

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Com. DEGREE EXAMINATION – HONOURS

SECOND SEMESTER – APRIL 2023

UBH 2501 – MANAGEMENT ACCOUNTING

Date: 09-05-2023

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

PART A

ANSWER ALL QUESTIONS

(30X2=60Mark)

1. The following statements relate to financial accounting or to cost and management accounting:

(i) Financial accounts are historical records.

(ii) Cost accounting is part of financial accounting and establishes costs incurred by an organisation.

(iii) Management accounting is used to aid planning, control and decision making.

Which of the statements are correct?

A (i) and (ii) only B (i) and (iii) only C (ii) and (iii) only D (i), (ii) and (iii)

2. Which one of the following is an example of internal information for the wages department of a large company?

A A Code of Practice issued by the Institute of Directors

B A new national minimum wage

C Changes to tax coding arrangements issued by the tax authorities

D The company's employees' schedule of hours worked.

3. A farmer has land extending to 100 acres which comprises 43% wheat, 20% barley, 16% grass, 12% oats and 9% millets. If these figures were drawn in a pie chart, calculate the angle of the wheat and oats(to the nearest whole number) . wheat= -----⁰, Oats=====⁰

4. Which of the following costs would NOT be classified as a production overhead cost in a food processing company?

A The cost of renting the factory building B The salary of the factory manager

C The depreciation of equipment located in the materials store D The cost of ingredients

5. An organisation manufactures a single product. The total cost of making 4,000 units is \$20,000 and the total cost of making 20,000 units is \$40,000. Within this range of activity the total fixed costs remain unchanged. \$----- is the variable cost per unit of the product?

What is the variable cost per unit of the product?

A \$0.80 B \$1.20 C \$1.25 D \$2.00

6. Regression analysis is being used to find the line of best fit ($y = a + bx$) from twelve pairs of data. The calculations have produced the following information:

$\Sigma x = 300$, $\Sigma y = 330$, $\Sigma x^2 = 15,000$, $\Sigma y^2 = 8,000$ and $\Sigma xy = 13,000$. What is the value of 'b' in the equation for the line of best fit (to 2 decimal places)?

7. A company manufactures and sells toys and incurs the following three costs:

(i) Rental of the finished goods warehouse

(ii) Depreciation of its own fleet of delivery vehicles

(iii) Commission paid to sales staff.

Which of these are classified as distribution costs?

A (i) and (ii) only

B (ii) and (iii) only

C (ii) only

D (i) and (iii)

8. The following represent the materials transactions for a company for the month of December 20X6:

	\$000s
Materials purchases	276
Issued to production	265

Materials written off	14
Returned to stores	19
Returned to suppliers	18

The material inventory at 1 December 20X6 was \$25,000. What is the closing balance on the materials inventory account at 31 December 20X6?

- A \$5,000 B \$16,000 C \$23,000 D \$31,000

9. Your firm values inventory using the weighted average cost method. At 1 October 20X8, there were 60 units in inventory valued at \$12 each. On 8 October, 40 units were purchased for \$15 each, and a further 50 units were purchased for \$18 each on 14 October. On 21 October, 75 units were sold for \$1,200. What was the value of closing inventory at 31 October 20X8? \$-----

10. An employee is paid on a piecework basis. The scheme is as follows:

1 – 200 units per day	\$0.15 per unit
201 – 500 units per day	\$0.20 per unit
> 500 units per day	\$0.25 per unit

Only the additional units qualify for the higher rates. Rejected units do not qualify for payment. An employee produced 512 units in a day of which 17 were rejected as faulty. What wage is paid to the employee?

- A \$128 B \$103 C \$99 D \$89

11. Blazer Co absorbs overheads based on units produced. In one period 110,000 units were produced and the actual overheads were \$500,000. Overheads were \$50,000 over-absorbed in the period. \$----- is the overhead absorption rate per unit? -----

12. A company has established a marginal costing profit of \$72,300. Opening inventory was 300 units and closing inventory is 750 units. The fixed production overhead absorption rate has been calculated as \$5/unit. \$-----is the profit under absorption costing?

13. Zara Ltd did a sales for \$ 2,25,000 and supplies you the following data to find their level of contribution. Calculate the total contribution from the given details.

Direct Material Cost 68,000, Direct Wages 42,000

Variable Overheads: -Factory-23,000; Administration 4,000

Fixed overheads: Factory-40,000, Administration- 18000.

14. ABC manufactures product X in a single process. Normal loss (scrap) in the process is 10% of output and scrapped units can be sold off for \$4/unit. In period 8 there was no opening inventory and no closing inventory. Process costs of direct materials, direct labour and production overheads totalled to \$184,800. Input to the process in the month was 13,200 units. What was the cost/unit produced?

- A. 25\$ B.17\$ C. 10\$ D.15\$

15. GRF's projected revenue for 20X9 is \$40,000 per month. All sales are on credit. Receivables' accounts are settled 60% in the month of sale, 30% in the following month, and 10% are written off as irrecoverable debts after two months. What are the budgeted cash collections for March? -----\$

16. A company has a two-month receivables' cycle. It receives in cash 40% of the total gross sales value in the month of invoicing. Irrecoverable debts are 30% of total gross sales value and there is a 20% discount for settling accounts within 30 days. What proportion of the first month's sales will be received as cash in the second month? -----

17. Galway Ltd budgeted to make sales of \$1,500, \$1,800 and \$2,800 in its first three months of operation. 25% of its sales are expected to be for cash and another 25% of total sales will also be collected in the same month by offering a 10% discount; 40% will be collected in the following month, and the remainder the month after that. How much cash did Galway Ltd budget to receive in its third month of operation? -----\$

- A. \$2000 B.\$2200 C.\$2500 D.\$2300

18. Company is deciding whether to launch a new product. The initial outlay and the forecast possible annual cash inflows are shown below:

Year 0	(60,000)
Year 1	23,350
Year 2	29,100
Year 3	27,800

The company's cost of capital is 8% per annum. Assume the cash inflows are received at the end of the year and that the cash inflows for each year are independent. What is the net present value to the nearest \$ for the product? -----.

19. In the last year a division's controllable return on investment was 25% and its controllable profit was \$80,000. The cost of finance appropriate to the division was 18% per annum. What was the division's controllable residual income in the last year?

20. A division has a residual income of \$240,000 and a net profit before imputed interest of \$640,000. If it uses a rate of 10% for computing imputed interest on its invested capital, what is its return of investment (ROI) to the nearest whole number in %?

A. 15% B. 17% C. 16% D. 20%

21. A division of a company has capital employed of \$2m and its return on capital is 12%. It is considering a new project requiring capital of \$500,000 and is expected to yield profits of \$90,000 per annum. The company's interest rate is 10%. If the new project is accepted, what will the residual income of the division be?

22. A law firm recovers overheads on chargeable consulting hours. Budgeted overheads were \$615,000 and actual consulting hours were 32,150. Overheads were under-recovered by \$35,000. Actual overheads were \$694,075. What is the budgeted overhead absorption rate per hour (to 2 decimal places)?

A. \$20.5 B. \$17.25\$ C. \$19.5 D. 18.5\$

23. Which one of the following statements is incorrect?

A Job costs are collected separately, whereas process costs are averages

B In job costing the progress of a job can be ascertained from the materials requisition notes and job tickets or time sheet

C In process costing information is needed about work passing through a process and work remaining in each process

D In process costing, but not job costing, the cost of normal loss will be incorporated into normal product costs.

24. The following statements refer to situations occurring in Process Q of an organisation which operates a series of consecutive processes:

(i) Direct labour is working at below the agreed productivity level.

(ii) A machine breakdown has occurred.

(iii) Direct labour is waiting for work to be completed in a previous process.

Which of these situations could give rise to idle time?

A (i) and (ii) only B (i) and (iii) only
C (ii) and (iii) only D (i), (ii) and (iii)

25. A company operates a job costing system. Job number 605 requires 15 kg of direct materials for \$ 20 each kg. and 50 hours of direct labour of \$ 8 per hour. Production overheads are absorbed at a rate of \$26 per direct labour hour and non-production overheads are absorbed at a rate of 120% of prime cost. What is the total cost of job number 605?

A \$2,000 B \$2,400 C \$2,840 D \$4,400

26. Which ONE of the following is an advantage of Activity Based Costing?

A It provides more accurate product costs

B It is simple to apply

C It is a form of marginal costing and so is relevant to decision making

D It is particularly useful when fixed overheads are very low.

27. Which TWO of the following are characteristics of service costing?

A High levels of indirect costs as a proportion of total cost

B Use of equivalent units

C Use of composite cost units

D Long timescale from commencement to completion of the cost unit

28. A hotel calculates a number of statistics including average cost per occupied bed per day. The following information is provided for a 30-day period.

	<i>Rooms with twin beds</i>	<i>Single rooms</i>
Number of rooms in hotel	260	70
Number of rooms available to let	240	40
Average number of rooms occupied daily	200	30
Number of guests in period	6,450	
Average length of stay	2 days	
Payroll costs for period	\$100,000	
Cost of cleaning supplies in period	\$5,000	
Total cost of laundering in period	\$22,500	

What is the average cost per occupied bed per day for the period?

A \$9.90 B \$9.88 C \$7.20 D \$8.17

29. A customer returns a faulty product to a firm for repair under a warranty scheme. The firm operates a total quality management system. Which of the following best describes the cost of the repair?

A An internal failure cost B An external failure cost
C An appraisal cost D A prevention cost

30. A chemical process has a normal wastage of 5% of input. In a period, 1,500 kg of material were input and there was an abnormal loss of 50 kg. What was the quantity of good production?

A.1250 B.1300 C.1375 1350

PART-B

ANSWER ALL THE QUESTIONS

(2X20=40 Marks)

31. (a) Point uses the economic order quantity (EOQ) model to establish the reorder quantity for raw material Y. The company holds no buffer inventory. Information relating to raw material Y is as follows:

Annual usage 48,000 units Purchase price \$80 per unit
Ordering costs \$120 per order Annual holding costs 10% of the purchase price.

Calculate the total cost of raw material Y and EOQ of Y .

Further The supplier has offered Point a discount of 1% on the purchase price if each order placed is for 2,000 units. What is the total annual saving to Point of accepting this offer. (6 Marks)

(b) Differentiate between job and process costing with a sentence each (2 Marks)

(c) **Prepare the process account, abnormal loss and gain account, and scrap account for Process 2 for the period just ended from the below details .(6 Marks)**

W&B Ltd produce a breakfast cereal that involves several processes. At each stage in the process, ingredients are added, until the final stage of production when the cereal is boxed up ready to be sold. In Process 2, W&B Ltd have initiated a quality control inspection. This inspection takes place BEFORE any new ingredients are added in to Process 2. The inspection is expected to yield a normal loss of 5% of the input from Process 1. These losses are sold as animal fodder for \$1 per kg.

The following information is for Process 2 for the period just ended:

	Units	\$
Transfer from Process	1 500 kg	750
Material added in Process	2 300 kg	300
Labour	200 hrs	800
Overheads	—	500
Actual output	755 kg	—

(d) **Calculate the total direct and indirect labor costs for Vienna. Also calculate the labor turnover ratio for BLC Co(6 Marks)**

Vienna is a direct labour employee who works a standard 35 hours per week and is paid a basic rate of \$12 per hour. Overtime is paid at time and a third. In week 8 she worked 42 hours and received a \$50 bonus.

Vienna works for BLC co which had 6,641 employees in the beginning of the year and at the end of the year employee numbers were 6,735. During the year 1224 employees chose to leave the company.

32. Marie is considering a project to produce a new product. To make it she will need to buy a new machine at a cost of \$250 000 with a useful life of 4 years.

The following information is available

Sales volume in units is expected to be:

Year	Units
1	20 000
2	22 000
3	23 000
4	18 000

- The selling price will be \$30 per unit and will remain unchanged.
- The labour costs are \$15 per unit. These are expected to increase by 2% in Year 3. There are no further expected changes in labour costs per unit in Year 4.
- The material needed for each unit is 3 kilos at \$2.75 per kilo. Material cost per kilo will remain unchanged.
- The annual fixed costs are \$107 500. This includes the depreciation charge for the new machine.
- The new machine will have no residual value

Required:

a) Prepare a table to show the expected annual net cash flows arising from the project. Marie's cost of capital is 10%. Discount factors are as follows. (10 Marks)

Year	Discount factor
0	1.000
1	0.909
2	0.826
3	0.751
4	0.683

(b) Calculate the Net Present Value (NPV) of the project.

[3 Marks]

(c) Calculate the Internal Rate of Return (IRR) for the project.

[7 Marks]

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