

**SECOND SEMESTER (CBCSS—UG) DEGREE EXAMINATION
APRIL 2021**

B.C.A.

BCA 2C 03—FINANCIAL AND MANAGEMENT ACCOUNTING

Time : Two Hours

Maximum : 60 Marks

Section A (Short Answer Type Questions)

Answer at least eight questions.

Each question carries 3 marks.

All questions can be attended.

Overall Ceiling 24.

1. Define accounting Entity Concept.
2. Define Accounting.
3. Explain any *four* objectives of accounting.
4. What is Gross profit ?
5. What is imprest system ?
6. Define Marginal Costing.
7. What is cash budget ?
8. What is variance analysis ?
9. Define flexible Budget.
10. What is Comparative balance sheet ?
11. Name the sub-divisions of journal.
12. What is the purpose of preparing sales returns book ?

(8 × 3 = 24 marks)

Turn over

Section B (Short Essay Type Questions)

Answer at least five questions.

Each question carries 5 marks.

All questions can be attended.

Overall Ceiling 25.

13. Explain the limitations of accounting.
14. What are the needs of preparing Balance Sheet ?
15. Advantages of marginal costing.
16. Journalise the following transactions :

2019 January 1 Purchased furniture for cash Rs. 3,000
 3 Sold machinery for cash Rs. 6,000
 7 Purchased good for cash Rs. 4,200
 11 Sold goods for cash Rs. 4,500.
 15 Paid wages Rs. 300
 19 Paid to Kumar Rs. 500
 22 Received cash from Sonu Rs. 1,000
 28 Received commission Rs. 400
 31 Paid salary Rs. 1,000

17. Calculate Material Cost Variance, Material Quantity Variance and Material Price Variance from the following :

Material	Standard		Actual	
	Qty	Rate (Rs.)	Qty	Rate (Rs.)
X	1,000	6	1,100	7
Y	700	10	600	8

18. Prepare a Comparative Income statement of K Ltd. For the following Profit and Loss Account for the year ended 31st March 2016 and 2017 :

<i>Particulars</i>	2016	2017	<i>Particulars</i>	2016	2017
To Cost of goods sold	70,000	89,000	By Sales	1,00,000	1,20,000
To Operating expenses :—					
Administrative expenses	9,000	14,000			
Selling expenses	6,000	4,000			
To Net profit	15,000	13,000			
	1,00,000	1,20,000		1,00,000	1,20,000

19. The sale of a company for 2 different periods are 4,000 units and 7,000 units and the profits are Rs. 80,000 and Rs. 1,70,000. Calculate :

- Fixed cost.
- Break-even Point.
- Number of units to be sold to earn a profit of Rs. 2,00,000.

Assume selling price as to Rs. 100 per unit.

(5 × 5 = 25 marks)

Section C (Essay Type Questions)

Answer any one question.

The question carries 11 marks.

20. Calculate Material Cost Variance, Material Quantity Variance and Material Price Variance from the following :

Material	Standard		Actual	
	Qty	Rate (Rs.)	Qty	Rate (Rs.)
X	2,000	5	1,800	6
Y	1,000	8	1,100	7

Turn over

Part D (Essay Questions)

*Answer any five questions.
Each question carries 8 marks.*

24. In an analysis of monthly wages paid to the workers in two firms A and B belonging to the same industry gave the following result :

	Firm A	Firm B
No. of wage earners	986	548
Average hourly wages	Rs. 52.5	Rs. 47.5
Variance of dis. Of wages	100	121

- (a) Which firm A or B pays out larger amount as hourly wages ?
 (b) In which firm A or B there is greater variability in individual wages ?
 (c) What are the measures of average hourly wages and variability in individual wages if all the workers in firm A and B taken together ?
25. The following data gives income in rupees of individuals in two cities. Draw Lorenz curves and comment on the distribution income of both the cities :

Income	0-1000	1000-5000	5000-20000	20000-50000	50000-1 lacs
City A :	22	78	124	24	9
City B	25	98	116	20	15

26. Derive the formula for Spearman's rank correlation co-efficient.
27. Let $N = 100$, $\sum X_i = 5000$, $\sum Y_i = 10000$, $\sum X_i^2 = 260000$, $\sum Y_i^2 = 1040000$ and $\sum X_i Y_i = 516000$
- (a) Find the predicted value of X, when $Y = 80$.
 (b) What is the predicted value of Y, when $X = 60$?
 (c) Find the correlation coefficient between X and Y.
28. Two unbiased dice are thrown. Find the probability that :
- (a) Both the dice shows the same number.
 (b) The first die shows 6.
 (c) Total of the numbers on the dice is 13.
 (d) Total of the numbers on the dice any number from 2 to 12 both inclusive.

Turn over

29. The joint p.d.f. of (X, Y) is given by

$$f(x, y) = \begin{cases} k \left(x^2 + \frac{xy}{3} \right), & 0 \leq x \leq 1; 0 \leq y \leq 2 \\ 0, & \text{otherwise} \end{cases}$$

Examine whether X and Y are independent.

30. Obtain the MLE of α and β using a random sample of size n taken from the population with p.d.f.

$$f(x) = \frac{1}{\beta} e^{-\frac{(x-\alpha)}{\beta}}, x \geq \alpha, \beta \geq 0$$

31. Construct a 95% confidence interval for variance σ^2 of the Normal population using the following sample :

4.5, 10.2, 10.5, 9.8, 13.0, 19.2, 15.5, 13.3, 10.8 and 16.4. Assuming that population mean is unknown.

(5 × 8 = 40 marks)