

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester BCOM/BCOM CA Degree Examination, April 2023

BCC404 /

BCM4C04 – Quantitative Techniques for Business

(2019 Admission onwards)

Time: 2 ½ hours

Max. Marks: 80

Section A

Answer all questions.

1. What are the limitations of quantitative techniques?
2. What is mean by feasible region?
3. What is coefficient of determination?
4. Define correlation.
5. If regression coefficients $b_{xy} = 1.243$ and $b_{yx} = 0.598$, then calculate correlation coefficient (r)?
6. Comment on the statement 'the correlation between height and weights of 100 sample of students in a college is + 0.98'.
7. Distinguish between linear and nonlinear regressions.
8. Discuss the characteristics of Poisson distribution.
9. Define random variable.
10. State two properties of normal distribution.
11. What is the range of probability?
12. What will be the sample space when two coins are tossed together?
13. What is the probability of drawing a white ball from a box containing 3 white and 5 black balls.
14. What is a linear programming problem ?
15. What is conditional probability?

(15 x 2 = 30, maximum ceiling 25 marks)

Section B

Answer all questions.

16. What are the different types of quantitative techniques used in Business?
17. Distinguish between correlation and regression analysis.
18. Out of the two lines of regression given by
 $x + 2y - 5 = 0$, and $2x + 3y - 8 = 0$, which one is the regression line of x on y and which one is the regression line of y on x ?

19. A manufacturer who produces medicine bottles, find that 0.1% of the bottles are defective. The bottles are packed in boxes containing 500 bottles. A drug manufacturer buys 100 boxes from the producer of bottles. Using Poisson distribution, find how many boxes will contain,
- No defectives
 - At least two defectives.
 - At the most three defectives.
20. The probability that a doctor will diagnose a particular disease correctly is 0.6. The probability that a patient will die by his treatment after correct diagnosis is 0.4 and probability of death by wrong diagnosis is 0.7. A patient of the doctor who had the disease died. What is the probability that his disease is correctly diagnosed.
21. In a village of 600 families, 260 own refrigerators, 300 own television, 250 own washing machines. 80 families own both refrigerator and television, 70 own refrigerator and washing machines, and 90 own television and washing machines. If all of them use at least one of these, find the number of families who own all of these. Draw Venn diagram to support your answer.
22. There are 4 boys and 3 girls in a class. Find the probability of selecting 3 of which,
- exactly two are women,
 - no woman
 - at least one woman
 - at least two women
 - at the most 2 women.
23. Box 'A' contains 4 white and 3 red marbles and box 'B' contains 2 white and 5 red marbles. One of the box is to be chosen at random and marbles is to be selected from the chosen box. What is the probability of drawing a white marble?

(8 x 5 = 40, maximum ceiling 35 marks)

Section C

Answer any two Questions.

24. With the following data in six cities calculate the coefficient of correlation by Karl Pearson's method between density of population and death rate.

City	Area in Square miles	Population (in 1000)	No of deaths
A	150	30	200
B	180	90	1440
C	100	40	560
D	60	42	840
E	120	72	1224
F	80	34	312

25. The weekly wages of 1000 workers are normally distributed around a mean of ₹ 70 and with a standard deviation of ₹ 5. Estimate the number of workers whose weekly wages will be between ₹ 70 and ₹ 72. Also estimate the lowest wages of the 100 highest paid workers.

26. The screws produced by certain machine were checked by examining samples. The following table shows the distribution of 128 sample according to number of defective items they contained.

No of defectives :	0	1	2	3	4	5	6	7
No of samples :	7	6	19	35	30	23	7	1

Fit a binomial distribution to find the mean and variance of the distribution.

27. Solve the following linear programming problem using graphical method.

$$\text{Maximise } Z = 100X_1 + 80X_2$$

Subject to,

$$5X_1 + 10X_2 \leq 50$$

$$8X_1 + 2X_2 \geq 16$$

$$3X_1 - 2X_2 \geq 6$$

$$X_1 \text{ and } X_2 \geq 0$$

(2 x 10 = 20 marks)

15

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester BCOM/BCOM CA Degree Examination, April 2023

BCM4B05/BCC4B05 – Cost Accounting

(2019 Admission onwards)

Time: 2 ½ hours

Max. Marks: 80

PART A

Answer all questions

1. What do you mean by Cost Accounting?
2. What are the three major components of cost??
3. Calculate Cost of production: Factory Expenses Rs 30,000, Administration expenses Rs.20,000 .Labour Rs 25,000. Materials Rs 35,000, Selling expenses Rs 10,000.
4. Calculate EOQ by considering the following information:-
Annual Consumption 40,00,000kgs, cost of placing one order Rs.100, Cost of carrying one kg of raw material for one-year Rs.0.50
5. What do you understand by stores ledger?
6. What is VED analysis?
7. Mention the objects of Time keeping?
8. What is Labour hour rate ?
9. How do you calculate Machine hour rate in Cost accounting?
10. What are the two basic methods of Costing?
11. What are the examples of abnormal loss in cost accounting?
12. A passenger transporting company has 4 buses with a seating capacity of 50 each. It covers a distance of 30kms (one way) to a particular destination. It makes daily 5 trips on an average. The average capacity carried is 90 % of the total capacity. Calculate total running kilometres per day?
13. What do you understand by Zero Base Budgeting?
14. What is the main purpose of computing standard cost?
15. State the meaning of MCV?

(15 x 2 = 30, Maximum ceiling 25 marks)

PART B

Answer all questions

16. S. K. Brothers wish to approach the bankers for temporary overdraft facility for the period from October 2010 to December 2010. During the period of these three months, the firm will be manufacturing mostly for stock. You are required to prepare a cash budget for the above period.

Month	Sales(₹)	Purchases(₹)	Wages.₹)
August	3,60,000	2,49,600	24,000
September	3,84,000	2,88,000	28,000
October	2,16,000	4,86,000	22,000
November	3,48,000	4,92,000	20,000
December	2,52,000	5,36,000	30,000

(a) 50% of credit sales are realized in the month following the sales and remaining 50% in the second following.

(b) Creditors are paid in the month following the month of purchase

(c) Estimated cash as on 1-10-2010 is Rs.50,000.

17. A Transport company runs buses at two places –A and B from following particulars calculate

(a) total kilometres (b) Total passenger kilometres for both places

Particulars	A	B
Number of Buses	4	5
Days operated in a month	30	25
Trip made by each bus	4	4
Distance of route (one way)	30 kilometres	25 Kilometers
Capacity of Bus	60 passengers	50 passengers
Normal passengers travelling	80% of capacity	90% of capacity

18. From the following calculate the earnings of workers A, B and C under Halsey plan and Rowan scheme of payment

Worker	A	B	C
Standard time (hrs)	3	4	5
Actual Hrs	5	3	4
Basic wages per hour	2	2	2

19. What are the methods of absorption of overheads? Explain?

20. Briefly explain the role of inventory in JIT?
21. Distinguish between Cost Centre and Profit centre?
22. Briefly explain the classification of cost?
23. Calculate minimum stock level, maximum stock level, and re-ordering level:
 - (i) Maximum Consumption = 300 units per day
 - (ii) Minimum Consumption = 180 units per day
 - (ii) Normal Consumption = 190 units per day
 - (iv) Reorder period = 10-15 days
 - (v) Reorder quantity = 2,000 units
 - (vi) Normal reorder period = 13 days.

(8 x 5 = 40, Maximum ceiling 35 marks)

PART C

Answer any two questions

24. From the following figures obtained from the costing records of product A ascertain the PRIME COST for the month of August 2022:

Opening stock of Raw materials(1.8.2022)	10,000
Raw materials purchased	80,000
Raw materials returned	5,000
Carriage inward for raw materials purchased	4,000
Raw materials on 31.08.2022	6,000
Work-in-progress at prime cost on 1.08.2022	8,000
Work-in-progress at prime cost on 31.08.2022	4,000
Chargeable expenses	10,000
Productive wages	40,000

25. A factory has 3 production departments (P1, P2, P3) and 2 service departments (S1 & S2). The following overheads & other information are extracted from the books for the month of January 2012.

Expense	Amount (₹)
Rent	6,000
Repair	3,600
Depreciation	2,700
Lighting	600
Supervision	9,000
Fire Insurance for stock	3,000
ESI contribution	900
Power	5400

Particulars	P1	P2	P3	S1	S2
Area sq. ft	400	300	270	150	80
No. of workers	54	48	36	24	18
Wages (₹)	18000	15000	12000	9000	6000
Value of plant (₹)	72,000	54,000	48,000	6,000	-
Stock Value (₹)	45,000	27,000	18,000	-	-
Horse power plant	600	400	300	150	50

Allocate or apportion the overheads among the various departments on suitable basis.

26. A product is completed in three consecutive processes. During a particular month the input to Process 1 of the basic raw material was 5,000 units at Rs 2 per unit. Other information for the month was as follows:

Particulars	Process1	Process2	Process3
Output	4,700	4,300	4,050
Normal loss as % of input	5%	10%	5%
Scrap value per unit(₹)	1	5	6
Direct wages (₹)	3000	5000	8000
Direct expenses (₹)	9,750	9,910	15,560

Overhead ₹ 32,000 is chargeable as percentage of direct wages. There was no opening or closing work-in-progress. Compile three process and finished stock account with details of abnormal loss and gain, where applicable.

27. Describe briefly the procedure of establishing standard costs within the divisions of material, labour and overhead costs?

(2 × 10 = 20 marks)

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester BCOM/BCOM CA Degree Examination, April 2023

BCM4B06/BCC4B06 – Corporate Regulations

(2019 Admission onwards)

Time: 2 ½ hours

Max. Marks: 80

PART A

Answer all questions.

Each question carries 2 marks.

1. What do you mean by Doctrine of Constructive Notice?
2. Explain Red-herring prospectus.
3. Who is a Promoter?
4. Explain types of Promoter
5. What do you mean by Memorandum of Association?
6. Define share.
7. What is cumulative preference share?
8. Explain Public offer.
9. What do you mean by forfeiture of share?
10. What is a share warrant?
11. What is extra ordinary general meeting?
12. What is resolution?
13. What is Voluntary winding up?
14. Who is a liquidator?
15. What is agenda?

(15 x 2 = 30, Maximum ceiling 25 marks)

PART B

Answer all questions.

Each question carries 5 marks.

16. What are the duties of Promoter?
17. What are the limitations on the power of a company to alter its Memorandum?
18. Explain the Doctrine of Indoor Management. State exceptions to indoor management.
19. Briefly explain the liabilities for misstatement in prospectus.
20. What is Corporate Social responsibility?

21. Explain the position of directors in a company.
22. How are the votes cast in company meetings?
23. What are the consequences of winding up?

(8 x 5 = 40, Maximum ceiling 35 mark)

PART C

**Answer any two questions.
Each question carries 10 marks.**

24. Explain the circumstance in which the Corporate Veil is lifted.
25. Explain the powers and liabilities of directors of a company.
26. Explain the functions and powers of SEBI.
27. Describe the different modes of winding up of a company

(2 x 10 = 20 Marks)

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester BCOM/BCOM CA/BBA Degree Examination, April 2023

BCM4A13/BCC4A13/BBA4A13– Entrepreneurship Development

(2019 Admission onwards)

Time: 2 ½ hours

Max. Marks: 80

PART A**Answer all questions, each question carries 2 marks.**

1. Define Entrepreneurship
2. Who is first generation entrepreneur?
3. What are the objectives of NAYE
4. What is technical analysis?
5. Explain bounties?
6. What is industrial estate?
7. Who is innovative entrepreneur?
8. What is Seed capital?
9. List out the characteristics of entrepreneur?
10. What you mean by Incentives?
11. What is UAM
12. What is plant design?
13. What is executive summary?
14. What is the main function of DIC?
15. What is STED project?

(15 x 2 = 30, Maximum ceiling 25 marks)**PART B****Answer all questions, each question carries 5 marks.**

16. What is SIDCO? What are its functions?
17. What are the benefits of registration as a Small-Scale Unit
18. Discuss briefly the various institutions engaged in entrepreneurship development in India
19. What are the features of MSME Development Act, 2006
20. Explain the techniques of demand forecasting.
21. Write a note on women entrepreneurship in Kerala.
22. State the difference between entrepreneur and manager.
23. What is the purpose of Project Report?

(8x5 = 40, Maximum ceiling 35 marks)

PART C

Answer any two questions, each question carries 10 marks.

24. Define sick industrial units. What are the measures taken by the Govt. of India for the prevention of industrial sickness/revival of sick industrial units?
25. Draft the specimen form of a project report.
26. Define entrepreneur. Explain the various types of entrepreneurs.
27. Discuss the procedure of getting environmental clearance before starting a project

(2 x 10 = 20 marks)

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester BCOM/BCOM CA/BBA Degree Examination, April 2023

BCM4A14 /BCC4A14/BBA4A14– Banking & Insurance

(2019 Admission onwards)

Time: 2 ½ hours

Max. Marks: 80

Section A**Answer all questions. Each question carries 2 marks.**

1. Define bank.
2. Expand NEFT and RTGS.
3. What is financial inclusion?
4. What do you mean by credit creation.
5. What is a bill of exchange under Negotiable Instrument Act?
6. Who is an endorser?
7. What is marking of a cheque?
8. What is credit card?
9. What is virtual banking?
10. What is consensus ad idem for insurance contracts?
11. What is double insurance?
12. What is insurable interest?
13. What is nomination for life insurance?
14. What is Telebanking?
15. What is micro finance?

(15 x 2 = 30 maximum ceiling 25 marks)**Part B****Answer all questions each questions carries 5 marks**

16. Explain the relationship between banker and customer
17. Write a note on insurance as a social security tool
18. Why RBI is called bankers bank?
19. Explain core banking
20. What is bank rate policy? What are its assumptions?
21. Explain different type of negotiable instruments
22. Write a short note on IRDA?
23. What are the different kinds of endorsements?

(8x5 = 40 Maximum ceiling 35 marks)

Part C

Answer any TWO questions each question carries 10 marks

24. What are different types of bank accounts? Also examine procedure to be followed for opening a bank account.
25. Explain the different principles of insurance
26. What is E banking? Explain the need and importance of E banking
27. Explain the evolution and law relating to Life Insurance in India

(2 x 10 = 20 Marks)