NOV 2018

Roll No. ............................ INTERMEDIATE (IPC)

GROUP I - PAPER 3

COST ACCOUNTING

& FINANCIAL MANAGEMENT

Total No. of Questions – 7

Total No. of Printed Pages – 11

Time Allowed – 3 Hours

Maximum Marks – 100

# GZA

Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate has not opted for Hindi Medium, his/her answers in Hindi will not be valued.

Question No. **1** is compulsory.

Attempt any **five** questions out of the remaining **six** questions.

Working notes should form part of the answers.

**Marks**

1. Answer the following : **4×5 =20**

(a) The following information of a work is given :

| | |
|---|---|
| Weekly working hours | 45 |
| Wage Rate per hour (₹) | 8.00 |
| Piece Rate per Unit (₹) | 4.00 |
| Normal time taken per piece | 20 Minutes |
| Normal Output per week | 100 Pieces |
| Actual Output for the week | 120 Pieces |
| Differential Piece Rate | 80% of Piece Rate when actual output is below normal output that is 100 pieces and 120% of Piece Rate when actual output is above normal output. |

You are required to calculate the earnings of a worker for a week under following plans :

(i) Differential Piece Rate and

(ii) Halsey Premium Scheme (50% sharing)

Marks

(b) A manufacturing concern was operating at margin of safety of 40% in the year 2018 and was selling its product at ₹ 75 per unit. Variable cost ratio to sales was 80% and fixed costs amounted to ₹ 5,40,000.

In the year 2019, the concern anticipates an increase in the variable costs and fixed costs by 15% and 5% respectively.

You are required to :

Find out the selling price to be fixed in the year 2019 keeping in view that concern is willing to maintain the same P/V ratio as it was in the year 2018.

(c) A Limited Company's books reveal following information :

| | |
|---|---|
| Net Income | ₹ 3,60,000 |
| Shareholders' Equity | ₹ 4,00,000 |
| Assets Turnover | 2.5 times |
| Net profit margin | 12% |

You are required to calculate ROE (Return on Equity) of the company based on the 'DuPont Model'.

(d) A Company has Sales of ₹ 1,00,00,000; Variable Cost is 55% of Sales and fixed Cost is ₹ 6,00,000. The Capital Structure of the company is : Equity ₹ 1,20,00,000 and 8% Debt ₹ 80,00,000.

Required :

(i) Calculate Company's Operating, Financial and Combined Leverages.

(ii) If the Sales amount is increased by 12%, by what percentage EBIT will increase ?

**Marks**

2\. (a) MKS Ltd. is engaged in construction sector. It took a contract to build a house for ₹ 45 lakhs. The contract commenced on 1st April, 2018. Following information, relating to contract, for the year ending on 31st March, 2019 are as under : **8**

| | ₹ |
|---|---|
| Materials purchased | 8,52,000 |
| Wages | 10,48,000 |
| Indirect expenses | 92,000 |
| Administrative charges | 1,18,000 |
| Materials at site at the end of the year | 38,000 |

A plant was purchased for the contract on 1st April, 2018 which, after charging depreciation @ 15% p.a. on the cost, appeared at ₹ 6,12,000 at the end of the year.

A supervisor who is paid ₹ 10,000 per month has devoted two-third of his time to this contract.

Two-third of the contract was completed. The architect issued certificate covering 50% of the contract price and contractor has been paid 90% of the work certified on account. The books of accounts are closed on 31st March every year.

Prepare contract account showing following :

(i) Works cost of the contract

(ii) Value of works uncertified

(iii) Notional profit and

(iv) Amount to be carried to profit and loss account.

Marks

(b) A Doctor is considering purchasing a machine at a cost of ₹ 1,20,000. The projected life of the machine is 5 years and has an expected salvage value of ₹ 10,000 at the end of 5 years. The annual operating cost of the machine is ₹ 2,000. It is expected to generate revenues of ₹ 60,000 per year for five years. At present the Doctor is outsourcing his work related to this machine and earns commission income of ₹ 15,000 per annum; net of taxes. Tax Rate is 30%. **8**

You are required to find as to whether it would be profitable for the Doctor to purchase the machine ? Give your advice based on :

(i) Net Present Value Method

(ii) Profitability Index Method

Take PV Factors at 9% as given below :

| **Year** | 1 | 2 | 3 | 4 | 5 | **Total** |
|---|---|---|---|---|---|---|
| | 0.917 | 0.842 | 0.772 | 0.708 | 0.650 | 3.889 |

3. (a) A Company manufacturing chemical solution that passes through a number of processes uses FIFO method to value Work-in-Process and Finished Goods. At the end of month of September, a fire occurred in the factory and some papers containing records of the process operations for the month were destroyed. The Company desires to prepare process accounts for the month during which the fire occurred. Some information could be gathered as to operating activities as under : **8**

 **Marks**

- Opening Work-in-Process at the beginning of the month of 1,100 litres-40% complete for labour and 60% complete for Overheads. Opening Work-in-Process was valued at ₹ 48,260.
- Closing Work-in-Process at the end of the month was 220 litres, 40% complete for Labour and 30% complete for Overheads.
- Normal loss is 10% of input and total losses during the month were 2,200 litres partly due to fire damage. Assume degree of completion of abnormal losses is 100%.
- Output sent to Finished Goods Warehouse was 5,900 litres.
- Losses have a scrap value of ₹ 20 per litre.
- All Raw Materials are added at the commencement of the process.
- The Cost per equivalent Unit (litre) is ₹ 53 for the month consisting :

| | ₹ |
|---|---|
| Raw Material | 35 |
| Labour | 8 |
| Overheads | 10 |
| **Total** | **53** |

You are required to :

(i) Calculate the quantity (in litres) of Raw Material input during the month.

(ii) Calculate the quantity (in litres) of Normal Loss and Abnormal loss/Gain experienced in the month.

Marks

(iii) Calculate the values of Raw Materials, Labour and Overheads added to the process during the month.

(iv) Prepare the Process Account for the month.

(b) The following information has been extracted from the books of AB S Limited : 8

| | 1st April, 2017 (₹) | 31st March, 2018 (₹) |
|---|---|---|
| Raw Material | 1,00,000 | 70,000 |
| Works-in-progress | 1,40,000 | 2,00,000 |
| Finished goods | 2,30,000 | 2,70,000 |

Other information for the year :

| | ₹ |
|---|---|
| Average receivables | 2,10,000 |
| Average payables | 3,14,000 |
| Purchases | 15,70,000 |
| Wages and overheads | 17,50,000 |
| Selling expenses | 3,20,000 |
| Sales | 42,00,000 |

All purchases and sales are on credit basis. Company is willing to know :

(i) Net operating cycle period

(ii) Amount of working capital requirements

(Assume 360 days in a year)

Marks

4. (a) AB manufacturing Company manufactures two products A and B. Both Products use a common Raw Material "C". The Raw Material "C" is purchased at the rate of ₹ 45 per kg. from the Market. The Company has made estimates for the year ended 31st March, 2018 (the budget period) as under: 8

| | Products | |
|---|---|---|
| | **A** | **B** |
| Sales in Units | 36,000 | 16,700 |
| Finished Goods Stock Increase by year-end (in Units) | 860 | 400 |
| Post-production Rejection Rate (%) | 3 | 5 |
| Material "C" per completed Unit, net of wastage | 4 kg | 5 kg |
| Material "C" wastage in % | 5 | 4 |

Additional information available is as under :

- Usage of Raw Material "C" is expected to be at a constant rate over the period.
- Annual cost of holding one unit of Raw Material "C" in Stock is 9% of the Material Cost.
- The cost of placing an order is ₹ 250 per order.

You are required to:-

(i) Prepare Functional Budgets for the year ended 31st March, 2018 under the following categories :

(A) Production Budget for Products A and B in Units.

(B) Purchase Budget for Raw Material "C" in kg and value.

(ii) Calculate the Economic Order Quantity (EOQ) in kg for Raw Material "C".

Marks

(b) YZ Ltd. has the following balances as on 1st April, 2018 : 8

| Particulars | (₹) |
|---|---|
| Plant and Equipment | 13,60,000 |
| Accumulated Depreciation | 4,76,000 |
| Inventories and Bills Receivable | 6,24,000 |
| Cash and Cash Equivalent | 94,500 |
| Bills Payable | 1,14,000 |
| Equity Share Capital (Face Value ₹ 100 each) | 7,00,000 |

The Company has made the following estimates for the Financial Year 2018-2019:

(i) The Company will pay tax-free Dividend of 12%, the rate of dividend distribution tax being 20%.

(ii) The Company will acquire Plant at a cost of ₹ 2,40,000 after selling one machine for ₹ 46,000 costing ₹ 1,06,000 and on which depreciation provided amounted to ₹ 74,200.

(iii) At the financial year-end. Inventories and Bills Receivable are expected to be ₹ 6,70,000: and Bills Payable are expected to be ₹ 1,52,000.

(iv) The Profit would be ₹ 1,20,600 after charging depreciation of ₹ 1,25,000

You are required to prepare the Projected Cash Flow Statement (as per AS 3) and ascertain the Cash and Cash Equivalent at the end of the year as on 31st March, 2019.

(Ignore Corporate Tax.)

Marks

5. Answer all four : 4×4 =16

(a) How will you treat following items associated with purchase of materials ?

(i) Custom duty

(ii) Penalty

(iii) Subsidy received from the government

(iv) Insurance charges

(b) Why is standard costing system preferred by an organisation ? State the reasons.

(c) Explain the relationship between cost of capital, capital structure and value of the firm according to Net Income (NI) approach and Net Operating Income (NOI) approach.

(d) Write a short note on seed capital assistance.

6. (a) RSJ produces a single product and absorbs production overheads at a pre-determined rate. Information relating to a period is as under : 8

| | |
|---|---|
| Production overheads actually incurred | ₹ 4,84,250 |
| Overhead recovery rate at production | ₹ 1.45 per hour |
| Actual hours worked | 2,65,000 hours |
| Production : | |
| Finished goods | 17,500 units |
| Works-in-progress (50% complete in all respect) | 5,000 units |
| Sales of finished goods | 12,500 units |

At the end of the period, it was discovered that the actual production overheads incurred included ₹ 40,000 on account of 'written off obsolete stores' and wages paid for the strike period under an award.

It was also found that 30% of the under absorption of production overheads was due to factory inefficiency and the rest was attributable to normal increase in costs.

Required to calculate :

(i) The amount of under absorbed production overheads during the period.

(ii) Show the accounting treatment of under absorption of production overheads and pass journal entry.

(b) PQR Ltd. has the following capital structure at book value : 8

| | (₹) |
|---|---|
| Equity Share Capital (₹ 10 each) | 1,50,00,000 |
| 10% Preference share capital (₹ 100 each) | 50,00,000 |
| 9% Debentures (₹ 1,000 each) | 1,50,00,000 |
| 9.5% Term Loan | 2,00,00,000 |

Debentures are redeemable after 3 years and are being currently quoted at ₹ 980 per debenture in the market.

Preference shares are also redeemable after 5 years and currently selling at ₹ 98.50 per share.

Marks

The current market price of one equity share is ₹ 75. The risk free interest rate is 6.25%. The market portfolio return is 15.25%. The beta of the company is 1.93.

The applicable income tax rate for the company is 35%.

You are required to calculate the cost of the following using market value as weight :

(i) Equity share

(ii) Preference share

(iii) 9% Debenture

(iv) 9.5% Term loan

(v) Weighted average cost of capital

7. Answer any **four** of the following: $4 \times 4 = 16$

(a) State the types of Cost in the following cases :

(i) Interest paid on own Capital not involving any Cash Outflow.

(ii) Withdrawing money from Bank Deposit for the purpose of purchasing new machine.

(iii) Rent paid for the factory building which is temporarily closed.

(iv) Cost associated with the acquisition and conversion of raw material into finished product.

(b) List the Financial Expenses which are not included in Cost.

(c) (i) Explain angle of incidence.

(ii) Write any two limitations of profit maximisation objectives of financial management.

(d) What are common methods of venture capital financing ?

(e) Explain ageing schedule in context of monitoring of receivables.