

## FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester BCOM/BCOM CA Degree Examination, April 2025

BCM4C04/BCC4C04 – Quantitative Technique for Business

(2022 Admission onwards)

Time: 2 ½ hours

Max. Marks : 80

## Section A

Answer all questions.

1. Explain the role of quantitative techniques in business and industry.
2. What are the different methods of studying correlation?
3. What is coefficient of determination?
4. Under what circumstances is the rank correlation used?
5. Distinguish between linear and nonlinear regressions.
6. Discuss the characteristics of Poisson distribution.
7. What is point estimation and interval estimation?
8. State two properties of normal distribution.
9. What are the properties of a good estimator?
10. What is SPSS used for?
11. What is analysis of variance?
12. Differentiate between standard deviation and standard error?
13. What are type I and type II errors in testing hypothesis?
14. What is sign test?
15. Do you agree with the statement 'The mean of a binomial distribution is 5 and SD is 3'? if not, why?

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

## Section B

Answer all questions.

16. Describe various mathematical and statistical quantitative techniques?
17. Explain the procedure of testing a hypothesis?
18. Two groups of 100 people each were taken for testing the use of vaccine, 15 persons contracted the disease out of vaccinated persons, 25 contracted the disease in the other group. Test the efficiency of the vaccine using  $\chi^2$  test. (at 5% level for 1 df the value of  $\chi^2 = 3.84$ ).

19. If  $b_{xy} = 0.83$ ,  $\sigma_x = 10$ ,  $\sigma_y = 12$ , find  $r$ .
20. The number of accidents in a year attributed to taxi drivers in a city follows Poisson distribution with mean 3. Out of 1000 taxi drivers find approximately the number of drivers with
- No accidents in a year.
  - More than 3 accidents in a year
21. A sample size 900 was taken from a population with SD 15. The mean of the sample is 25. Test whether the sample has come from a population with mean 26.8.
22. It is observed that 90% of television viewers watch 'big boss' programme. What is the probability that out of 10 viewers,
- at least 3 viewers watch the program
  - none of them watch the program
  - at the most 2 viewers watch the program.
23. For a sample of 100 workers from Kerala, the average daily wage is ₹ 800 with S.D of ₹ 65. For a sample of 200 workers from Tamil Nadu, the corresponding figures are ₹ 500 and ₹ 50 respectively. Can you conclude that the average wages of workers of Kerala is more than that of the workers in Tamil Nadu.

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

### Section C

Answer any two Questions.

24. A certain company had four salesman A, B, C and D each of whom was sent for a month to three types of areas, countryside K, outskirts of a city O and shopping centre of the city S. The sales in hundreds of rupees per month are shown below:

Areas	Salesmen			
	A	B	C	D
K	30	70	30	30
O	80	50	40	70
S	100	60	80	80

Carry out a two-way analysis of variance and interpret the results.

25. The following is the result of an examination.

Age of candidates	13	14	15	16	17	18	19	20	21	22
Candidates appeared	200	300	100	50	150	400	250	150	25	75
Successful candidates	124	180	65	34	99	252	145	81	12	33

Calculate Karl Pearson's correlation co-efficient between Age and success rates of candidates.

26. In an examination conducted by the university of Calicut to 1000 students the mean score was 60 and the standard deviation was 20 marks. Assuming the marks are normally distributed find,
- The number of students whose scores are between 35 and 75
  - Whose scores exceeds 70
  - Whose scores are below 40.
27. Twelve students were given special classes for quantitative techniques subject for 1 month. Two examinations were conducted before and after the special classes. Do the marks from indicate any improvement in students due to special classes ?

Sl no	1	2	3	4	5	6	7	8	9	10	11	12
Marks before	34	45	46	53	36	24	35	28	29	45	48	37
Marks after	56	63	49	69	48	54	58	32	42	56	68	54

( $t_{0.05}$  with 11 d.f = 1.796)

(2 x 10 =20 marks)

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE  
Fourth Semester BCOM/BCOM CA Degree Examination, April 2025  
BCM4B05/BCC4B05 – Cost Accounting  
(2022 Admission onwards)

Time: 2 ½ hours

Max. Marks : 80

**Section A**

*Answer All Questions, Each carry 2 Marks*

1. What is direct labour?
2. Write a note on VED analysis?
3. What is cost plus contract?
4. How do you differentiate cost centre with profit centre?
5. Write a note on cash budget?
6. Define motion study?
7. What are the applications of service costing?
8. What is bin card ?
9. What is meant by work certified and work uncertified?
10. What is standard costing?
11. Who are out workers?
12. Give four examples of office overheads?
13. What is muster roll?
14. Define co-products?
15. How is abnormal gain treated in process accounts.

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

**Section B**

*Answer All Questions. Each Carries 5 Marks*

16. Explain how cost control is achieved by the use of standard costing?
17. What is EOQ? Explain the method of determining EOQ?
18. ABC Ltd are the manufactures of panels of TV. The following are the details of their operations during 2023-24.  
Ordering cost – Rs. 120 per order  
Inventory carrying cost – 20% p.a  
Cost of panel – Rs. 450 per panel  
Normal usage – 90 panel per week  
Minimum usage – 40 panel per week  
Maximum usage – 200 panel per week  
Lead time to supply – 6 to 8 weeks

Required:

- (i) Re-order level
- (ii) Maximum level of stock
- (iii) Minimum level of stock

19. Calculate the earnings of workers A and B under Straight piece rate system and Taylor's differential piece rate system from the following particulars:

Normal rate per hour – Rs. 1.80

Standard time per unit – 20 seconds

Differentials to be applied:

80% of piece rate below standard

120% of piece rate at or above standard

Worker A produces 1,300 units per day and worker B produces 1,500 units per day.

20. Anji Dutt Ltd. took up two jobs during the 1<sup>st</sup> week of April 2024. Following details are available:

	Job 101	Job 102
Materials supplied	Rs. 2,100	Rs. 1,400
Wages paid	Rs. 900	Rs. 600
Material transfer from 102 to 101	Rs. 100	Rs. 100
Material returned to stores	-	Rs. 50

Find the cost of each job

21. A contract is estimated to be 80% complete in its first year of construction as certified. The contractee pays 75% of value of work certified, as and when certified and makes the final payment on the completion of contract. Following information is available for the first year.

Cost of work in progress uncertified – Rs. 8,000

Profit transferred to P/L A/c at the end of year on incomplete contract – Rs. 60,000

Cost of work to date – Rs. 88,000

Calculate the (a) Value of Work in Progress Certified and (b) Amount of Contract Price

22. Following are the budgeted expenses for production of 2500 units

	Per Units Rs.
Direct materials	90
Direct labour	45
Variable overhead	35
Fixed overhead (Rs. 1,25,000)	50
Variable expenses (Direct)	20
Selling overhead (10% fixed)	30
Administration expenses (Rs. 25,000)	10
rigids for all level of production)	10
Distribution expenses (30% fixed)	10

Prepare a flexible budget for production of 1500, 1750 and 2000 units, showing distinctly marginal and total cost.

23. Compute the Machine Hour Rate from the following data:

Cost of machine – Rs. 1,00,000

Installation charges – Rs. 10,000

Estimated scrap value after the expiry of its life (15 years) – Rs. 5,000

Rent and rates for the shop per month – Rs. 200

General lighting for the shop per month – Rs. 300

Insurance premium for the machine per annum – Rs. 960

Repairs and maintenance expenses per annum – Rs. 1,000

Power consumption – 10 units per hour

Rate of power per 100 units – Rs. 20

Estimated working hours per annum – 2,200

This includes setting up time of 200 hours

Shop supervisor's salary per month – Rs. 600

The machine occupies 1/4 of the total area of the shop. The supervisor is expected to devote 1/5 of his time for supervising the machine.

(8 x 5 = 40 Marks, Max ceiling 35 Marks)

#### Section C

*Answer Any TWO Questions. Each Carries 10 Marks*

24. The following is the history of the receipts and issues of materials in a factory during January 2025

2025, Jan 1	Opening balance	500 quintals	@ Rs. 25.00
Jan 3	Issue	70 quintals	
Jan 6	Issue	100 quintals	
Jan 9	Issue	80 quintals	
Jan 13	Received from suppliers	200 quintals	@ Rs. 24.50
Jan 14	Return of surplus from a work order	15 quintals	@ Rs. 24.00
Jan 16	Issue	180 quintals	
Jan 20	Received from suppliers	240 quintals	@ Rs. 24.75
Jan 24	Issue	304 quintals	
Jan 25	Received from suppliers	320 quintals	@ Rs. 24.50
Jan 26	Issue	112 quintals	
Jan 27	Return of surplus from work order	12 quintals	@ Rs. 24.50
Jan 28	Received from suppliers	100 quintals	@ Rs. 25.00

Issues are priced on the principle of LIFO method. The stock verifier notices on 15, he had found a shortage of 5 quintals and on 27 another shortage of 8 quintals. Write out the Stores Ledger Account.

25. International Motors manufacture crankshafts for Jeeps and Trucks. They have furnished the following particulars for the quarter ended March 31, 2024.

Materials Rs. 2,98,000; Direct Wages Rs. 42,000; Stores Expenses Rs. 20,000; Machinery Maintenance Rs. 4,600; Depreciation Rs. 22,300; Staff Welfare Rs. 12,000; General Expenses Rs. 30,000; Administration and Selling Expenses Rs. 27,000.

Additional information provided by them:

	Jeep	:	Trucks
Production (Nos)	300	:	400
Material cost ratio per vehicle	1	:	2
Direct labour ratio	2	:	3
Machine hour ratio	1	:	2

Calculate the cost per crankshaft of each vehicle indicating the basis of apportionment adopted by you.

26. From the following information, prepare a Process B Account, Normal Loss Account, Abnormal Loss / Abnormal Gain Account as the case may be:

2,000 units are transferred to Process B @ 4 per unit. Other details are given to the process are:

Materials – Rs. 4,000

Labour – Rs. 1,000

Overhead – Rs. 700

The normal loss has been estimated @ 10% of the process input. Units representing normal loss can be sold @ Rs. 1 per unit. Actual production in the process is 1,900 units.

Output of Process B is transferred to Finished Stock Account.

27. “Cost accounting is the backbone of financial stability and profitability in an organization”

– Discuss this statement in detail.

(2 x 10 = 20 Marks)

## FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

## Fourth Semester BCOM/BCOM CA Degree Examination, April 2025

## BCM4B06/BCC4B06 – Corporate Regulations

(2022 Admission onwards)

Time: 2 ½ hours

Max. Marks : 80

**PART A****All questions can be attended.****Each question carries 2 marks**

1. Define a joint stock company.
2. What is a defunct company?
3. What is certificate of incorporation?
4. Who are called promoters?
5. Define Memorandum of Association.
6. What is a Red- Herring prospectus?
7. What are preference shares?
8. What is private placement?
9. What is a depository?
10. Who is an additional director?
11. Define corporate governance.
12. Define quorum.
13. What is resolution?
14. Who is an official liquidator?
15. What is compulsory winding up?

**(15 x 2 = 30 , Maximum ceiling 25 marks)****PART B****All questions can be attended.****Each question carries 5 marks**

16. What are the privileges of one person company?
17. What are the legal position of promoters? Explain.
18. What are the clauses of Memorandum of Association?
19. What are the conditions for buyback of shares?
20. What are the qualifications of an independent director?
21. What are the requisites of a valid motion? Explain.
22. What is winding up? What are the reasons for winding up of a company?
23. What are the qualifications of a company secretary?

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

### **PART C**

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

24. Explain the different stages in the formation of a company.
25. Discuss the liabilities for mis-statement in the Prospectus.
26. What are the rights, duties and liabilities of a director? Explain.
27. What is company meeting? Explain different types of company meetings.

**(2 x 10 = 20 Marks )**

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Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester BCOM/BCOM CA/BBA Degree Examination, April 2025

BCM4A13/BCC4A13/BBA4A13 – Entrepreneurship Development

(2022 Admission onwards)

Time: 2 ½ hours

Max. Marks : 80

**PART A**

**All questions can be attended.**

**Each question carries 2 marks.**

1. What is Innovation?
2. Define an Intrapreneur?
3. Who is an induced entrepreneur?
4. What are bounties?
5. What is the function of DIC?
6. Define Incentives?
7. What are export oriented units?
8. What is seed capital instance?
9. What is single window system?
10. Define Project ideas?
11. What is location decision?
12. What is SCBA ?
13. What is meant by Entrepreneurial ecosystem?
14. What is micro enterprise?
15. Define sick industrial unit?

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

**PART B**

**Answer all questions**

**Each question carries 5 marks.**

16. What are the functions of entrepreneurship?
17. What are the problems faced by women entrepreneur?
18. What are the functions performed by KITCO?
19. What are the functions of Technopark?
20. What is the importance of MSMEs?
21. Explain the components of Social Cost Benefit Analysis.
22. State the importance of feasibility study?
23. What are the techniques of financial analysis?

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

**PART C**

**Answer any two questions**

24. Who is an entrepreneur? Explain different classification of entrepreneurs.
25. What are the purposes of project report ? Explain the requirements of a good project report.
26. Discuss the various factors affecting entrepreneurs growth?
27. Explain the process of setting up of a MSME.

**(2 x 10 = 20 marks)**

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester BCOM/BCOM CA/BBA Degree Examination, April 2025

BCM4A14/BCC4A14/BBA4A14 – Banking &amp; Insurance

(2022 Admission onwards)

Time: 2 ½ hours

Max. Marks : 80

**PART A****All questions can be attended.****Each question carries 2 marks**

1. Define a bank.
2. What is Subrogation?
3. What is a negotiable instrument?
4. Name two types of cheques.
5. Define endorsement.
6. Differentiate between a cheque and a draft.
7. Explain CORE banking.
8. What is an E-cheque?
9. Define insurance.
10. Mention two principles of insurance.
11. What is life insurance?
12. What is the role of IRDA?
13. What is nomination?
14. List two types of cards used in banking.
15. Who is a drawer?

**(15 × 2 = 30, Maximum ceiling 25 marks)****PART B****All questions can be attended.****Each question carries 5 marks**

16. Discuss the structure of banking in India.
17. Distinguish between a cheque and a bill of exchange.
18. Describe the characteristics of negotiable instruments.
19. Evaluate the procedures for applying for debit cards and credit cards.
20. Insurance is a security tool. Explain.
21. Discuss the various types of general insurance.
22. Differentiate between life insurance and general insurance.
23. Describe the powers and functions of IRDA.

**(8 × 5 = 40, Maximum ceiling 35 marks)**

**PART C**

**Answer any two questions.**

**Each question carries 10 marks.**

24. How do different types of banks function in India?
25. What is crossing? Explain the different types of crossing and its significance.
26. How can one claim insurance in death or an accident? Explain.
27. Explain the need and importance of E-banking.

**(2x10= 20 Marks)**