INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

11th September 2018

Subject CT2 – Finance and Financial Reporting

Time allowed: Three Hours (10.30 – 13.30 Hours)

Total Marks: 100

INSTRUCTIONS TO THE CANDIDATES

1. ***Please read the instructions inside the cover page of answer booklet and instructions to examinees sent along with hall ticket carefully and follow without exception.***
2. ***Mark allocations are shown in brackets.***
3. ***Attempt all questions, beginning your answer to each question on a separate sheet. <u>However, answers to objective type questions could be written on the same sheet</u>.***
4. ***Please check if you have received complete Question Paper and no page is missing. If so, kindly get new set of Question Paper from the Invigilator.***

AT THE END OF THE EXAMINATION
Please return your answer book and this question paper to the supervisor separately. You are not allowed to carry the question paper in any form with you.

Q. 1) Which of the following is not true about taxation in India?

A. Indian Income Tax laws tax individuals as per different slab rates of income.
B. Goods and Services Tax (GST) became effective in 2017.
C. Long term capital gains are taxed.
D. Insurance companies are exempt from taxation. **[2]**

Q. 2) Which of the following best describes the possibility of an agency relationship between company directors and debenture holders?

A. There is no agency relationship because the debenture holders are protected by the terms of their debenture
B. The directors could indulge in risky behavior that threatens the value of the debenture holders' stake in the company.
C. The debenture holders do not appoint the directors and so the directors are not the debenture holders' agents.
D. The debenture holders bear exactly the same agency risks as the shareholders. **[2]**

Q. 3) Which of the following are variants of basic ordinary shares?

I. Redeemable shares
II. Shares with multiple voting rights
III. Preference shares
IV. Golden shares for specific industries

A. III only
B. I, II, III
C. All of the above
D. II, III, IV **[2]**

Q. 4) A project that has been under review for some time has been modified so that the cash receipts will remain the same, but their timing will be brought forward throughout the length of the project. How will this affect the project's internal rate of return and net present value (using a positive risk discount rate)?

A. The internal rate of return and net present value will both decrease.
B. The internal rate of return and net present value will both increase.
C. The internal rate of return will increase and the net present value will decrease.
D. The internal rate of return will decrease and the net present value will increase. **[2]**

Q. 5) India Pvt. Ltd. has 2 lakh shares outstanding priced at Rs.50 a share. A rights issue will allow one share to be purchased for every five shares currently held by shareholders for Rs.30 each. Which of the following will be true post the rights issue?

A. The number of shares outstanding will fall to 16 million.
B. The firm will raise Rs.15 lakhs.
C. The stock price will fall to Rs.46.67.
D. The company's total value will decrease to Rs.88 lakhs. **[2]**

Q. 6) Which accounting ratio is generally not used to measure profitability?

A. Profit Margin
B. Asset Utilization Ratio
C. Quick Ratio
D. Return on Capital employed **[2]**

Q. 7) Which of the following organizations is a regulator in India?

A. Federation of Indian Chambers of Commerce & Industry
B. Pension Fund Regulatory and Development Authority
C. Insurance Information Bureau of India
D. Bombay Stock Exchange **[2]**

Q. 8) If a Government in any country issues 50 year bonds, which types of companies will be most interested to buy these bonds?

A. Health Insurance Companies which sell only annual insurance policies
B. General Insurance Companies
C. Life Insurance Companies
D. Agriculture Insurance Companies **[2]**

Q. 9) Which option amongst those given below, cannot be traded in Secondary Market by investors?

A. A share of a listed company
B. A tax free bond issued by Central Government
C. With profit policy issued by insurance company
D. None of the above **[2]**

Q. 10) If an insurance company is not able to produce underwriting profit for a year, what could be the explanation?

A. High claim reserves for the outstanding claims
B. Low investment income environment
C. Excessive purchase of Reinsurance cover
D. All of the above **[2]**

Q. 11) Kriti established a proprietary actuarial consulting practice a few years ago which has been quite successful. Kriti is considering offering a partnership to her longest serving actuary Avinash.

i) Discuss the implications for Kriti of making this employee a partner. (3)

ii) Also discuss the considerations for Avinash in accepting the offer. (2)

iii) What could be the key benefit of registering the business as a Limited Liability Partnership? (1)
[6]

Q. 12) **i)** Explain the beta of a stock along with formula. (2)

ii) How can beta be determined? (3)

iii) As an active stock market investor, would you invest in a stock with a beta of 1 or -1? (2)

iv) Name a financial instrument that is likely to have a beta of 0. (1)
[8]

Q. 13) **i)** A pharmaceutical company is considering launching a new line of products which are not available in the Indian market yet however are well adopted in the Western world, being preventive rather than curative in nature. What are the various considerations the Company may have before proceeding with this investment? (4)

ii) The Company has declared modest dividends in the last few years despite good profits, hence has a good pool of retained earnings. The Company would however wish to declare some dividends in the next couple of years so market sentiment is positive. Comment on the suitability of any four methods of project evaluation for this investment? (4)
[8]

Q. 14) Several insurance companies in India have recently listed on the Indian stock exchange. Is the listing likely to affect their dividend policy and how? **[5]**

Q. 15) ABC Pvt. Ltd. has a debt: equity ratio of 1:1. The risk-free rate of return is 7%, the equity risk premium derived from the market is 5% and the gross cost of debt is 9%. Its beta is 1.5 and assume any profit is taxed at 25%.

i) Calculate its weighted average cost of capital. (2)

ii) ABC is concerned about its high debt: equity ratio. If ABC were to repay all debt, what would be the required return to equity? (2)
[4]

Q. 16) Shivali is seeking funding for a company that she wishes to establish. Given the scale and riskiness of the project, bank financing is proving to be a challenge, however a venture capital company has offered to invest in convertible loan stock.

Evaluate this option against a venture capitalist funding initial and running expenses for a 51% stake in the company. Shivali will not have to compensate any losses incurred in the business however will need to actively involve the venture capitalist in the day-to-day running of the business. The venture capitalist will offer a buyback to Shivali after three years based on an independent valuation. What would you recommend? **[5]**

Q. 17) Describe any four key types of derivatives. **[4]**

Q. 18) **i)** List the main content of an auditor report. (3)

ii) Describe the matching and dual aspect concepts of accounting. (3)
[6]

Q. 19) There are general insurance and life insurance companies operating in a country, each of which is governed and regulated by a different regulator. If you want to interpret the accounts of these companies for your investment decision, what limitations and challenges are possible? **[4]**

Q. 20) An interior designer company "ABC Ltd." has been set up on January 1, 2017 to provide advice to high value customers. The company has taken an office on rent starting from February 1, 2017.

The terms of payment for rent are as follows –

1) Annual payment for 12 months will be INR 15917.
2) First month rent payment will be INR 1000.
3) Every month rent will be increased by 5% of previous month rent on compounded basis.

ABC Ltd. List of Balances on December 31, 2017 (Amount in INR)

Account	
Laptops	35,000
Office Equipment	20,000
Office Supplies	2,000
Trade Receivables	1,500
Cash	1,000
Bills Receivables	5,000
Office Building Rent	15,917
Dividends	5000
Employees' Salaries	10,000
Office Electricity Bill	4,000
Mobile and Internet Bill	583
-	-
Unearned Fees	10,000
Share Capital	32,000
Trade Payables	3,000
Fee Revenue Earned	55,000

In addition, the following information is not reflected in the figures above:-

1. The Laptops and Office equipment purchase date: February 1, 2017 and having 10 years useful life.
2. The inventory of supplies on December 31 is INR 1000.
3. Fee revenue of INR 2000 is due from customers.
4. Unearned fees include INR 1000 earned in December.
5. December salaries of employees total INR 4000 have not been paid.
6. The bills receivable account is a six month bill for INR 5000 given by a customer on July 1, 2017. This bill carries INR 200 as interest income for the remaining financial year which will be paid at the end of the financial year.

7. Income tax of INR 3000 is payable on December 31.
8. The company's depreciation policy uses the straight line basis, with no salvage value after the useful life of machines and equipment.

Produce a profit and loss account, a statement of retained earnings and a balance sheet (statement of financial position) for ABC Ltd for the year ended December 31, 2017. **[20]**

Q. 21) **i)** Calculate the current assets of a company from the following information:

Inventory turnover ratio = 4 times
Inventory at the end is Rs.20,000 more than the inventory in the beginning.
Revenue from Operations Rs.3,00,000 and gross profit ratio is 20% of revenue from operations.
Current liabilities = Rs.40,000
Quick (Acid Test) ratio = 0.75 : 1 (6)

ii) The debt equity ratio of X Ltd. is 0.5 : 1. Which of the following would increase/decrease or not change the debt equity ratio?

a) Further issue of equity shares
b) Cash received from debtors
c) Sale of goods on cash basis
d) Redemption of debentures or bonds
e) Purchase of goods on credit.
f) Stock (shares) split.
g) Fire destroys uninsured machinery in the manufacturing premises.
h) Payment of dividends this year, which was announced last year. (4)

[10]

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