

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATIONS-2022

B.Tech-IV Semester (All branches)

COURSE CODE (CREDITS): 18B11HS411 (3)

MAX. MARKS: 35

COURSE NAME: Finance & Accounts

COURSE INSTRUCTORS: Triambica Gautam & Dr. Amit Srivastava

MAX. TIME: 2 Hours

*Note: All questions are compulsory. Marks are indicated against each question in square brackets.*

**Q1.** Answer the following briefly. (30 to 50 words)

- Describe the identifying feature of a real account.
- Gross Profit = Cost of Goods sold – Sales. Is this correct? If not write the correct relationship.
- Liquidity ratio does not indicate the quality of the current assets and liabilities. Comment.
- Define an optimum capital structure for any organization.
- Explain any one limitation of profit maximization.
- How does the limited liability feature in equity capital help a company raise funds?

[1x6=6]

**Q2.** Calculate the cost of debt and equity in the following case and also the weighted average cost of capital for the organization using book value weights. Equity share of face value Rs10, is currently selling in the market at Rs70. The dividend expected to be paid in the next year is Rs3 per share and dividend has been growing steadily at 8% for the last 6 years. Debt is in the form of 14% debentures of Rs100 face value, issued at Rs95 per debenture to be redeemed at Rs105, 5 years later. Tax rate applicable to this organisation is 30%. Total balance sheet value of debentures is Rs35,00,000 and the equity value is Rs 60,00,000.

[2+2+1]

**Q3.** Given below are the cash inflows of a project that requires an investment of Rs 2,00,000. Calculate the discounted payback and the MIRR of this project.

Year	1	2	3	4	5
Cash inflow (Rs)	50000	50000	60000	60000	150000

[2+4]

Q4. Explain the limitations of the IRR method of capital budgeting.

[2]

Q5. What is frequency of compounding and how does it relate to the Effective Interest Rate (EIR)? Support your answer with a suitable example.

[3]

Q6. An individual takes a home loan of Rs 20,00,000 at 8% p.a. for 5 years. He will be paying back this loan in equal annual installments. Calculate the value of this annual installment and prepare the loan amortization schedule rounding off values to the nearest rupee. How much would he have paid to the bank in 5 years if he paid in equal monthly installments instead of annual installments?

[1+3+1]

Q7. Following is the selected financial data for two similar companies A and B:

Parameter	A	B
Number of units sold	10,000	15,000
Price per unit	Rs 80	Rs 70
Variable Cost (as % of Sales)	60%	70%
Fixed Cost	Rs 80,000	Rs 1,20,000
Amount of interest	Rs 50,000	Rs 30,000

Calculate the combined leverage of the two firms and explain which of the two is riskier? (Assuming corporate tax rate 30%)

[3+1]

Q8. You've been given an investment offer by two different insurance agents, agent X and agent Y, for the initial investment of Rs 10,00,000. Agent X will give you Rs 1,50,000 each year from years 3-8, Rs 1,00,000 each year from years 12-15 and Rs 3,00,000 in the 15<sup>th</sup> year. The offer of Agent Y is Rs 2,00,000 each year from year 1-6, Rs 1,50,000 each year from years 10-12 and Rs 8,00,000 at the end of 20<sup>th</sup> year. Evaluate both the investment options assuming discount rate of 8% per annum and recommend the best one for investment.

[4]