

Reg. No. :

Name :

Fifth Semester B.B.A. Degree Examination, December 2024**Career Related First Degree Programme under CBCSS****Group 2(b)****Core Course****BM 1541 — QUANTITATIVE TECHNIQUES FOR MANAGEMENT****(2022 Admission)**

Time : 3 Hours

Max. Marks : 80

PART – AAnswer **all** questions. Each question carries **1** mark.

1. What is Operations Research?
2. What is meant by modelling in Operations Research?
3. What is graphic method of solving LPP?
4. What are decision variables in LPP?
5. Which are the methods of obtaining initial feasible solution to transportation problem?
6. What is meant by Payoff?
7. What is network analysis?

P.T.O.

PART – C

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

23. What are the main features of linear programming?
24. Write short note on North West Corner Rule.
25. What is meant by 'crashing' in network analysis?
26. What are the properties of binomial distribution?
27. A dietician mixes two types of food in such a way that the vitamin contents of the mixture contain atleast 8 units of vitamin A and 10 units of vitamin C. Food X contains 2 units per kg of vitamin A and 1 unit per kg of vitamin C while food Y contains 1 unit per kg of vitamin A and 2 units per kg of vitamin C. One kg of food X costs Rs.5 whereas one kg of food Y costs Rs. 7.

Formulate the above as LPP.

28. Solve the following transportation problem by lowest cost entry method.

Factories	Retail agency					Capacity
	1	2	3	4	5	
1	1	9	13	36	51	50
2	24	12	16	20	1	100
3	14	33	1	23	26	150
Requirement	100	60	50	50	40	300

29. Given below is the regret table.

Act	Events		
	E1	E2	E3
A1	350	0	250
A2	0	300	0
A3	450	100	100

Suppose that the probabilities of the events in this table are $P(E1) = 0.30$, $P(E2) = 0.45$ and $P(E3) = 0.25$, calculate expected loss of each action and find the optimal act.

30. Draw the network diagram for the following project.

Activity Predecessor activity Time estimate in weeks

A	—	5
B	—	6
C	—	3
D	A	5
E	B	7
F	B	10
G	C	4
H	D	2
I	E	3
J	F, G	6
K	H, I	4

31. The probability of student A passing an examination is $\frac{3}{5}$ and of student B passing $\frac{4}{5}$. Assuming the two events as independent find the probability of

- (a) Both students passing the examination
- (b) Only A passing the examination
- (c) Only one of them passing the examination
- (d) None of them passing the examination.

(6 × 4 = 24 Marks)

PART – D

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

32. Explain the use of Operations Research in management.
33. Describe some methods which are useful for decision making under uncertainty.
34. Solve the following LPP using graphical method.

$$\text{Maximise } Z = 100x_1 + 80x_2$$

Subject to

$$5x_1 + 10x_2 \leq 50$$

$$8x_1 + 2x_2 \geq 16$$

$$3x_1 - 2x_2 \geq 6$$

$$x_1, x_2 \geq 0$$

35. A small project is composed of ten activities whose time schedule is detailed below :

Activity	Duration in weeks
1-2	6
1-3	2
2-3	3
2-4	3
2-5	5
3-6	4
4-7	3
5-7	3
6-7	2
7-8	2

Required to

- (a) Construct network diagram
- (b) Compute EST, LST, EFT and LFT values
- (c) Find total float for each activity
- (d) Find critical path and project duration.

(2 × 15 = 30 Marks)

Reg. No. :

Name :

Fifth Semester B.B.A Degree Examination, December 2024

Career Related First Degree Programme under CBCSS

Group 2(b)

Core Course

BM 1542 : RESEARCH METHODOLOGY

(2022 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **all** the questions in **one** or **two** sentences each.
Each question carries **1** mark.

1. What is casual research?
2. Define deduction.
3. What is research gap?
4. What is a variable?
5. What is hypothesis?
6. What is scaling?
7. What is area sampling?
8. What is primary data?
9. What is coding?
10. What is technical report?

(10 × 1 = 10 Marks)

P.T.O.

SECTION – B

Answer any **eight** questions in not exceeding **one** paragraph. Each question carries **2** marks.

11. What do you mean by ratio scale?
12. Explain moderating and interviewing variable.
13. What is experimental and control group?
14. Explain any two frequently using scaling techniques.
15. What are the merits of secondary data?
16. What is a schedule? What is its purpose?
17. Explain extraneous variables.
18. What is unidimensional analysis and bivariate analysis?
19. What do you mean by foot notes?
20. Write short note on non parametric tests.
21. What is in-depth interview?
22. What do you mean by snowball sampling?

(8 × 2 = 16 Marks)

SECTION – C

Answer any **six** questions in not exceeding **one** page. Each question carries **4** marks.

23. What are the factors affecting research design?
24. Explain the merits of sampling.
25. What are the essentials of questionnaire?
26. Explain the difference between pure research and applied research.
27. What are the features of probability sampling method?
28. Explain the objectives of classification.
29. What are the functions of research report?

- 30. What are merits and demerits of experimental research?
- 31. What are the objectives of review of literature?

(6 × 4 = 24 Marks)

SECTION – D

Answer any **two** questions in not exceeding **four** pages each. Each question carries **15** marks.

- 32. Explain the process of research.
- 33. What are the methods for collecting primary data?
- 34. Explain the layout of research report.
- 35. What do you mean by hypothesis testing? Explain the steps in testing of hypothesis.

(2 × 15 = 30 Marks)

Reg. No. :

Name :

Fifth Semester B.B.A. Degree Examination, December 2024

Career Related First Degree Programme under CBCSS

Group 2(b)

Core Course

BM 1543 : INVESTMENT MANAGEMENT

(2022 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **all** questions in **one** or **two** sentences each. Each carries **1** mark.

1. What is the money market?
2. What is a book built issue?
3. What is a depository?
4. What is a European Option?
5. Who is an AMC?
6. What is NSE?
7. Who can be called Sub broker?
8. What is a stoploss order?

P.T.O.

9. What is Venture Capital?
10. What is the Strike Price?

(10 × 1 = 10 Marks)

SECTION – B

Answer any **eight** questions in not exceeding **one** paragraph. Each question carries **2** marks.

11. What is a commodity future?
12. Explain the term Beta?
13. Who can be called an odd lot dealer?
14. What is private placement?
15. What is Index options?
16. What is Exchange Traded Funds?
17. What is Net Asset Value?
18. What is insider trading?
19. What is FPI?
20. What is Swaps?
21. Explain 'At-the-money' options.
22. What is the meaning of ESOPs?

(8 × 2 = 16 Marks)

SECTION – C

Answer any **six** questions not exceeding **one page** each. Each questions carries **4** marks

23. Write the features of the money market.
24. Differentiate Primary market and Secondary market.

25. State the process of investment decisions.
26. State the differences between forwards and futures.
27. Explain the weakness of Indian Money Market.
28. Write down the features of Swaps.
29. Write the objectives of portfolio management.
30. Explain the advantages of listing.
31. Explain the advantages of depositories.

(6 × 4 = 24 Marks)

SECTION – D

Answer any **two** questions in not exceeding **4** pages each. Each question carries **15** marks.

32. Explain the key factors affecting investment decisions
33. Explain the classification of mutual funds schemes in India.
34. Explain types of charting techniques and chart patterns in investment analysis.
35. Give a brief account of intermediaries in the New Issue Market.

(2 × 15 = 30 Marks)

Reg. No. :

Name :

Fifth Semester B.B.A. Degree Examination, December 2024

Career Related First Degree Programme under CBCSS

Group 2(b)

Elective Course

BM 1561.2 : CUSTOMER RELATIONSHIP MANAGEMENT

(2022 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – I

Answer **all** questions in **one** or **two** sentences. Each question carries **1** mark.

1. Define CRM.
2. What is customer retention?
3. Expand ERP.
4. What are web portals?
5. What are databases?
6. What is data warehousing?
7. What is hospitality industry?
8. Name any two web-based services.

P.T.O.

9. What is a sales force?
10. What is activity management?

(10 × 1 = 10 Marks)

SECTION – II

Answer any **eight** questions. (Not to exceed one paragraph)

11. Explain customer lifetime value.
12. Write a note on the call centre.
13. What is analytical CRM?
14. Explain event-based marketing.
15. Write a note on software robots.
16. What is SFA?
17. Explain the term supply chain management.
18. Explain data mining.
19. What is contact management?
20. What are BOTs?
21. What is behaviour prediction?
22. Write a note on the target market.

(8 × 2 = 16 Marks)

SECTION – III

Short Essay questions. Answer any **six** questions. (Not to exceed **120** word).

23. What are the differences between marketing and CRM?
24. Explain four C's of CRM process.
25. Explain the relevance of customer retention.

26. What are the steps in sales process.
27. What are the uses of ERP?
28. Explain the web-based services.
29. Write a note on the legalities of data use.
30. What are the advantages of e CRM?
31. What are the steps in CRM implementation?

(6 × 4 = 24 Marks)

SECTION – IV

Long Essay questions. Answer any **two** questions.

32. Explain in detail the success factors of CRM.
33. Explain in detail the CRM Practices of the banking sector.
34. Explain in detail the various ethical practices in data use.
35. Explain in detail the steps in choosing CRM tools.

(2 × 15 = 30 Marks)