COST ACCOUNTING

Time:- 2hrs.30mins **[Marks: 75]**

1. **All questions are compulsory.**
2. **Figures to the right indicate full marks.**
3. **Working note should be part of answer.**

Q.1. A Select correct option & re-write the sentence. (Any 8)

1. ABC Ltd. manufactures a single product which it sells for ₹ 50 per unit. Fixed costs are ₹ 80,000 per annum. The contribution to sales ratio is 50%. ABC Ltd's breakeven point in units is:
   a) 3,500 b) 3,000
   c) 3,200 d) 3,400

2. A company plans to produce & sell 5,000 units of product C each month, at the selling price of ₹ 20 per unit. The unit cost comprised of ₹ 8 variable cost & ₹ 6 fixed cost. Calculate the margin of safety as a percentage of planned sales:
   a) 60% b) 50%
   c) 65% d) 75%

3. A budget that gives a summary of all the functional budgets is known as:
   a) Capital Budget b) Flexible Budget
   c) Master Budget d) Discretionary Budget

4. The fixed variable cost classification has a special significance in the preparation of:
   a) Capital Budget b) Flexible Budget
   c) Master Budget d) Cash Budget

5. When preparing a production budget, the quantity to be produced equals:
   a) Sales quantity + opening stock + closing stock
   b) Sales quantity - opening stock + closing stock
   c) Sales quantity - opening stock - closing stock
   d) Sales quantity + opening stock - closing stock

6. A job requires 12,000 actual labour hours for completion & it is anticipated that there will be 20% idle time. If the wage rate is ₹ 10 per hour, what is the idle cost for the job?
   a) ₹ 19,200 b) ₹ 24,000
   c) ₹ 28,800 d) ₹ 30,000

7. Of the four costs shown below which would not be included in the cash budget?
   a) Depreciation of the fixed asset
   b) Office salaries
   c) Commission paid to the agents
   d) Capital cost of a new computer

8. PG Ltd. makes a single product & is preparing its material usage budget for next year. Each units of product requires 2kgs. of material, & 5,000 units of product are to be produced next year. Opening stock of material is budgeted to be 800 kgs. & PG Ltd. budget to increase material stock at the end of next year by 20%. The material usage budget for next year is:
   a) 8,000 kg b) 9,840 kg
   c) 10,000 kg d) 10,160 kg

9. If a company uses only one type of material, then following variance cannot be found
   a) Material cost variance b) Material price variance
   c) Material usage variance d) Material yield variance

10. Telephone charges is
   a) Variable cost b) fixed cost
   c) semi variable cost d) none of the above

B. State whether following statements are true or false (Any 7)

1. Equal emphasis should be laid on favourable & unfavourable variances.
2. Material yield variance is the difference between the standard yield specified & the actual yield obtained.
3. Analysis of variances is done in order to determined the reasons for increase or decrease in profit.
4. A system of budgetary control can not be used in an organization when standard costing is being used.
5. Budgets are always prepared for past.
6. Forecast & budget are one & the same.
7. The relationship between contribution & turnover is represented in the form of profit volume ratio.
8. At break-even point, fixed cost plus profit is equal to total sales.
9. Margin of safety = Break-even sales + Fixed cost.
10. A high margin of safety usually indicates high fixed overheads.

Q.2. The following information is obtained from a company for January:

Sales	₹ 20,000
Variable Costs	₹ 10,000
Fixed Costs	₹ 6,000

1. Find P/V Ratio, Break-even point & Margin of safety at this level
2. Also find effect of the following individually on BEP sales
   a) 20% decrease in fixed cost
   b) 10% increase in fixed cost
   c) 10% decrease in variable cost
   d) 10% increase in selling price
   e) 10% increase in variable cost & selling price both

OR

Q.2. M/s. Alok Industries has given the following details, find the most profitable product Mix & prepare a statement of profitability of the product mix.

Particulars	Product "X"	Product "Y"	Product "Z"
Units Budgeted to be Produced & sold	1,800	3,000	1,200
Selling Price Per Unit (₹)	60	55	50
Requirement Per Unit:			
Direct Materials	5 kg.	3 kg.	4 kg.
Direct Labour	4 hrs.	3 hrs	4 hrs
Variable Overheads	₹ 7	₹ 13	₹ 8
Fixed Overheads	₹ 10	₹ 10	₹ 10
Cost of Direct Material Per Kg.	₹ 4	₹ 4	₹ 4
Direct Labour Hour Rate	₹ 2	₹ 2	₹ 2
Maximum Possible Units of Sales	4,000	5,000	1,500

All the three products are produced from the same direct material using the same type of machines & labour. Direct Material, Which is the key factor, is limited to 36,000 kg.

Q.3. M/s. Jayshree Enterprises is currently working at 50% capacity & produces 10,000 units. At 60% working raw material cost increases by 2% & selling price falls by 2%. At 80% working raw material cost increases by 5% & selling price by 5%. At 50% capacity working the product costs ₹ 18 per unit & is sold at ₹ 20 per unit.
The unit cost of ₹ 10 is made up as following:

Material	₹ 10
Wages	₹ 03
Factory Overheads	₹ 03 (40% Fixed)
Administration Overheads	₹ 02 (50% fixed)

Prepare a statement showing the estimated profit of the business when it is operated at is operated at 60% & 80% capacity.
It may be noted the fixed overhead remain constant upto 100% capacity. Increase in raw material cost & decrease in selling price are to be calculated with reference to the figure given for 50% capacity usage.

OR

Q.3. ABC Foods Products Limited has prepared the following sales Budget for the first five months of 2016

Sales Budget (in Units)

January	10,800
February	15,600
March	12,200
April	10,400
May	9,800

The inventory of finished products at the end of every month is to be equal to 25% of the sales estimate for the next month. On 1st January 2016, there were 2,700 units of product in hand. There is no work-in-process at the end of any month.
Every unit of product requires two types of materials in the following quantities:

Material A : 4 Kg. Material B : 5 Kg.
Material equal to one-half of the next month's production are to be in hand at the end of every month. This requirement was met on 1st January 2016
Budgeted prices for the purchase of materials are
Material A: ₹ 3 per kg; Material B: 2 per kg.

Prepare Materials consumption Budget & purchase budget (qty & value) for first quarter of 2016 showing the quantities of each type of material to be purchased every month.

Q.4. The budgeted & the actual sale for a period in respect of three products are given below:

Budgeted Figures

Product	Quantity	Price ₹	Value ₹
A	1,000	5	5,000
B	750	10	7,500
C	500	15	7,500
	2,250		**20,000**

Actual

Product	Quantity	Price ₹	Value ₹
A	1,200	6	7,200
B	700	9	6,300
C	600	14	8,400
	2,500		**21,900**

Calculate all sales variances.

OR

Q.4. Calculate all labour variance from the following data.

Particulars	Standard Hours	Standard hourly rate	Actual hours	Actual Hourly rate
Skilled Labour	2,880	20	1,760	25
Semi-skilled	1920	10	2640	5
Labour Total	4,800		4,400	
Output	108 Kg		90 Kg	

Q.5. A What is marginal costing? Explain Break-even chart in detail.
B. What is standard costing? Explain Material variances in detail.

OR

Q.5. Write Short Notes (Any 03)
1. P/V Ratio
2. Fixed overheads variances
3. Master Budget
4. Advantages of Budgetary control
5. Limiting factor