.
 - (b) Project review is a very important aspect of the entire project life.
 - (c) A firm having high current ratio may not necessarily be treated as being favourably placed as regards payment of its current liabilities.
 - Sharpe ratio is a risk adjusted measure of return to evaluate the performance of a portfolio. (d) (5 marks each)

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

- 2. Distinguish between the following:
 - 'Forfaiting' and 'export factoring'.
 - 'Net net net lease' and 'update lease'. (b)
 - 'Interest rate parity' and 'purchasing power parity'. (c)
 - (d) 'Call premium' and 'put premium'.

(4 marks each)

OR (Alternate question to Q.No. 2)

- **2A.** (i) What are the risks and uncertainties in capital budgeting decisions?
 - (ii) Explain 'pecking order hypothesis' relevant to capital structure planning.
 - (iii) Describe the meaning of 'pegging of currency'. Highlight the intermediate arrangements for determining exchange values of foreign currency.
 - (iv) 'Reverse stock split' is generally an indication of financial difficulty. Elucidate.

(4 marks each)

2/2015/FTFM (N/S) P.T.O. : 2 :

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

- **3.** (a) ABC Chemicals Ltd. is considering two mutually exclusive proposals. Your advice is sought for choice between the two options under consideration :
 - (i) Purchase of petrol truck
 - (ii) Purchase of a battery powered truck

	Year	Petrol truck	Battery powered truck
Purchase cost (₹)	0	1,50,000	2,50,000
Operating cost (₹)	1	24,000	12,000
	2	34,000	12,000
	3	29,000	12,000
	4	31,000	12,000
	5	_	12,000

Assume an investment incentive of 100% initial depreciation allowance and a 30% incidence of corporate tax. No depreciation is allowed on subsequent years. Taxes are promptly paid. A return of 10% after tax as investment incentives is required.

You are required to find out equivalent cost for two options.

(4 marks)

(b) Sagar Ltd. has been in IT business for six years and enjoys a favourable market reputation. Corporate tax is 30%. They anticipated that the demand for IT solutions would increase considerably since many foreign firms are setting-up their BPO centres in India. For an expansion project, they propose to invest ₹22 crore to be funded by new debt and equity on 50:50 basis. Enquiries with merchant bankers reveal that funds can be available at following rates:

	Rate
Debt	
First ₹5 crore	10%
Next ₹5 crore	12%
All additional funds	15.72%
Equity	12%
Risk gradation by company	2% over cost of capital

You are required to compute the appropriate risk adjusted discount rate.

(4 marks)

(c) Describe the tool that provides insights into whether a company is creating or destroying wealth.

(4 marks)

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(d) A group of new customers with 10% risk of non-payment, desires to establish business connection with you. The group desires one and a half months credit and is likely to increase the sales of your concern by ₹1,20,000 per annum. Cost of sales would be 80% of sales. Tax rate is 30% and required rate of return is 40% (after tax). Should the new business connection be established? Give your decision with supporting calculations.

(4 marks)

OR (Alternate question to Q.No. 3)

3A. (i) Describe various tools of treasury management.

(4 marks)

(ii) From the following given operating data, calculate the degree of operating leverage of the two companies:

	ABC Ltd.	XYZ Ltd.
Sales (₹)	40 lakh	50 lakh
Variable expense (as % of sales)	40%	30%
Fixed cost (₹)	10 lakh	20 lakh

Also, state which company has the greater business risk and why?

(4 marks)

(iii) Madhur Ltd., an Indian company has an export exposure of 100 lakh Yen value at December end. Yen is not directly quoted against Rupee. The current spot rates are INR/USD = ₹63.60 and JPY/USD = 124.75 Yen. In December end, it is estimated that Yen will be depreciated to 144 and Rupee to 65 against a Dollar.

You are required to calculate the expected loss if hedging is not done.

(4 marks)

(iv) Diva Ltd. has 10 lakh equity shares outstanding at the end of accounting year 2014-15. The current market price of the shares is ₹150 each. The Board of directors of the company has recommended ₹8 per share as dividend. The rate of capitalisation appropriate to the risk class to which the company belongs is 12%.

Based on Modigliani-Miller approach, calculate the market price of the share if the recommended dividend is – (a) declared; and (b) not declared.

(4 marks)

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4. (a) There are various sources of permanent working capital. Comment.

(4 marks)

(b) In a portfolio of the company, ₹2,00,000 have been invested in Asset-X which has an expected return of 8.5%, ₹2,80,000 in Asset-Y, which has an expected return of 10.2% and ₹3,20,000 in Asset-Z which has an expected return of 12%. What is the expected return for the portfolio?

(4 marks)

(c) Saraswati Engineering Company is considering its working capital investment for the next year. Estimated fixed assets and current liabilities for the next year are ₹2.60 crore and ₹2.34 crore respectively. Sales and profit before interest and taxes (PBIT) depend on investment in current assets – particularly inventories and book debts. The company is examining the following alternative working capital policies:

Working capital	Investment in current	Estimated sales	PBIT
policy	assets (₹ in crore)	(₹in crore)	(₹ in crore)
Conservative	4.50	12.30	1.23
Moderate	3.90	11.50	1.15
Aggressive	2.60	10.00	1.00

You are required to calculate the rate of return on total assets for each policy.

(4 marks)

(d) ABC Ltd. has 10,000 shares of ₹7 each, ₹10,000, 12% debentures and ₹20,000 as short-term loan @10%. Tax rate for the company is 30%. Assume the cost of equity capital as 20%. Calculate weighted average cost of capital at book value.

(4 marks)

5. (a) A company has two alternatives for selecting a new machine to replace its existing machine. The cash flows under the two alternatives are as follows:

	Machine-A	Machine-B
	(₹ in lakh)	(₹ in lakh)
Year 0 cash outflow	25	40
Year 1 cash inflow	Nil	10
Year 2 cash inflow	5	14
Year 3 cash inflow	20	16
Year 4 cash inflow	14	17
Year 5 cash inflow	14	15

2/2015/FTFM (N/S) Contd

You are required to appraise the two alternatives using net present value and profitability index methods.

The cost of capital of the company is 15%.

(8 marks)

(b) Aman Ltd. is producing a single Product-X and presently commanding a market share of 15%. The following cost details are provided:

	₹	₹
Sales price		100
Less: Material	40	
Labour	20	
Overheads	10	_70
Contribution		30
Less: Fixed cost		20
Profit		10

The current volume of sale of Product-X is 15,000 units. It has now been estimated that the market share can be increased up to 25% from next year for 3 years if the following promotional expenses are incurred in the corresponding previous year:

For Year-1	₹1,00,000
For Year-2	₹75,000
For Year-3	₹50,000

There will be an increase in fixed cost by ₹30,000 when production is increased from present level. The company wants to achieve 15% return and would apply discounted cash flow technique for evaluation.

You are required to evaluate the impact of above situation on profitability when —

- (i) Market share is increased by 25%; and
- (ii) Market share is increased by 20%.

(8 marks)

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6. A newly formed company has applied for a short-term loan to a commercial bank for financing its working capital requirements. Projected statement of profit and loss is as follows:

		₹
Sales (20% cash)		21,00,000
Less: Cost of goods sold		15,30,000
Gross profit		5,70,000
Less: Administrative expenses	1,40,000	
Selling expenses	1,30,000	2,70,000
Profit before tax (PBT)		3,00,000
Less: Tax		1,00,000
Profit after tax (PAT)		2,00,000
Cost of goods sold has been derived as follows:		
Material		8,40,000
Wages and money expenses (one month arrear)		6,25,000
Depreciation		2,35,000
		17,00,000
Less: Stock (10% of finished goods)		1,70,000
		15,30,000

The figures given above relate only to the goods that have been finished and not to work-in-progress; goods equal to 15% of year's production (in terms of physical units) are in progress on an average requiring full materials and only 40% of other expenses. The company believes in keeping two months consumption of material in stock. Credit allowed to customers is 2 months. Selling expenses and administrative expenses are one month in arrears. Credit allowed by supplier is $1\frac{1}{2}$ months.

You are requested by the bank to prepare an estimate of requirements of working capital for the company. Add 10% to your estimated figure to cover contingencies.

		(16 marks)
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2/2015/FTFM (N/S) Contd

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YEAR	15	0.5568	0.4970	0.4440	0.3971	0.3555	0.3186	0.2858	0.2567	2	0.2307	0.2307	0.2307 0.2076 0.1869	0.2307 0.2076 0.1869 0.1685	0.2307 0.2076 0.1869 0.1685 0.1520	0.2307 0.2076 0.1869 0.1685 0.1520						
YEAR	-	0.5847	0.5268	0.4751	0.4289	0.3875	0.3505	0.3173	0.2875		0.2607	0.2607	0.2607 0.2366 0.2149	0.2607 0.2366 0.2149 0.1954	0.2607 0.2366 0.2149 0.1954 0.1778	0.2607 0.2366 0.2149 0.1954 0.1778	0.2607 0.2366 0.2149 0.1954 0.1778 0.1619	0.2607 0.2366 0.2149 0.1954 0.1778 0.1619 0.1476	0.2607 0.2366 0.2149 0.1954 0.1778 0.1619 0.1476 0.1346	0.2607 0.2366 0.2149 0.1954 0.1778 0.1619 0.1476 0.1346	0.2607 0.2366 0.2149 0.1954 0.1778 0.1619 0.1476 0.1346 0.1228	0.2607 0.2366 0.2149 0.1954 0.1778 0.1476 0.1328 0.1228 0.1122
YEAR	10	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855	0.3522	0.3220		0.2946	0.2946	0.2946 0.2697 0.2472	0.2946 0.2697 0.2472 0.2267	0.2946 0.2697 0.2472 0.2267 0.2080	0.2946 0.2697 0.2472 0.2267 0.2080	0.2946 0.2697 0.2472 0.2267 0.2080 0.1911	0.2697 0.2697 0.2472 0.2267 0.2080 0.1911 0.1756	0.2697 0.2697 0.2267 0.2267 0.1911 0.1756 0.1615	0.2697 0.2697 0.2472 0.2267 0.2080 0.1911 0.1756 0.1756	0.2697 0.2697 0.2267 0.2267 0.2080 0.1911 0.1756 0.1615 0.1369	0.2697 0.2697 0.2472 0.2267 0.2080 0.1911 0.1756 0.1486 0.1369 0.1262
YEAR	თ	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241	0.3909	0.3606		0.3329	0.3329	0.3329 0.3075 0.2843	0.3329 0.3075 0.2843 0.2630	0.3329 0.3075 0.2843 0.2630 0.2434	0.3329 0.3075 0.2843 0.2630 0.2434	0.3329 0.3075 0.2843 0.2630 0.2434 0.2255	0.3329 0.3075 0.2843 0.2630 0.2434 0.2255 0.2090	0.3329 0.3075 0.2843 0.2630 0.2255 0.2090 0.1938	0.3329 0.3075 0.2630 0.2434 0.2255 0.2090 0.1938 0.1799	0.3329 0.3075 0.2843 0.2255 0.2255 0.1938 0.1739 0.1670	0.3329 0.3075 0.2630 0.2434 0.2255 0.2090 0.1938 0.1739 0.1670 0.1552
YEAR	∞	0.6768	0.6274	0.5820	0.5403	0.5019	0.4665	0.4339	0.4039		0.3762	0.3762	0.3762 0.3506 0.3269	0.3762 0.3506 0.3269 0.3050	0.3762 0.3506 0.3269 0.3050	0.3762 0.3506 0.3269 0.3050 0.2848	0.3762 0.3506 0.3269 0.3050 0.2848 0.2660	0.3762 0.3506 0.3050 0.2848 0.2660 0.2487	0.3762 0.3506 0.3050 0.2848 0.2660 0.2487 0.2326	0.3762 0.3506 0.3050 0.2848 0.2660 0.2487 0.2326 0.2326	0.3762 0.3506 0.3269 0.2848 0.2660 0.2487 0.2326 0.2326 0.2326	0.3762 0.3506 0.3269 0.2848 0.2660 0.2487 0.2326 0.2176 0.2038 0.1909
YEAR	~	0.7107	0.6651	0.6227	0.5835	0.5470	0.5132	0.4817	0.4523		0.4251	0.4251	0.4251 0.3996 0.3759	0.4251 0.3996 0.3759 0.3538	0.4251 0.3996 0.3759 0.3538	0.3996 0.3759 0.3759 0.3332 0.3139	0.3996 0.3759 0.3538 0.3332 0.3139	0.3996 0.3759 0.3538 0.3139 0.2959	0.4251 0.3996 0.3538 0.3332 0.3139 0.2791	0.3996 0.3759 0.3538 0.3139 0.2791 0.2633	0.3996 0.3759 0.3538 0.3139 0.2791 0.2786 0.2486	0.3996 0.3759 0.3538 0.3332 0.2959 0.2959 0.2791 0.2633 0.2348
YEAR	ဖ	0.7462	0.7050	0.6663	0.6302	0.5963	0.5645	0.5346	0.5066	0	0.4803	0.4803	0.4803 0.4556 0.4323	0.4803 0.4556 0.4323 0.4104	0.4803 0.4556 0.4323 0.4104 0.3898	0.4556 0.4556 0.4104 0.3898 0.3704	0.4803 0.4556 0.4323 0.4104 0.3898 0.3704	0.4803 0.4556 0.4323 0.4104 0.3898 0.3704 0.3521	0.4803 0.4556 0.4323 0.4104 0.3898 0.3704 0.3521 0.3349	0.4803 0.4556 0.4323 0.4104 0.3898 0.3704 0.3521 0.3186	0.4803 0.4556 0.4323 0.4104 0.3898 0.3704 0.3521 0.3349 0.3186 0.3033	0.4803 0.4556 0.4323 0.4104 0.3898 0.3704 0.3521 0.3186 0.3186
YEAR	က	0.7835	0.7473	0.7130	0.6806	0.6499	0.6209	0.5935	0.5674	7	0.5428	0.5194	0.5194 0.4972	0.5194 0.4972 0.4761	0.5194 0.4972 0.4761 0.4561	0.5428 0.5194 0.4972 0.4761 0.4561	0.5428 0.5194 0.4972 0.4761 0.4371 0.4190	0.5428 0.5194 0.4972 0.4761 0.4371 0.4190	0.5428 0.5194 0.4972 0.4561 0.4371 0.4190 0.3855	0.5428 0.5194 0.4972 0.4761 0.4371 0.4190 0.3855	0.5428 0.5194 0.4972 0.4561 0.4371 0.4190 0.4019 0.3855 0.3552	0.5428 0.5194 0.4972 0.4561 0.4371 0.4190 0.3855 0.3700 0.3552
YEAR	4	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830	0.6587	0.6355	0.6123	2	0.5921	0.5921	0.5921 0.5718 0.5523	0.5921 0.5718 0.5523 0.5337	0.5921 0.5718 0.5523 0.5337 0.5158	0.5921 0.5718 0.5523 0.5337 0.5158	0.5921 0.5718 0.5523 0.5337 0.54887 0.4887	0.5921 0.5718 0.5523 0.5337 0.4987 0.4823	0.5921 0.5718 0.5523 0.5337 0.5337 0.4987 0.4665	0.5921 0.5718 0.5523 0.5337 0.4987 0.4665 0.4665	0.5921 0.5718 0.5523 0.5337 0.4987 0.4865 0.4665 0.4369
YEAR	m	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513	0.7312	0.7118	0.6931				0.6750 0.6575 0.6407	0.6750 0.6575 0.6407 0.6244	0.6750 0.6575 0.6407 0.6244 0.6086	0.5937 0.6575 0.6407 0.6244 0.6086	0.6575 0.6575 0.6407 0.6244 0.6086 0.5934	0.6575 0.6575 0.6244 0.6286 0.5934 0.5787	0.6575 0.6575 0.6407 0.6244 0.6086 0.5934 0.5645	0.6575 0.6575 0.6244 0.6286 0.5934 0.5787 0.5645 0.5507	0.6575 0.6575 0.6407 0.6244 0.6086 0.5934 0.5645 0.5645 0.5507
YEAR	8	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264	0.8116	0.7972	0.7831	:	0.7695	0.7695	0.7695 0.7561 0.7432	0.7695 0.7561 0.7432 0.7305	0.7695 0.7561 0.7432 0.7305 0.7182	0.7695 0.7561 0.7305 0.7305 0.7062	0.7695 0.7561 0.7305 0.7305 0.7062	0.7695 0.7561 0.7305 0.7305 0.7182 0.7062 0.6944	0.7695 0.7561 0.7305 0.7305 0.7062 0.6830 0.6830	0.7695 0.7561 0.7432 0.7305 0.7182 0.7062 0.6944 0.6830 0.6719	0.7695 0.7561 0.7305 0.7305 0.7062 0.6944 0.6830 0.6610
YEAR	-	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850		0.8772	0.8772	0.8696 0.8621	0.8696 0.8621 0.8547	0.8696 0.8621 0.8547 0.8475	0.8772 0.8696 0.8621 0.8547 0.8475	0.8696 0.8621 0.8547 0.8475 0.8403 0.8333	0.8772 0.8696 0.8621 0.8547 0.8475 0.8333 0.8333	0.8772 0.8696 0.8547 0.8475 0.8403 0.8333 0.8264	0.8772 0.8696 0.8621 0.8475 0.8403 0.8333 0.8333 0.8333	0.8772 0.8696 0.8547 0.8475 0.8403 0.8333 0.8264 0.8197 0.8130
RATE		%9	%9	%/	%8	%6	10%	11%	12%	13%		14%	14%	14% 15% 16%	14% 15% 16% 17%	14% 15% 16% 17%	14% 15% 16% 17% 19%	14% 15% 16% 17% 19% 20%	14% 15% 16% 17% 18% 19% 20%	14% 15% 16% 17% 19% 20% 21%	14% 15% 16% 17% 18% 20% 21% 22% 23%	14% 16% 17% 18% 20% 21% 22% 23% 24%

TABLE - 1: PRESENT VALUE OF RUPEE ONE

2/2015/FTFM (N/S) P.T.O.

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VALUE
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TABLE

YEAR YEAR	14 15	9.8986 10.3797	9.2950 9.7122	8.7455 9.1079	8.2442 8.5595	7.7862 8.0607	7.3667 7.6061	6.9819 7.1909	6.6282 6.8109	6.3025 6.4624	6.0021 6.1422	5.7245 5.8474	5.4675 5.5755	5.2293 5.3242	5.0081 5.0916	4.8023 4.8759	4.6106 4.6755	4.4317 4.4890	4.2646 4.3152	4.1082 4.1530	
YEAR	13	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.7499	6.4235	6.1218	5.8424	5.5831	5.3423	5.1183	4.9095	4.7147	4.5327	4.3624	4.2028	4.0530	,
YEAR	12	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.4924	6.1944	5.9176	5.6603	5.4206	5.1971	4.9884	4.7932	4.6105	4.4392	4.2784	4.1274	3.9852	
YEAR	7	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	6.2065	5.9377	5.6869	5.4527	5.2337	5.0286	4.8364	4.6560	4.4865	4.3271	4.1769	4.0354	3.9018	1
YEAR	10	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.8892	5.6502	5.4262	5.2161	5.0188	4.8332	4.6586	4.4941	4.3389	4.1925	4.0541	3.9232	3.7993	0.00
YEAR	6	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.5370	5.3282	5.1317	4.9464	4.7716	4.6065	4.4506	4.3030	4.1633	4.0310	3.9054	3.7863	3.6731	1
YEAR	ω	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	5.1461	4.9676	4.7988	4.6389	4.4873	4.3436	4.2072	4.0776	3.9544	3.8372	3.7256	3.6193	3.5179	0
YEAR	۲	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.7122	4.5638	4.4226	4.2883	4.1604	4.0386	3.9224	3.8115	3.7057	3.6046	3.5079	3.4155	3.3270	0
YEAR	9	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.2305	4.1114	3.9975	3.8887	3.7845	3.6847	3.5892	3.4976	3.4098	3.3255	3.2446	3.1669	3.0923	1000
YEAR	ĸ	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6959	3.6048	3.5172	3.4331	3.3522	3.2743	3.1993	3.1272	3.0576	2.9906	2.9260	2.8636	2.8035	7 7 7 7
YEAR	4	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.8550	2.7982	2.7432	2.6901	2.6386	2.5887	2.5404	2.4936	2.4483	0707
YEAR	ო	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4437	2.4018	2.3612	2.3216	2.2832	2.2459	2.2096	2.1743	2.1399	2.1065	2.0739	2.0422	2.0114	0,000
YEAR	7	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.7125	1.6901	1.6681	1.6467	1.6257	1.6052	1.5852	1.5656	1.5465	1.5278	1.5095	1.4915	1.4740	4 4560
YEAR	-	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	6006.0	0.8929	0.8850	0.8772	0.8696	0.8621	0.8547	0.8475	0.8403	0.8333	0.8264	0.8197	0.8130	1900
RATE		2%	%9	%2	%8	%6	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	21%	22%	23%	7070