Roll	<i>No</i>
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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.
- 4. Working notes form the part of answer.
- **1.** Comment on the following :
  - (a) The key areas with respect to structural reforms and development of financial system have been specified by Economic Development Institute of the World Bank.
  - (b) The strong position of domestic currency is at large good for the economy.
  - (c) The efficient market hypothesis supports the assumption of supremacy to market forces.
  - (d) Efficient cash pooling structures are keys to efficient and effective liquidity management.

    (5 marks each)

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

- **2.** Distinguish between the following:
  - (a) Fund based financial activities and Non-fund based financial activities.
  - (b) Private equity and Public issue.
  - (c) Accounting rate of return and Internal rate of return.
  - (d) Project monitoring and Project evaluation.

(4 marks each)

## OR (Alternate question to Q. No. 2)

**2A.** (i) Illustrate the negative covenants those are normally part of the loan agreement that is entered between a financial institution and a borrower.

(4 marks)

(ii) For the purpose of efficient treasury management in a firm, the treasury manager has to take in to consideration both macro and micro parameters. Discuss.

(4 marks)

(iii) The meaningful and successful finalisation of the deal of securitization will be achieved only if other parties are involved in addition to primary parties to the deal. Briefly explain the other parties those are involved in the securitization process.

(4 marks)

: 2:

(iv) The stock exchanges in India have made noteworthy contribution for the development of an organised capital market. To introduce the trading of derivatives on exchange platform, certain conditions are needed to be fulfilled. Discuss those conditions in brief.

(4 marks)

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

- 3. (a) M/s Abacus Ltd. has decided to fill up the position of finance officer. To test the analytical capacity of applicant, following information is provided in the scanning test. You are one of the applicants for the position of finance officer. You are required to prepare the Income Statement in the vertical format based on information given hereunder.
  - 1. The operating leverage is 2.50.
  - 2. The financial leverage is 3.00.
  - 3. The earnings per share is  $\stackrel{?}{\underset{?}{?}}$  30.
  - 4. Present market price per share is ₹ 225.
  - 5. Applicable tax rate is 33.0357%.
  - 6. Number of equity shares outstanding as of date are 20,000.

(4 marks)

- (b) The following rates are quoted in the Forex market of the London. From the information as given in the table, you are required to calculate the cost and/or value in terms of £ for Lila Ltd., who wishes to
  - (a) Buy  $\notin$  45,520 one month forward from now.
  - (b) Sell Canadian\$ 95,750 three months forward from now.

Foreign Currency	Spot	Swap Points - One month forward	Swap Points - three months forward
Canadian\$	1.8640-8650	40-30	90-80
€	1.1468-72	10-20	45-55
US\$	1.4865-70	20-30	25-35

(4 marks)

- (c) Jeeyu Ltd., is incorporated as per Companies Act, 2013, one year ago, in the State of Maharashtra. The first year's operation is being successful and company has worked above the breakeven point. The management of Jeeyu is thinking to manage ₹ 10 lakh, from the market. To avail the benefit of trading on equity, they are planning to make issue of debentures. The investment banker has suggested that they could issue the debentures at the face value of ₹ 100 and can offer the interest rate 11%. One of the directors has mentioned that, now-a-days investors are expecting the rate of return 12.50%. The company covered under the tax rate of 33%. You are required to work out:
  - (a) The issue price of debenture in terms of per debenture, and
  - (b) The effective cost of debentures from the view point of Jeevu Ltd.

(4 marks)

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: 3 :

- (d) Vivu Ltd. is a reputed chemical producing company. Vivu's shares are quoted in the market at the price of ₹ 340. Roma Mutual Fund's manager is thinking to buy the shares of Vivu. Advice the manager of Roma with respect to buy decision through the application of Gordon model based on the following information.
  - (1) The expected rate of return by equity shareholders is 10%.
  - (2) The retention ratio is 40%.
  - (3) The earnings per share recorded in the recent past year is ₹ 20.
  - (4) The expected earnings per share for next year is ₹ 25.
  - (5) The internal rate of return of Vivu Ltd. is 15%.

(4 marks)

## OR (Alternate question to Q. No. 3)

**3A.** (*i*) Strawberry Ltd. is an established confectionary maker company. Chairman of the Strawberry has recently attended one of the Management Development Programme in premier institution. He is willing to work out the Economic Value Added (EVA) of the firm. He has provided to you, the following information. You are required to calculate the EVA from the same.

1.	Profit after interest and tax	₹ 150 lakh
2.	Interest	₹ 25 lakh
3.	Borrowing interest rate	10%
4.	Owners' cost of capital	18%
5.	Net worth of the company	₹ 300 lakh
6.	Tax rate applicable	33%
7.	Overall cost of capital	15%

(4 marks)

(ii) Trufen Ltd.'s equity shares are quoted in the BSE for physical and de-mat based delivery. The derivatives of Trufen's shares are in the form of option. The share is presently traded in the market at the price of ₹ 50. The following table indicates the quoted exercise price and its related premium for call option :

Exercise Price ₹	Option Premium ₹
48	6
50	4
55	5
60	7

Required to indicate for each exercise price, whether the option is At the money, Out of the money or In the money. Also calculate the intrinsic value and time value for each exercise price.

(4 marks)

: 4:

(iii) Santra Ltd. is planning to replace an old lathe machine with a new one. The production manager has shortlisted the two alternative types of lathe machines, and provided the following information:

Particulars	Alternative I	<b>Alternative II</b>	
Name of supplier	Apple Ltd.	Grapes Ltd	
Cost of machine	₹100 lakh	₹ 50 lakh	
Resultant savings in cost			
Year 1	₹ 10 lakh	₹ 20 lakh	
Year 2	₹ 35 lakh	₹ 20 lakh	
Year 3	₹ 25 lakh	₹ 20 lakh	
Year 4	₹ 40 lakh	₹ 20 lakh	
Economical life in years	4	4	

You are required to suggest which lathe machine to be purchased, by using the discounted payback period method, and considering the applicable discount rate of 10%.

(4 marks)

(iv) Jakarta Ltd. is considering financing an expansion project of ₹ 100 lakh. The finance manager has worked out the two options by studying the macro factors of the economy, and also the operating performance of the company. The present tax rate applicable to company is 30%. The details of present position and different financing plans are as under.

P	<del>, , _ ,</del>
Particulars	Present position and Financial plans
Present	20 lakh equity shares and debentures of ₹ 50 lakh carrying
	interest rate 8%
Plan A	Issue of Equity shares at the rate of ₹ 12.50
	The expected Price earnings Ratio: 14
Plan B	Issuance of Debentures carrying interest rate 14%.
	The expected Price earnings Ratio: 12

From the above information, calculate the Indifference point at which EPS would be the same by both plan.

(4 marks)

4. (a) From the information related to annual return earned by investor's through investment in the shares of Pink Ltd.; and also the return earned by investors' community at large from index rate movements in the recognised stock exchange; compute the beta value of Pink Ltd.

Year	Return on Shares of	Return earned by		
	Pink Ltd. (%)	<b>Investors' Community (%)</b>		
2012	14.00	6.00		
2013	21.00	8.00		
2014	(6.00)	(2.00)		
2015	4.00	12.00		
2016	20.00	14.00		
2017	19.00	16.00		

(4 marks)

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(b) The shares of Paper Power Ltd. are presently quoted in the market at the rate of ₹ 504 per share. Abhay wants to play in the derivatives of Paper Power Ltd., as he holds the shares of the company. He decided to become the call option writer. The 3 months call options are quoted in the market at the rate of ₹ 505, with a premium of ₹ 5. The size of option is 100 shares of Paper Power Ltd. Work out Abhay's net payoff, if the prices of the shares on the exercise date is between ₹ 490 to 510, with intervals of price of ₹ 5.

(4 marks)

(c) Elaborate the symptoms through which an analyst can get indication about the probable financial distress of firm.

(4 marks)

(d) Comment on the following statement from the perspective of Miller and Modigliani: "It is considered as an essential for the firm to declare the dividend on equity shares to attract the fresh capital in future".

(4 marks)

- Lamuna Ltd., a carpet manufacturer in India is tendering for an export order for an America based buyer. The tender conditions state that payment will be made in US\$ at the end of 18 months from now. The marginal cost of producing the carpet is ₹ 600 per square feet. The tender quantity is 2,00,000 square feet of carpet. The normal mark-up is 25% on marginal cost, as per the practice of Lamuna Ltd. The present spot exchange rate in Mumbai is ₹ 65.08-65.18 per \$. Expected annual inflation rate in India is 9%, while in US is 3%.
  - Recommend the price to be quoted in the tender by Lamuna Ltd., to American buyer.

    (8 marks)
  - (b) Aarvi, a portfolio manager of WX Mutual Fund coordinates and take all necessary decisions to provide the sufficient return to the investors' of fund. The following information is available with respect to the portfolio created and managed by her:
    - (1) Risk free rate of interest generally applicable in an economy is 8%.
    - (2) Expected market return by investing community is 14%.
    - (3) Standard deviation of assets deployed by fund is 3.0%.
    - (4) Standard deviation registered and normally recorded by market is 4%.
    - (5) Correlation coefficient of portfolio of fund with market is 1%.

From the above information, calculate the expected rate of return of portfolio.

(8 marks)

6. Management of Rose Ltd. is contemplating the next year budget, and hence required to work out the working capital requirements for the next year. The following information has been provided by the budget committee.

## A: Estimated value for per unit of finished product

Particulars	Amount ₹ (Per Unit)
Raw materials	60
Direct wages	30
Cash based Manufacturing and administrative overhead	20
Depreciation	10
Selling and distribution overhead	10
Total cost	130
Selling price	200

# Additional information provided by the concerned committee member of budget committee is as under.

- (1) Expected level of activity would be 60,000 units.
- (2) Raw material cost consists of the following:

Particulars	₹ per unit
Dried milk powder	40
Coco butter	18
Vanila essence	2

(3) Raw materials are purchased from different suppliers, and those suppliers are extending different credit period as indicated hereunder:

Particulars	Credit period in months		
Dried milk powder	2		
Coco butter	1/2		
Vanila essence	1		

- (4) Product is in process for a period of ½ month. Production process requires 100% of dried milk powder and coco butter in the beginning of the process. Vanila essence is required at a uniform and constant rate during the process.
- (5) Direct wages and other overhead accrue at a uniform rate throughout production process.
- (6) Past trends indicate that dried milk powder is required to be stored for two months period and other materials to be stored for one month, before it would be given for the production process.
- (7) Finished goods are kept in stock for a period of one month.
- (8) It is estimated that one-fourth of total sales would be on cash basis.
- (9) The past experience also indicates that it took generally two months time to collect the receivables from the debtors.
- (10) Average time-lag in payment of all overhead is one month and ½ month in case of labour payment.
- (11) Desired cash balance to be maintained throughout the year at the level of ₹ 1 lakh. From the above information, you are required to determine the net working capital requirement on cash basis.

	(16	marks)
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YEAR YEAR YEAR YEAR YEAR YEAR	YEAR YEAR YEAR 3 4 5 6	YEAR YEAR	YEAR 6		YE	Α .	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR	YEAR 13	YEAR 14	YEAR 15
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0.9524 0.9070 0.8638 0.8227 0.7835 0.7 0.9434 0.8900 0.8396 0.7921 0.7473 0.7	0.8638 0.8227 0.7835 0.8396 0.7921 0.7473	0.7921 0.7835		0.7	0.7462	0.7107	0.6768	0.5919	0.5584	0.5847	0.5568	0.5303	0.5051	0.4810
0.8734 0.8163 0.7629 0.7130	0.8163 0.7629 0.7130	0.7629 0.7130		0.6	0.6663	0.6227	0.5820	0.5439	0.5083	0.4751	0.4440	0.4150	0.3878	0.3624
0.9259 0.8573 0.7938 0.7350 0.6806 0.	0.7938 0.7350 0.6806	0.7350 0.6806		Ö	0.6302	0.5835	0.5403	0.5002	0.4632	0.4289	0.3971	0.3677	0.3405	0.3152
0.9174 0.8417 0.7722 0.7084 0.6499 0.	0.7722 0.7084 0.6499	0.7084 0.6499		Ó	0.5963	0.5470	0.5019	0.4604	0.4224	0.3875	0.3555	0.3262	0.2992	0.2745
0.9091 0.8264 0.7513 0.6830 0.6209 0	0.7513 0.6830 0.6209	0.6830 0.6209		0	0.5645	0.5132	0.4665	0.4241	0.3855	0.3505	0.3186	0.2897	0.2633	0.2394
0.9009 0.8116 0.7312 0.6587 0.5935 0	0.7312 0.6587 0.5935	0.6587 0.5935		0	0.5346	0.4817	0.4339	6068.0	0.3522	0.3173	0.2858	0.2575	0.2320	0.2090
0.8929 0.7972 0.7118 0.6355 0.5674 0	0.7118 0.6355 0.5674	0.6355 0.5674		0	0.5066	0.4523	0.4039	9098.0	0.3220	0.2875	0.2567	0.2292	0.2046	0.1827
0.8850 0.7831 0.6931 0.6133 0.5428 0	0.6931 0.6133 0.5428	0.6133 0.5428		0	0.4803	0.4251	0.3762	0.3329	0.2946	0.2607	0.2307	0.2042	0.1807	0.1599
0.8772 0.7695 0.6750 0.5921 0.5194 0.	0.6750 0.5921 0.5194	0.5921 0.5194		Ö	0.4556	0.3996	0.3506	0.3075	0.2697	0.2366	0.2076	0.1821	0.1597	0.1401
0.8696 0.7561 0.6575 0.5718 0.4972 0.4	0.6575 0.5718 0.4972	0.5718 0.4972		9.	0.4323	0.3759	0.3269	0.2843	0.2472	0.2149	0.1869	0.1625	0.1413	0.1229
0.8621 0.7432 0.6407 0.5523 0.4761 0.	0.6407 0.5523 0.4761	0.5523 0.4761		ò	0.4104	0.3538	0.3050	0.2630	0.2267	0.1954	0.1685	0.1452	0.1252	0.1079
0.8547 0.7305 0.6244 0.5337 0.4561 0.3	0.6244 0.5337 0.4561	0.5337 0.4561		0.0	0.3898	0.3332	0.2848	0.2434	0.2080	0.1778	0.1520	0.1299	0.1110	0.0949
0.8475 0.7182 0.6086 0.5158 0.4371 0.3	0.6086 0.5158 0.4371	0.5158 0.4371		0.3	0.3704	0.3139	0.2660	0.2255	0.1911	0.1619	0.1372	0.1163	0.0985	0.0835
0.8403 0.7062 0.5934 0.4987 0.4190 0.3	0.5934 0.4987 0.4190	0.4987 0.4190		0	0.3521	0.2959	0.2487	0.2090	0.1756	0.1476	0.1240	0.1042	0.0876	0.0736
0.8333 0.6944 0.5787 0.4823 0.4019 0.3	0.5787 0.4823 0.4019	0.4823 0.4019		ö	0.3349	0.2791	0.2326	0.1938	0.1615	0.1346	0.1122	0.0935	0.0779	0.0649
0.8264 0.6830 0.5645 0.4665 0.3855 0.3	0.5645 0.4665 0.3855	0.4665 0.3855		0	0.3186	0.2633	0.2176	0.1799	0.1486	0.1228	0.1015	0.0839	0.0693	0.0573
0.8197 0.6719 0.5507 0.4514 0.3700 0.3	0.5507 0.4514 0.3700	0.4514 0.3700		Ö	0.3033	0.2486	0.2038	0.1670	0.1369	0.1122	0.0920	0.0754	0.0618	0.0507
0.8130 0.6610 0.5374 0.4369 0.3552 0.	0.5374 0.4369 0.3552	0.4369 0.3552		Ö	0.2888	0.2348	0.1909	0.1552	0.1262	0.1026	0.0834	0.0678	0.0551	0.0448
0.8065 0.6504 0.5245 0.4230 0.3411 0.	0.5245 0.4230 0.3411	0.4230 0.3411		0	0.2751	0.2218	0.1789	0.1443	0.1164	0.0938	0.0757	0.0610	0.0492	0.0397
0.8000 0.6400 0.5120 0.4096 0.3277 0.3	0.5120 0.4096 0.3277	0.4096 0.3277		0	0.2621	0.2097	0.1678	0.1342	0.1074	0.0859	0.0687	0.0550	0.0440	0.0352

TABLE-1: PRESENT VALUE OF RUPEE ONE

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YEAR	<del>.</del>	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	7.1909	6.8109	6.4624	6.1422	5.8474	5.5755	5.3242	5.0916	4.8759	4.6755	4.4890	4.3152	4.1530	4.0013	3.8593
YEAR	4	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.9819	6.6282	6.3025	6.0021	5.7245	5.4675	5.2293	5.0081	4.8023	4.6106	4.4317	4.2646	4.1082	3.9616	3.8241
YEAR	13	9:3336	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	3.9124	3.7801
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	3.8514	3.7251
YEAR	Ę	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	3.7757	3.6564
YEAR	5	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	3.6819	3.5705
YEAR	o	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	3.5655	3.4631
YEAR		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	3.4212	3.3289
YEAR	-	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	3.2423	3.1611
YEAR	φ	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	3.0205	2.9514
YEAR	ю	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	2.7454	2.6893
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	2.4043	2.3616
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	1.9813	1.9520
YEAR	8	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	1.4568	1.4400
YEAR	-	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8547	0.8475	0.8403	0.8333	0.8264	0.8197	0.8130	0.8065	0.8000
RATE		%9	%9	4.2	<b>8</b> %	%6	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	21%	25%	23%	24%	25%

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