

**FIRST SEMESTER (CUCBCSS-UG) DEGREE EXAMINATION  
NOVEMBER 2021**

B.Com. (Professional)

1.5 BCP—NUMERICAL SKILLS

(2016 – 2019 Admissions)

Time : Three Hours

Maximum : 80 Marks

**Part A**

*Answer all questions.  
Each question carries 1 mark.*

A. Choose the correct answer :

1. If A has 32 elements, B has 42 elements and  $A \cup B$  has 62 elements, find the number of elements in  $A \cap B$ .  
(a) 74. (b) 62.  
(c) 12. (d) None of these.
2. Find the three numbers in A.P ; whose sum is 6 and product is  $-24$ .  
(a)  $-2, 2, 6$ . (b)  $-1, 1, 3$ .  
(c)  $1, 3, 5$ . (d)  $1, 4, 7$ .
3.  $(n + 1)^{2}$ th term is median if  $n$  is :  
(a) Odd. (b) Even.  
(c) Both. (d) None.
4. Statistics is defined in terms of numerical data in the :  
(a) Plural sense. (b) Singular sense.  
(c) Either (a) or (b). (d) Both (a) or (b).
5. Find the value of the determinant  $A = \begin{vmatrix} 1 & -3 \\ 2 & 4 \end{vmatrix}$ .  
(a) 10. (b)  $-2$ .  
(c)  $-10$ . (d) None.

**Turn over**

B. Fill in the blanks :

6. Any square matrix is said to be symmetric if it is equal to its \_\_\_\_\_.
  7. The number of observations falling within a class is called \_\_\_\_\_.
  8. Mode of 15, 12, 5, 13, 12, 15, 8, 8, 9, 9, 10, 15 is \_\_\_\_\_.
  9. If  $7(x - 2) + 8(x - 3) - 22 = x + 10$ , then  $x$  will be \_\_\_\_\_.
  10. The graphical representation of a cumulative frequency distribution is called \_\_\_\_\_.
- (10 × 1 = 10 marks)

### Part B

*Answer any **eight** questions.  
Each question carries 2 marks.*

11. Represent  $A^c \cup B^c$  using Venn diagram

12. If  $A = \begin{bmatrix} 2 & 3 & 2 \\ 1 & 2 & 1 \end{bmatrix}$ ,  $B = \begin{bmatrix} 0 & 1 & 2 \\ 3 & 1 & 1 \end{bmatrix}$ , find  $3A - 2B$ .

13. Solve  $4x + 2y = 6$  and  $5x + y = 6$ .

14. Explain domain and range.

15. Consider the set  $\{1, 2, 4, 8, 16\}$ , from the relation  $R$  " $a = b^2$ ", specify domain and range of the relation.

16. If 5<sup>th</sup> and 12<sup>th</sup> terms of an A.P. are 14 and 35 respectively, find the A.P.

17. Find the harmonic mean of 4, 6 and 10.

18. The mean salary of a group of 40 female workers is Rs. 5,200 per month and that for a group of 40 male workers is Rs. 6,800 per month, what is the combined mean salary.

19. Calculate M.D from median of the following numbers :

82, 56, 75, 70, 52, 80, 68

20. Explain the limitations of statistics.

(8 × 2 = 16 marks)

**Part C**

Answer any **six** questions.  
Each question carries 4 marks.

21. Find the inverse of the matrix  $\begin{bmatrix} 4 & 2 \\ -3 & 1 \end{bmatrix}$ .
22. Solve  $3x^2 + 4x + 1 = 0$ .
23. Solve  $x - y/2 = y - 1/3$  and  $3x - 4y/5 = x - 10$ .
24. Explain different methods of constructing index numbers.
25. Each student in a class of 40 studied at least one of the languages viz, Malayalam, Hindi and French. 16 studied Malayalam, 22 French, 26 Hindi, 5 studied Malayalam and French, 14 Hindi and French, 2 studied Malayalam, Hindi and French. Find the number of students who studied Malayalam and Hindi only.
26. Draw a pie diagram to represent the following :

Source	Revenue (Rs. in million)
Customs	80
Excise	190
Income tax	160
Corporate tax	75
Others	35

27. Calculate the total interest on Rs. 500 for 73 days, Rs. 720 for 14 weeks and on Rs. 900 for 3 months, all at 6% per annum.
28. Explain merits and limitations of quartile deviation.

(6 × 4 = 24 marks)

**Part D**

Answer any **two** questions.  
Each question carries 15 marks.

29. Solve the following using matrix

$$3x + 2y + z = 6$$

$$2x - 3y + 3z = 2$$

$$x + y + z = 3.$$

**Turn over**

30. Find median and mean deviation from the following :

size	0-10	10-20	20-30	30-40	40-50	50-60	60-70
frequency	3	6	9	13	8	7	4

31. Find the mean time of bulbs from the data given below :

Lifetime in hrs (less than)	100	200	300	400	500	600	700
No. of bulbs	0	5	15	29	48	67	81

(2 × 15 = 30 marks)

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1.4 BCP—MANAGERIAL ECONOMICS

(2016—2019 Admissions)

Time : Three Hours

Maximum : 80 Marks

**Part-A**

*Answer all questions.  
Each question carries 1 mark.*

I. Choose the correct answer :

- 1 \_\_\_\_\_ is a free gift of nature.
  - (a) Land.
  - (b) Labour.
  - (c) Capital.
  - (d) Organisation.
- 2 If the value of Elasticity is greater than one ; then it is called \_\_\_\_\_ demand.
  - (a) Relatively Elastic.
  - (b) Perfectly Elastic.
  - (c) Relatively Inelastic.
  - (d) Unitary Elastic.
- 3 Consumer Surplus is \_\_\_\_\_.
  - (a) Potential price – Actual price.
  - (b)  $MV_n = TV_n - TV_{n-1}$ .
  - (c) Demand = Supply
  - (d) None of the Above.
- 4 What is the price policy of the firm, under Monopoly ?
  - (a) Price taker.
  - (b) Price maker.
  - (c) Pricing based on consumer's brand loyalty.
  - (d) Considerable control over prices.

**Turn over**

- 5 Deflation regenerates into \_\_\_\_\_.
- (a) Recession. (b) Disequilibrium.  
(c) Depression. (d) Recovery.

II. Fill in the blanks :

- 6 When the total returns are maximum and constant, the marginal returns will be \_\_\_\_\_.
- 7 The concept of monopolistic competition was introduced into economic analysis by \_\_\_\_\_.
- 8 When the National income is divided by the total population of the country, we get the \_\_\_\_\_ of the country in a given year.
- 9 \_\_\_\_\_ is a group of indifference curves for two commodities showing the different levels of satisfaction.
- 10 \_\_\_\_\_ is a general statement telling that prices and quantities of a commodity are inversely related.

(10 × 1 = 10 marks)

**Part B**

*Answer any eight questions from the following.*

*Each question carries 2 marks.*

- 11 Define Managerial Economics.
- 12 Write any two differences between Economic cost and Accounting cost.
- 13 What are 'Cartels' ?
- 14 What is Target Pricing ?
- 15 State any two objectives of Modern firms.
- 16 What do you mean by Inflation ?
- 17 Identify the relationship between MR, AR and Prices of the firm's products, when the firm is in equilibrium.
- 18 Give the meaning for 'Delphi Technique' of Demand forecasting.
- 19 Give examples for Substitute goods and Complimentary goods (one each).
- 20 On what factors are GDP of the nation calculated ?

(8 × 2 = 16 marks)

**Part C**

*Answer any **six** questions from the following.*

*Each question carries 4 marks.*

- 21 Give the significance of Elasticity of Demand in business decisions.
- 22 Briefly explain the salient features of Indifference Curves in an Indifference map.
- 23 State the objectives of Pricing policies.
- 24 Point out the key differences between Monopoly and Oligopoly markets.
- 25 Give formulae showing the relationship between TC, AC, MC, TR and Total Profit of the firm, given 'Q' as the quantity.
- 26 Differentiate between Micro Economics and Macro Economics.
- 27 Give an outline on different factors determining the demand for smart phones among youth.
- 28 Which are the four methods used for Economic forecasting ? Explain.

(6 × 4 = 24 marks)

**Part D**

*Answer any **two** questions from the following.*

*Each question carries 15 marks.*

- 29 Define Managerial Economics. Discuss in detail its characteristics and importance in economic development of a country.
- 30 What is Business Cycle ? Enumerate its different phases elaborately using diagram.
- 31 Explain the Law of Variable Proportions.

(2 × 15 = 30 marks)

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B.Com. (Professional)

1.3 BCP—PRINCIPLES AND PRACTICE OF ACCOUNTING

(2016—2019 Admissions)

Time : Three Hours

Maximum : 80 Marks

**Part I**

*Answer all questions.  
Each question carries 1 mark.*

Choose the correct answer :

1. Purchase book records purchase of \_\_\_\_\_.
  - a) Cash.
  - b) Credit.
  - c) Cash and credit.
  - d) None.
2. Error of posting affects \_\_\_\_\_ account.
  - a) One.
  - b) Nominal.
  - c) Personal.
  - d) Two.
3. Sacrificing ratio = \_\_\_\_\_.
  - a) New ratio- old ratio.
  - b) Old ratio- new ratio.
  - c) Old ratio.
  - d) None of these.
4. Branch stock account is always prepared at \_\_\_\_\_.
  - a) Cost price.
  - b) Market price.
  - c) Cost or market price whichever is better.
5. At the time of renewal of a bill, interest account is \_\_\_\_\_ in the books of drawer.
  - a) Debited.
  - b) Credited.
  - c) Credited and debited.
  - d) Not recorded.

**Turn over**



Fill in the blanks :

6. The credit balance in bank account is \_\_\_\_\_.
7. Errors of carry forward affects \_\_\_\_\_ accounts.
8. Down payment means \_\_\_\_\_.
9. Under debtors system branch account discloses \_\_\_\_\_.
10. Bills receivable account is a \_\_\_\_\_ account.

(10 × 1 = 10 marks)

### Part II (Short Answer questions)

*Answer any eight questions.  
Each question carries 2 marks.*

11. What is hire purchase price ?
12. State two merits of hire purchase.
13. What do you understand by business entity concept ?
14. How will you prepare bank reconciliation statement ?
15. What is mean by bills receivables ?
16. What does IFRS 12 deals with ?
17. Define partnership.
18. How will you compute new ratio in the case of partnership ?
19. What is mean by reconstitution of the firm ?
20. Describe whole sale branch system.

(8 × 2 = 16 marks)

### Part III (Short Essay Questions)

*Answer any six questions.  
Each question carries 4 marks.*

21. Explain limitations of financial accounting.
22. Explain classification of errors.
23. What are the features of bill of exchange ?
24. Distinguish between revaluation account and memorandum revaluation account.

25. Following errors are located in the books of Mothilal Ltd. for the year ended 30th June 2017 :

- 1 A contractor's bill for Rs. 30,000 for the erection of a store room was debited to repairs account.
- 2 A cheque for Rs. 4,500 received from Bansilal was dis-honoured and debited to allowance account.
- 3 Wages paid to the firm's own workmen for making certain additions to machinery amounting to Rs. 7,500.
- 4 Goods to the value of Rs. 3,500 returned by Chandal were included in stock, but was not entered in the books.
- 5 A sum of Rs. 5,000 drawn by the proprietor was debited to Entertainment expense account
- 6 A cheque for Rs. 1,500 received from Bagavathi was credited to the account of Jagathi and debited correctly to cash account.

Give journal entries to correct these.

26. Koshi and Joshi were partners in a joint venture sharing profits and losses in the proportion of three-fifth and two-fifth respectively. Koshi supplies goods to the value of Rs. 10,000 and incurs on freight Rs 500. Joshi also supplied goods to the value of Rs. 8,000 and incurs Rs. 400 towards freight and other incidental charges. Joshi sells the entire stock on behalf of the joint venture for Rs. 25,000. Joshi is also entitled to commission of 5% on sales. Joshi settled his account by remitting a bank draft.

Pass necessary journal entries and ledger accounts in the books of Koshi.

27. A and B are partners in a firm having capitals of Rs. 50,000 each. A and B are entitled to a salary of Rs. 1,500 p.m. and Rs. 3,000 respectively. Further A is entitled to receive 10% commission on net profits before charging any commission and B is entitled to receive 8% commission on net profits after charging all commissions. Net profits before charging any commission during the year was Rs. 45,000. Show the distribution of profits among partners if their profits sharing ratio is 3 :.2.

28. Give journal entries in the books of Branch A to rectify or adjust the following :

- i) Head office expenses Rs. 3,500 allocated to the branch, but not recorded in the branch books.
- ii) Depreciation of branch assets, whose accounts are kept by Head office not provided earlier for Rs. 1,500.
- iii) Branch paid Rs. 2,000 as salary to a HO Inspector, but the amount paid has been debited by the branch to salaries account.

**Turn over**

- iv) HO collected Rs 10,000 directly from a customer on behalf of the branch, but no intimation to this effect has been received by the Branch.
- v) A remittance of Rs. 15,000 sent by the branch has not yet been received by the Head office.
- vi) Branch A incurred advertisement expenses of Rs. 3,000 on behalf of branch.

(6 × 4 = 24 marks)

#### Part IV (Essay Questions)

*Answer any two questions.*

*Each question carries 15 marks.*

29. Mr. Senthil tallies his Trial balance placing the difference in the suspense account. But he finds the following mistakes and needs your help in correcting the following trail balance. With the data given below you are asked to prepare :

- (a) Profit and loss adjustment account for the year ended 31-12-2017
- (b) Corrected trial balance as on 31-12-2017
  - 1 Profit before the following correction-Rs. 22,950.
  - 2 Purchase of goods from Gayathri recorded as Rs 5,900 instead of Rs 9,500.
  - 3 Payment to Padma posted on priya's A/C-Rs 22,200.
  - 4 Electricity bill of residence to Electricity expenses A/c-Rs 18,000.
  - 5 Cash balance as on 31-03-2008 recorded as Rs 90,000 instead of Rs. 9,000.
  - 6 Cash sale Rs. 45,000 not recorded at all.
  - 7 Salary to pappu debited to his personal A/c.
  - 8 Depreciation on car provided at 15% instead of 20%.
  - 9 Credit card expenses of Balaji debited to Interest A/c-Rs. 15,000.

10 Loan from Yamini shown as cash sale -Rs. 12,500

*Trail balance as on 31-03-2008*

	Rs.	Rs.
P/L account		22,950
Gayathri	3,600	
Padma		22,200
Priya	22,200	
Cash	...	90,000
Pappu	24,000	
Car	...	42,500
Suspense		81,000
Capital	...	56,150
	<u>1,82,300</u>	<u>1,82,300</u>

30. James whose accounting year ends on 31<sup>st</sup> May, 2008, consigned 200 bags of sugar, each bag costing Rs. 300 to Simon of Bombay on 1<sup>st</sup> April, 2008. He had paid Rs. 1,000 towards freight and insurance, 30 bags were damaged in transit and on 31<sup>st</sup> May, 2008 the consignor has received Rs. 2,000 on account of the damaged bags from the Insurance Company.

Simon took delivery of the goods on 10<sup>th</sup> April 2008 and immediately accepted a bill drawn on him for Rs. 40,000 for 60 days. On 31<sup>st</sup> May 2006 the consignee reported that:

- 140 bags were sold at Rs. 350 per bag.
- The damaged bags were sold at Rs 110 per bag ; and
- He had incurred the following expenses.

Godown rent Rs. 1,400 ; clearing charges Rs 1,700 and carriage outwards Rs 600.

He is entitled to a commission of 10% on the sale proceeds of all goods sold.

Assuming that Simon remits the balance by bank draft on 3<sup>rd</sup> May 2008, prepare ledger accounts in the books of James. Also assume that no portion of expenses incurred by the consignee is attributable to the damaged bags.

**Turn over**

31. A, B and C were partners sharing profits and losses 2:3:1. The position of the firm as on 1-4-2007 and 31-3-2008 was :

	1-4-2017	31-3-2018		1-4-2017	31-3-2018
<i>Capitals :</i>			Fixed assets	130,000	28,000
A	20,000	18,000	Debtors	40,000	37,000
B	40,000	36,000	Stock	20,000	65,000
C	10,000	9,000	Loans and advances	32,000	22,000
General reserve	30,000	72,000			
Capital reserve	12,000	12,000			
Bank Overdraft	10,000	5,000			
	1,22,000	1,52,000		1,22,000	1,52,000

On 1<sup>st</sup> April 2017 the partners decided to change their profit and loss sharing ratio to 2 : 4 : 1. Goodwill was valued at Rs. 42,000. No entries were however passed to give effect to this change.

Pass journal entries in the books of the firm as on 31st March, 2018 and prepare capital accounts.

(2 × 15 = 30 marks)