**Birla Institute of Technology & Science, Pilani**

**Work-Integrated Learning Programmes Division**

**Second Semester 2023-2024**

**Comprehensive Examination**

**(EC-3 Regular)**

Course No. : BA ZG521

Course Title : FINANCIAL MANAGEMENT

Nature of Exam : Open Book

Weightage : 40%

No. of Pages = 3

# **No. of Questions = 4**

Duration : 2 ½ Hours

Date of Exam : Sunday, 19/05/2024 (AN)

Note:

1. Please follow all the *Instructions to Candidates* given on the cover page of the answer book.
2. All parts of a question should be answered consecutively. Each answer should start from a fresh page.
3. Assumptions made if any, should be stated clearly at the beginning of your answer.
4. XYZ Ltd. has the following capital structure. **[10]**

|  |  |
| --- | --- |
| **Capital Structure** | **Amount in Rs.** |
| Equity capital (3 million shares of Rs. 10 par) | 30,000,000 |
| Preference capital (25000 shares of Rs.200 par, carrying 15 per cent dividend) | 5,000,000 |
| Reserves and surplus | 20,000,000 |
| Debentures (150000 debentures of Rs. 100 par, carrying 14 per cent interest) | 15,000,000 |
| Total | 70,000,000 |

The current dividend per share is Rs.1.20. The dividend per share is expected to grow at a rate of 7 per cent forever. Market prize of the equity is Rs.15. Preference shares are redeemable after five years, whereas debentures are redeemable after 6 years. The market price of preference shares and debentures is Rs.205 and Rs. 115 respectively. The tax rate for the company is 30 per cent.

Calculate:

1. Cost of equity
2. Cost of preference share
3. Cost of debt
4. Weightage Average Cost of Capital (WACC)
5. A pro forma cost sheet of a company provides the following particulars: **[15]**

|  |  |
| --- | --- |
|  | Amount per unit (Rs.) |
| Raw material | 80 |
| Direct labour | 30 |
| Overheads | 60 |
| **Total cost** | **170** |
| Profit | 30 |
| **Selling price** | **200** |

The following further particulars are available:

(a) Raw material in stock, on an average one month; materials in process (100% raw material cost, 50% of labour and 50% overhead cost), on average half a month; finished goods in stock (at total cost), on an average one month.

(b) Credit allowed by suppliers is one month; credit allowed to debtors is two months; lag in payment of wages is 10 days; lag in payment of overhead expenses is one month; one-fourth of the output is sold against cash; cash in hand and at bank is expected to be Rs. 25,000.

You are required to prepare a statement showing working capital needed to finance a level of activity of 1,04,000 units of production. You may assume that production is carried on evenly throughout the year, and wages and overheads accrue similarly. You are supposed to add 10 per cent to your computed figure to allow for contingencies. Assume 360 days in a year.

**Q.3** IndiLaptop is considering relaxing its credit standards to increase its currently sagging sales of 10,000 crores units. As a result of the proposed relaxation, sales are expected to increase by 20% during the coming years; the average collection period is expected to increase from 60 to 80 days; and bad debts are expected to increase from 2% to 6% of sales. The selling price per Laptop unit is Rs. 40,000 and the variable cost per unit is Rs. 31,000. The cost of capital for IndiLaptop Ltd. 14%. Evaluate the proposed relaxation and make a recommendation to the firm. Assume year as 360 days. **[8]**

**Q.4** Explain the concept, significance and determinants of Capital Structure. **[7]**

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**Financial Management (ZG521)**

**Formula Sheet**

Cost of Debt (Kd) = = +



OR Close approximation = , Kd (post tax) = kd \* (1-T)



OR Kd (post tax) = Interest \* (1-tax rate)

Cost of Preference share (Kp) = =



OR Kp = Dividend/current market price of the preference share = D/P0

Cost of Equity (Ke) =  *= + g where =*



*OR*  = + β ( - )



Weighted Average Cost of Capital = WACC = + (1- T)



EOQ =



Total Fixed Cost = [Average Cost per unit – Variable Cost per unit] × No. of units sold on credit under Present Policy

Opportunity Cost = Total Cost of Credit Sales × (Collection period (Days)/ 365 (or 360) ) x (Required Rate of Return)/100

Inventory turnover period =



Debtors (Receivable) turnover period =



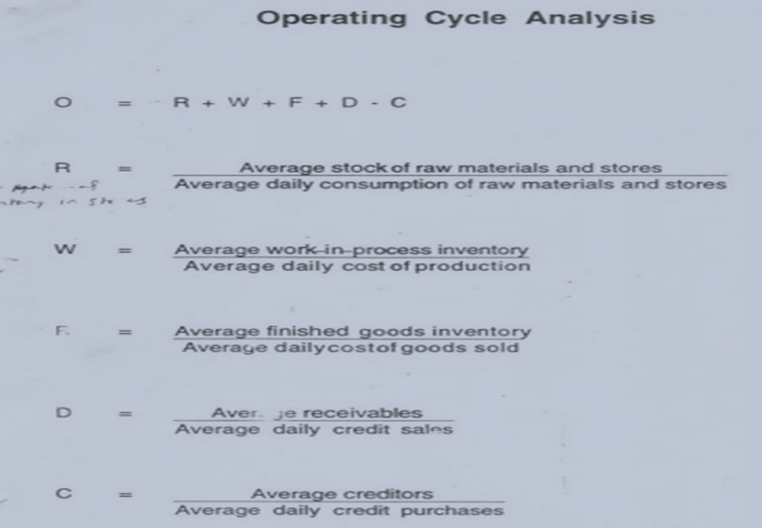
Creditors (Payables) deferral period =



Operating Cycle = Inventory turnover period + debtor’s turnover period

Cash cycle = Operating cycle – Creditors deferral period

**OR**



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