Roll No. ...363312............

Total No. of Questions – **7**

Total No. of Printed Pages – **11**

Time Allowed – **3** Hours

Maximum Marks – **100**

DAS

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 answers in Hindi, his/her answers in Hindi will not be valued.

Question No. 1 is compulsory.

Attempt any five questions out of the remaining six questions.

In case, any candidate answers extra question(s)/sub-question(s) over and above the required number, then only the requisite number of questions first answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.

Working notes should form part of the answers.

Marks

1. Answer the following : **4×5 =20**

(a) ASJ manufacturer produces a product which requires a component costing ₹ 1,000 per unit. Other information related to the component are as under :

Usage of component	1,500 units per month
Ordering cost	₹ 75 per order
Storage cost rate	2% per annum
Obsolescence rate	1% per annum
Maximum usage	400 units per week
Lead Time	6-8 weeks

The firm has been offered a quantity discount of 5% by the supplier on the purchase of component, if the order size is 6,000 units at a time.

You are required to compute :

(i) Economic Order Quantity (EOQ)

(ii) Re-order Level and advise whether the discount offer be accepted by the firm or not.

(b) A company planned to produce 2,000 units of a product in a week of 40 hours by employing 65 skilled workers. Other relevant information are as follows :

- Standard wages rate : ₹ 45 per hour
- Actual production : 1800 units
- Actual number of worker employed : 50 workers in a week of 40 hours
- Actual wages rate : ₹ 50 per hour
- Abnormal time loss due to machinery breakdown : 100 hours.

You are required to calculate :

(i) Labour cost, rate, idle time and efficiency variances.

(ii) Reconcile the variances.

(c) S Ltd. has furnished the following information for the year ending 31st March, 2018 :

	₹
Net profit before taxation	20,78,000
Depreciation charged to P & L Account	8,00,000
Profit on sale of plant & machinery	2,20,000
Increase in debtors	2,40,000
Decrease in stock	6,80,000
Decrease in other current liabilities	1,50,000
Increase in creditors	20,000
Purchases of plant and machinery	23,20,000
Proceeds from issue of share capital	15,00,000
Dividend paid	7,20,000
Income-tax paid	7,28,000

You are required to calculate cash from operating activities in accordance with AS-3.

Marks

(d) JC Ltd. is planning an equity issue in current year. It has an earning per share (EPS) of ₹ 20 and proposes to pay 60% dividend at the current year end. With a P/E ratio 6.25, it wants to offer the issue at market price. The flotation cost is expected to be 4% of the issue price.

Required : Determine the required rate of return for equity share (cost of equity) before the issue and after the issue.

2. (a) A company is producing an identical products in two factories. The following are the details in respect of both factories : 8

	Factory X	Factory Y
Selling price per unit (₹)	50	50
Variable cost per unit (₹)	40	35
Fixed cost (₹)	2,00,000	3,00,000
Depreciation included in above fixed cost (₹)	40,000	30,000
Sales in units	30,000	20,000
Production capacity (units)	40,000	30,000

You are required to determine :

(i) Break Even Point (BEP) each factory individually.

(ii) Cash break even point for each factory individually.

(iii) BEP for company as a whole, assuming the present product mix is in sales ratio.

(iv) Consequence on profit and BEP if product mix is changed to 2 : 3 and total demand remain same.

Marks

(b) G Ltd. has furnished the following information relating to the year ended 31st March, 2017 and 31st March, 2018 : **8**

	31st March, 2017 (₹)	31st March, 2018 (₹)
Share Capital	40,00,000	40,00,000
Reserve and Surplus	20,00,000	25,00,000
Long term loan	30,00,000	30,00,000

- Net profit ratio : 8%
- Gross profit ratio : 20%
- Long-term loan has been used to finance 40% of the fixed assets.
- Stock turnover with respect to cost of goods sold is 4.
- Debtors represent 90 days sales.
- The company holds cash equivalent to 1½ months cost of goods sold.
- Ignore taxation and assume 360 days in a year.

You are required to prepare Balance Sheet as on 31st March, 2018 in following format :

Liabilities	(₹)	Assets	(₹)
Share Capital	–	Fixed Assets	–
Reserve and Surplus	–	Sundry Debtors	–
Long-term loan	–	Closing Stock	–
Sundry Creditors	–	Cash in hand	–

Marks

3. (a) A company wants to outsource the operation of its canteen to a contractor. The company will provide space for cooking, free electricity and furniture in the canteen. The contractor will have to provide lunch to 300 workers of which 180 are vegetarian (Veg) and the rest are non-vegetarian (Non-Veg). In the case of non-veg meals, there will be a non-veg item in addition to the veg items. A contractor who is interested in the contract has analysed the costs likely to be incurred. His analysis is given below : **8**

- Cereals : ₹ 8 per plate
- Veg items : ₹ 5 per plate
- Non-veg items : ₹ 15 per plate
- Spices : ₹ 1 per plate
- Cooking oil : ₹ 4 per plate
- One cook : Salary ₹ 13,000 per month
- Three helpers : Salary ₹ 7,000 per month per head
- Fuel : Two commercial cylinders per month, price ₹ 1,000 each.

On an average the canteen will remain open for 25 days in a month. The contractor wants to charge the non-veg meals at 1.50 times of the veg meals.

Marks

You are required to calculate :

(i) The price per meal (veg and non-veg separately) that contractor should quote if he wants a profit of 20% on his takings.

(ii) The price per meal (separately for veg and non-veg) that a worker will be required to pay if the company provides 60% subsidy for meals out of welfare fund.

(b) A company is considering to engage a factor. The following information is available : 8

- The current average collection period for the company's debtors is 90 days and ½% of debtors default. The factor has agreed to pay money due after 60 days and will take the responsibility of any loss on account of bad debts.
- The annual charge for factoring is 2% of turnover. Administration cost saving is likely to be ₹ 1,00,000 per annum.
- Annual credit sales are ₹ 1,20,00,000. Variable cost is 80% of sales price. The company's cost of borrowing is 15% per annum. Assume 360 days in a year.

Should the company enter into a factoring agreement ?

Marks

4. (a) ABC Ltd. produces an item which is completed in three processes – X, Y and Z. The following information is furnished for process X for the month of March, 2018 : 8

Opening work-in-progress (5,000 units) :

Materials	₹ 35,000
Labour	₹ 13,000
Overheads	₹ 25,000

Units introduced into process X (55,000 units) :

Materials	₹ 20,20,000
Labour	₹ 8,00,000
Overheads	₹ 13,30,000

Units scrapped : 5,000 units

Degree of completion :

Materials	100%
Labour and Overheads	60%

Closing work-in-progress (5,000 units) :

Degree of completion :

Materials	100%
Labour and Overheads	60%

Units finished and transferred to Process Y : 50,000 units

Normal loss : 5% of total input (including opening works-in-progress)

Scrapped units fetch ₹ 20 per unit.

Marks

Presuming that average method of inventory is used, prepare

(i) Statement of Equivalent production

(ii) Statement of Cost for each element

(iii) Statement of distribution of cost

(iv) Abnormal loss account

(b) Following are the selected financial information of A Ltd. and B Ltd. for the year ended March 31, 2018 : 8

	A Ltd.	B Ltd.
Variable Cost Ratio	60%	50%
Interest	₹ 20,000	₹ 1,00,000
Operating Leverage	5	2
Financial Leverage	3	2
Tax Rate	30%	30%

You are required to find out :

(i) EBIT

(ii) Sales

(iii) Fixed Cost

(iv) Identify the company which is better placed with reasons based on leverages.

Marks

5. Answer all four : 4×4 =16

(a) List important factors which must be taken into consideration for increasing labour productivity.

(b) What are the essential pre-requisites of integrated accounting system ?

(c) Discuss the factors to be taken into consideration while determining the requirement of working capital.

(d) Differentiate between Business risk and Financial risk.

6. (a) Delta Ltd. is a manufacturing concern having two production departments P_1 and P_2 and two service departments S_1 and S_2. After making a primary distribution of factory overheads, the total overheads of all departments are as under : 8

	(in ₹)
P_1	4,02,000
P_2	2,93,000
S_1	3,52,000
S_2	33,000

Overheads of service departments are reapportioned as below :

	P_1	P_2	S_1	S_2
S_1	40%	50%	–	10%
S_2	50%	40%	10%	–

A product 'Z' passes through all the two production departments – P_1 and P_2 and each unit of product remain there in process for 2 and 3 hours respectively. The material and labour cost of one unit of product 'Z' is ₹ 500 and ₹ 350 respectively.

The company run for all the 365 days of the year and 16 hours per day.

Marks

You are required :

(i) To make secondary distribution of overheads of service departments by applying Simultaneous Equation method and

(ii) Determine the total cost of one unit of product Z.

(b) A proposal to invest in a project, which has a useful life of 5 years and no salvage value at the end of useful life, is under consideration of a firm. It is anticipated that the project will generate a steady cash inflow of ₹ 70,000 per annum. After analyzing other facts of the project, following information were revealed : 8

Internal rate of return 13%

Desirability factor 1.07762

You are required to find out :

(i) Cost of project

(ii) Cost of capital

(iii) Payback period

(iv) Net present value

Present value factors at different rates are given as under :

Year	10%	11%	12%	13%
1	0.909	0.901	0.893	0.885
2	0.826	0.812	0.797	0.783
3	0.751	0.731	0.712	0.693
4	0.683	0.659	0.636	0.613
5	0.621	0.593	0.567	0.543
Total	3.790	3.696	3.605	3.517

Note : Use only above present values to solve this question.

Marks

7. Answer any **four** of the following : 4×4 =16

(a) Discuss cost classification based on variability and controllability.

(b) Describe the salient features of budget manual.

(c) State the different types of packing credit.

(d) (i) State distinct groups of variances that arise in standard costing.

(ii) Explain 'Sale and Lease Back'.

(e) Why money in the future is worth-less than similar money today ? Give reasons and explain.