Room No: _____ Regd No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class : I MBA
Subject : Management
Title of Paper : Management process & Organizational Behaviour
Paper Code : R22MBA101 / R20MBA101
W.E.F : 2022-2023

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 31/12/2024

SECTION-A

I. Answer any FIVE of the following Questions 5x3=15M

1. Write short notes on:

a) Functions of management

b) Skills for managers

c) Span of control

d) Staffing

e) Personality traits

f) Transactional Analysis

g) Group Dynamics

h) OD Interventions

SECTION-B

II. Answer any FIVE of the following Questions **5X8=40M**

2. Discuss the evolution of management thought.

(OR)

3. Briefly write about various principles of management.

4. Define Decision making. Explain the concept and process of decision making.

(OR)

5. What is MBO? Explain the process and importance of MBO in business organization.

6. Compare and contrast Maslow's Need Hierarchy theory & Herzberg's two factor theory of Motivation.

(OR)

7. Define Leadership. Explain the Managerial Grid and Likert's four systems of leadership.

8. Describe the learning theories in detail.

(OR)

9. What is organizational behaviour? Explain different models of OB.

10. Explain the organizational change process and suggest ways to overcome the resistance to change.

(OR)

11. What is organizational conflict? Explain the process of conflicts resolutions.

[P.T.O]

SECTION-C

III. Case Study (Compulsory) 1×15=15M

12. Ritesh is vice-president finance in a company having more than 5000 employees in its roll. He had been working a financial manager in some multinational company. He is highly ambitious, bold, and energetic in his approach. He is result-oriented and practical in approach. He does not have respect for rules and formalities rather he moves in direct manner adopting short cut methods. He seeks high degree of compliance to order and instructions given by him. Use of rationality and intellect is on lower side and his decisions are based on intuition. But in this new company most of the middle level managers are equipped with knowledge of modern management. They are unhappy with the working style of vice president finance.

a) What managerial style is being used by Ritesh and how it is different from other styles of management?

b) Why young professionally qualified middle level managers are not happy with him?

c) Give your suggestion for improving the existing style being followed by ritesh.

Room No: _____ Regd No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class : I MBA
Subject : Management
Title of Paper : Managerial Economics
Paper Code : R22MBA102
W.E.F : 2020-21

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 02/01/2025

SECTION-A

I. Answer any FIVE of the following Questions **5X3=15M**

1. Write short notes on:

a) Managerial Economist

b) Demand forecasting

c) ISO-Quants

d) Wealth maximization

e) Implicit cost vs. explicit cost

f) Skimming vs. Penetration pricing

g) BOP

h) Consumption function

SECTION-B

II. Answer any FIVE of the following Questions **5X8=40M**

2. Explain Law of demand. What are the exceptions to the law of demand?

(OR)

3. Define Elasticity of demand. Explain types of elasticity of demand and their managerial uses.

4. Define economies of scale. What are the sources of internal and external economies of scale?

(OR)

5. How does an economic theory contribute to managerial decisions? Explain in detail.

6. Explain short range and long range costs with examples.

(OR)

7. Briefly explain price output determination in various types of competitions.

8. Write short notes on National Income, Wholesale Price Index and Consumer Price Index.

(OR)

9. Explain different types of inflation. Suggest measures to control inflation.

10. Define trade cycles. Explain the various methods to solve the problems arising out the trade cycles.

(OR)

11. Briefly discuss on Keynesian theory of trade cycles.

[P.T.O]

SECTION-C

III. Answer the following questions

12. Case Study-compulsory 1×15=15M.

Commodity	Original price	New price	Original demand	New demand
A	14	16	54	49
B	6	9	14	12
C	96	100	44	39
D	10	8	29	34

Questions:

a) Calculate price elasticity demand for A,B,C,D

b) Which commodity has more elasticity of demand and which commodity has less elasticity of demand?

Room No: _____ Regd No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class : I MBA
Subject : Management
Title of Paper : Business Environment And Business Laws
Paper Code : R22MBA103
W.E.F : 2022-23

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 04/01/2025

SECTION-A

5x3=15M

I. Answer any FIVE of the following Questions

1. Write short notes on:

a) Scope of Business Environment

b) Environmental scanning

c) NITI AAYOG

d) Money Market

e) Social objectives of business

f) Termination of agency

g) Types of GST

h) Competition Act, 2002

SECTION-B

II. Answer any FIVE of the following Questions **5X8=40M**

2. What is business environment? Explain various dimensions of business environment?

(OR)

3. What is porter's 5 forces model with an example?

4. How do you define globalization? Explain how privatization and globalization made impact on India economy after 90's.

(OR)

5. Explain the nature and structure of Indian economy.

6. What is social responsibility of business? Put for the arguments for and against business assuming social responsibility?

(OR)

7. Define technological environment. How technological environment has an impact on business.

8. What is a contract? Classify and explain the various types of contracts.

(OR)

9. What is a quasi contract? Explain various forms of quasi contracts.

10. What is the difference between companies Act, 1956 and 2013?

(OR)

11. How Indian consumers are protected through consumer protection act 1986? Discuss.

SECTION-C

III. Case Study (Compulsory) **1X15=15M**

12. Avinash and Bipin have a partnership in manufacturing an electronics product. They intend to Start a joint stock company in order to expand their business further. You are a consultant who is supposed to help them to start the company, explain to them complete the procedure and legalities of starting a company.

Room No: _____ **Regd No**_____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG I – SEMESTER END EXAMINATIONS

Class : I MBA
Subject : Management
Title of Paper : **Financial Reporting And Analysis**
Paper Code : R22MBA104
W.E.F : 2023-24

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 07/01/2024

SECTION-A

I. Answer any FIVE of the following Questions. **5X3=15M**

1. a) Define Financial Reporting

b) Elements of Financial Statements

c) Types of Financial Reports

d) Define Accounting

e) Current Ratio

f) C-V-P Analysis

g) Types of Profitability Ratios

h) B-E-P Analysis

SECTION-B

II. Answer ALL the following Questions. **5X8=40M**

2. Describe the objectives, advantages and limitations of Financial Reporting

(OR)

3. Explain the Difference between Financial Reporting and Management Reporting

4. Explain the disclosures under companies Act 2013

(OR)

5. Enumerate the disclosures under accounting standards and voluntary disclosures

6. Discuss the application of accounting concepts and conventions

(OR)

7. Explain the Differences between Funds Flow and Cash flow Statement.

8. Explain the different techniques of financial statements

(OR)

9. Prepare cash-flow statement under direct method

[P.T.O]

Particulars	Debit	Credit
Cash and cash equalents at beginning of period		35,000
Receipts from customer		27,83,000
Issues of shares		3,00,000
Sales of fixed assets		1,28,000
		32,46,000
payments of suppliers	20,47,000	
payments for overheads	1 ,15,000	
Wages & salaries	69,000	
Tax payed	2 ,43,000	
Dividends paid	80,000	
Repayment of bank loans	2,50,000	
Sales of fixed assets	2,30,000	30,34,000
Cash and cash equalents at ending of period		2,12,000

10. Explain the advantages and disadvantages of Ratios

(OR)

11. A comparative balance sheet of TATA motors companies is given for the years of 2022-2023 as given below.

	2022	2023		2022	2023
Equity and Liabilities			**Assets**		
Shareholders Funds			**Non-Current Assets**		
Share Capital	3,00,000	4,00,000	Plane & Machinery	2,50,000	3,50,000
Reserve and Surplus	1,50,000	2,80,000	Land & Building	3,00,000	4,00,000
Non-Current Liabilities			Good Will	2,00,000	2,00,000
Debenture at 8% interest	2,00,000	3,00,000	Patents	50,000	50,000
Mortgage Loan	4,00,000	2,58,000			
Current Liabilities			**Current Assets**		
Trade Payables:			Inventory	1,50,000	2,00,000
Sundry Creditors	50,000	70,000	Current Investments	18,000	50,000
Bills payable	25,000	35,000	**Trade Receivables**		
Short term Borrowings			Sundry Debtors	1,00,000	80,000
Bank overdraft	40,000	60,000	Bills Receivables	80,000	90,000
Outstanding Expenses	10,000	15,000	Cash balance	40,000	45,000
Tax Liabilities	15,000	20,000	Prepaid Expenses	2,000	**3,000**
TOTAL	**11,90,000**	**14,38,000**	Total	**11,90,000**	**14,38,000**

Calculate the following ratios for the year 2023

a) Current Ratio b) Quick Ratio c) Inventory Turnover Ratio

d) Receivable Turnover Ratio e) Payable Turnover Ratio f) Average Payment period

[Continued to Next Page]

SECTION-C

III. CASE STUDY 1X15 = 15 M

12. From the following trial balance prepare Income and Expenditure Statement and balance sheet for the year ended 31-3-2022

Particulars	Debit	Credit
Land at cost	2,20,000	
Plant & Machinery at cost	7,70,000	
Trade receivable	96,000	
Inventory	86,000	
Bank	20,000	
Adjusted Purchases	3,20,000	
Factory expenses	60,000	
Administration expenses	30,000	
Interest on Depreciation	20,000	
Interim divided paid	18,000	
Selling expenses	30,000	
Equity capital (Rs 10 each share)		3,00,000
Debentures (10% Interest)		2,00,000
General reserve		1,30,000
P&L a/c		72,000
Security premium		40,000
Sales		7,00,000
Trade payable		52,000
Provision for depreciation		1,72,000
Suspense a/c		4,000

Adjustments:

- The authorized share capital of a company is 40000 share each 10 Rs.
- The company on the advance of independent value willing to reduce land at Rs 3,60,000.
- Declared dividend at 10% on 2-April-2022.
- Suspense a/c Rs 4,000 represents cash received for the sale of sum portion of machinery. On 1-04-2021 The cost of machinery was Rs 10,000 and accumulated depreciation there on being Rs 8,000.
- Depreciation is provided on plant & Machinery at 10% on cost.
- Ignore taxation and previous year figures

Room No: _____ Regd No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG I – SEMESTER END EXAMINATIONS

Class : I MBA /M.Sc [ACH]
Subject : Management/Chemistry
Title of Paper : **Personality Development Through Life Enlightenment Skills**
Paper Code : R22ACH105A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 29/01/2025

SECTION-A

I. Answer any FIVE of the following Questions. **5X4=20M**

1. a) The concept of success and failure

b) Nature of motivation/motive

c) Explain the term Attitude

d) What is meant by the term Emotional Intelligence?

e) Why Work Ethics are important in any organizations?

f) Time Management

g) Types of Pranayama

h) List out the Meditation techniques

SECTION-B

II. Answer any FIVE of the following Questions. **5X8=40M**

2. Summarize the Theories of Personality development.(Freud &Erickson).

(OR)

3. Explain the concept of SWOT analysis

4. Define attitude. Explain the ways to develop positive attitude.

(OR)

5. Compare the Theories of Motivation explained by Maslow and Herzberg.

6. Apply Good manners and etiquette at work place.

(OR)

7. Identify the qualities of a successful leader.

8. Analyse the aspects of Holistic Development of personality as envisaged in Bhagavad Gita

(OR)

9. Examine Personality of Role Model as said in Bhagavad Gita.

10. Explain the Historical Perspective of Yoga in brief.

(OR)

11. How would you like to classify the Types of Stress and Relaxation Techniques?

[P.T.O]

SECTION-C

III. Answer the following Questions **1X10=10M**

12. Explain the reply give by Lord Krishna in response to the following question by Arjuna "Why is a person impelled to commit sinful acts, even unwillingly as if by force?"

Regd No:_____ Room No:_____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
I SEMESTER END EXAMINATIONS

Class : I MBA
Subject : Management
Title of Paper : Business Analytics for Managerial Decision Making
Paper Code : R22MBA105
W.E.F : 2022-23

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Paper Time : 9am to 12pm
Date : 09/01/2025

SECTION – A

I. Answer any FIVE Of the following questions. 5×3=15M.

1. Business Analytics.
2. Cramer's Rule.
3. Binomial Distribution.
4. Rank Correlation.
5. Sampling.
6. Conditional Probability.
7. Factor Analysis.

SECTION –B

II. Answer ALL the following Questions 5X8=40M

8. Explain about Application & Kinds of Analytics?

(OR)

9. "Business can optimize a distinct business capability via analytics & this better compete"-discuss?

10. Describe Data Sources? And explain the types of Data?

(OR)

11. Using Cramer's Rule, Solve

$$x + y + z = 6$$
$$2x + 3y - z = 5$$
$$6x - 2y - 3z = -7$$

12. Calculate Median for the following data.

Wages	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50
f	5	7	9	15	12	10	9	8	4	2

(OR)

13. State and Prove Bay's Theorem?

14. Compute Karl Pearson's Co-efficient of Correlation from the following data:

Marks is Accountancy	77	54	27	52	14	35	90	25	56	60
Marks in English	35	58	60	40	50	40	35	56	34	42

(OR)

15. Explain the Properties of Regression Coefficients with examples?

16. Briefly explain various steps involved in a Research Process?

(OR)

17. From the following data find whether is any significant liking in the habit of taking Soft drinks among the categories of employees.

	Employees		
Soft Drinks	**Clerks**	**Faculty**	**Officers**
Pepsi	10	25	65
Thums up	15	30	65
Fanta	50	60	30

1X15=15M

SECTION –C

CASE STUDY (COMPULSORY)

18. Answer the following question.

Two independents samples of 7 items respectively had the following values.

Sample I	11	11	13	11	15	9	12	14
Sample II	9	11	10	13	9	8	10	-

Is the difference between means of sample significance?

Room No: _____ Regd No_____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG I – SEMESTER END EXAMINATIONS

Class : I MBA
Subject : Management
Title of Paper : **Managerial Communication**
Paper Code : R22MBA106
W.E.F : 2023-24

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 11/01/2025

SECTION-A

I. Answer any FIVE of the following Questions **5X3=15M**

1. a) Importance of communication

b) Written communication

c) Presentation skills

d) Importance of listening

e) Interviews

f) Use of technology

g) Negotiation skills

h) Employment communication

SECTION-B

II. Answer the following Questions **5X8=40M**

2. Explain in detail about human communication process.

(OR)

3. What are the barriers of effective communication/ Explain in detail?

4. "Effectiveness of the oral communication depends on nonverbal communication" Do you agree? Justify.

(OR)

5. Explain the principles of oral communication.

6. Briefly explain types and barriers of listening skills.

(OR)

7. Explain the concept of body language.

8. Briefly discus the channels of communication.

(OR)

9. Explain the concept of diversity and intercultural communication.

10. What is meant by CV? Explain effective elements of good CV.

(OR)

11. Explain the concept of JOHARI WINDOW.

[P.T.O]

SECTION-C

III. Case Study **1X15=15M**

12. SLN garments, a medium sized family concern, started as a small company in Bangalore In a span of 10 years, the company had recorded an annual sales turnover of over Rs.200 crores, with over 4000 employees, in the 3 different manufacturing locations in Karnataka, with a wide dealer network. However, as the company grew from a small to large one, the company CEO, Mr.Sai, felt that the communication was suffering. This feeling was justified when Mr.Sai had observed a decline in productivity and an increase in rejection rate. Mr. Sai thought that the company was losing its "small company" spirit where, it had more control over its production and marketing operations. Upset by his inability to meet the requirements on time, he had shot off letters to his GM-production, Manager-supplies and marketing manager, asking them to work as a team, put in greater effort and plan their work. The recipients of these letters, in turn, sent somewhat similar letters to their supervisory and marketing field staff, stationed at various locations. However, the situation did not improve. Mr.Sai felt that he had lost touch with the employees, down the line. Therefore, he hired the services of a management consultancy firm, to study the situation and report to him.

Questions:

a. What do you think are the company's real communication problems?

b. How can the company get better commitment from its employees to improve the situation?

c. If you are hired as a consultant, what will be your suggestions to Mr.Sai to improve the communication?

Room No: _____ Regd No _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class : I MBA
Subject : Management
Title of Paper : **Personality Development Through Life Enlightenment Skills**
Paper Code : R22MBA107
W.E.F : 2022-23

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 18/01/2025

SECTION-A

I. Answer any FIVE of the following Questions **5X3=15M**

1. Write short notes on:

a) Find Dimensions of Personality in brief

b) Importance of self- motivation

c) Types of attitude

d) What is meant by the term Emotional Intelligence?

e) Good manners and etiquette

f) Time Management

g) Types of Pranayama

h) Cyclic meditation

SECTION-B

II. Answer any FIVE of the following Questions **5X8=40M**

2. Summarize the Theories of Personality development (Freud &Erickson).

(OR)

3. Explain the SWOT analysis of any MNC

4. Can you write a brief outline of Attitude formation and advantages and disadvantages of positive/negative attitude?

(OR)

5. Compare the Theories of Motivation explained by Maslow and Herzberg.

6. Explain the meaning and importance of social skills, soft skills, and life skills.

(OR)

7. Identify the qualities of a successful leader.

8. Analyse the aspects of Holistic Development of personality as envisaged in Bhagavad Gita.

(OR)

9. Examine Personality of Role Model as said in Bhagavad Gita.

10. Explain the Historical Perspective of Yoga in brief.

(OR)

11. How would you like to classify the Types of Stress and Relaxation Techniques?

[P.T.O]

SECTION-C

III. Case Study **1X15=15M**

Mr. Afroz an organizational consultant. He found personalities nametags are important in the work place and we must interact with one another But, sometimes interactions can lead to conflict because of the clashes between traits dimensions for example, outspoken and reserved, impulsive and methodical, along with skeptical and accepting. Besides, impulsive types usually foster more conflict than the others. This also being supported by some research because personality characteristics seem to affect whether the interpersonal conflict helps or hurts team performance It can be determine by the openness to experience and emotional stability of the employees. Conflict can affect team performance if there is low on some personality qualities. Plus, relationship between employees and supervisors can be weak if they have different personality on the big five modal except extraversion.

Questions

a. Analyze the summary of the case.

b. How would you like to examine the personality Traits which really influence the team's performance?

c. Justify with your answer and list out the personality traits which help in strengthening the relationships between the employees and the supervisor.

Room No: _____ Regd No_____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class : I MCA
Subject : Computers
Title of Paper : **Programming And Problem Solving Using Python**
Paper Code : R22MCA101A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 31/12/2024

SECTION-A

I. Answer any FIVE of the following Questions. **5X4=20M**

1. Explain about break and continue in Python.

2. Explain about Data types in Python.

3. Explain about sets in Python.

4. Explain about Classes and Objects in Python.

5. Explain about Modules in Python.

6. Explain about Exception Handling.

7. Explain about Pandas.

8. Explain about Simple Scatter plots.

SECTION-B

II. Answer the following Questions. **5X10=50M**

9. Explain about Control Statements in Python?

(OR)

10. Explain about Looping Statements

11. Explain about Lists in Python

(OR)

12. Explain about Dictionaries in Python

13. Explain about Abstract Classes in Python

(OR)

14. Explain about Inheritance and types of inheritance in Python

15. Explain about Data Frames in Pandas and its Operations.

(OR)

16. Explain about Computation on NumPy Arrays

17. Explain about Density and Contour Plots?

(OR)

18. Explain about Histograms, Binning's,

Room No: _____ **Regd No**_____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class	: I MCA	Max Marks	: 70
Subject	: Computers	Pass Mark	: 28
Title of Paper	: **Data Structures**	Duration	: 3 Hrs
Paper Code	: R22MCA102A	Time	: 9am to 12pm
W.E.F	: 2023-24	Date	: 02/01/2025

SECTION-A

I. Answer any FIVE of the following Questions. **5X4=20M**

1. Explain about Bubble sort.

2. Explain about Linear Search.

3. Explain about Two- Way Lists.

4. Explain about Deques.

5. Explain about Binary trees.

6. Explain about Heap Sort.

7. Explain about Operations on Graphs.

8. Explain about Linked representation of Graphs.

SECTION-B

II. Answer the following Questions. **5X10=50M**

9. Explain about Data Structure Operations, And Algorithms and its Complexity?

(OR)

10. Explain about Elementary Data Organization and explain about Insertion Sort

11. Explain about Linear Arrays and explain about Selection sort.

(OR)

12. Explain about Binary Search

13. Explain about Quick Sort

(OR)

14. Explain about Infix to postfix Conversion,

15. What is Binary Search Tree and explain about Searching, Insertion and Deletion in Binary Search Trees.

(OR)

16. What is AVL Tree and explain about Insertion and Deletion in AVL trees

17. Explain about Radix Sort and Shell Sort?

(OR)

18. Explain about Breadth First Search, Depth First Search,

Room No: _____ Regd No _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class : I MCA
Subject : Computers
Title of Paper : **Mathematical and Statistical Foundations**
Paper Code : R22MCA103A
W.E.F : 2024/25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 04/01/2025

SECTION-A

I. Answer any FIVE of the following Questions. **5X4=20M**

1. Check [(P V Q) ∧ (P → R) ∧ (Q→ R)] → R is Tautology or Contradiction.

2. Verify [(~p∨~q)->(p∧q∧r)] <=>(p∧q) truth table

3. Explain about Equivalence relation.

4. Explain about Generating Function.

5. Explain about Planar Graphs.

6. Explain about Euler and Hamiltonian Path.

7. Explain about Axioms of Probability.

8. Explain about significance testing.

SECTION-B

II. Answer the following Questions. **5X10=50M**

9. Using Mathematical Induction solve $1+2+2^2+.....+2^n=2^{n+1}-1$

(OR)

10. Show that P→(Q→R) and (P→Q)→R are logically equivalent.

Test the validity of the following argument:
Some intelligent boys are lazy.
Ravi is an intelligent boy.
∴ Ravi is lazy.

11. Find the solution to the recurrence relation $a_n - 7a_{n-1} + 12a_{n-2} = 0$, for n>=2 with the initial conditions $a_0 = 2$, $a_1 = 5$ by using characteristic roots.

(OR)

12. Find the solution of recurrence relation $a_n=6a_{n-1}-11a_{n-2}+6a_{n-3}$ with the initial condition $a_0=2, a_1=5, a_2=15$.

13. Construct Partial ordering on the set {1,2,3,4,6,8,12} such that (a,b) such that a divides b.

(OR)

14. Write the Algorithm for Shortest Path Problem and Explain about graph coloring

15. Explain about Bayes' theorem.

(OR)

16. Explain about Binomial distribution, Poisson distribution

17. Explain testing hypothesis on a proportion, comparing two proportions

(OR)

18. Explain about Hypothesis Testing on the variance

Room No: _____ Regd No_____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class : I MCA
Subject : Computers
Title of Paper : **Operating Systems**
Paper Code : R22MCA104A
W.E.F : 2023-24

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 07/01/2025

SECTION-A

I. Answer any FIVE of the following Questions. **5X4=20M**

1. Explain about Operating Systems Structures

2. Explain about Inter process Communication.

3. Explain about Monitors

4. Explain about Semaphores

5. Explain about Virtual Memory Management

6. Explain about Contiguous Memory Allocation

7. Explain about Disk Structure

8. Explain about Network Topology

SECTION-B

II. Answer the following Questions. **5X10=50M**

9. Explain about Operating System Structure and Services.

(OR)

10. Explain about Process control block.

11. Explain about Critical-Section Problem and Peterson's Solution?

(OR)

12. Explain about Deadlock handling, Deadlock Prevention and Recovery

13. Explain about Paging

(OR)

14. Explain about Page-Replacement Algorithms

15. Explain about File-System mounting?

(OR)

16. Describe about Disk Structure, Disk Scheduling

17. Explain about Features of Android Operating Systems

(OR)

18. Explain about Types of network based Operating systems

Room No: _____ **Regd No** _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class	: I MCA	Max Marks	: 70
Subject	: Computers	Pass Mark	: 28
Title of Paper	: **Personality Development Through Life Enlightenment Skills**	Duration	: 3 Hrs
Paper Code	: R22MCA105A	Time	: 9am to 12pm
W.E.F	: 2023-24	Date	: 09/01/2025

SECTION-A

I. Answer any FIVE of the following Questions. **5X4=20M**

1. Explain about concept of personality

2. Explain about concept of Success and Failure.

3. Explain about Low self esteem

4. Explain about Internal and external motives

5. Explain about Good manners and etiquette

6. Explain about Character building

7. Explain about Quality of work life

8. Explain about Concept of attitude

SECTION-B

II. Answer the following Questions. **5X10=50M**

9. Explain about Theories of Personality development

(OR)

10. Explain about SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis.

11. Explain about Theories of Motivation?

(OR)

12. Explain about Do's and Don"ts to develop positive self- esteem and Low self-esteem..

13. Explain about Time management and Work ethics

(OR)

14. Explain about Dimensions of Emotional Intelligence

15. Explain about Stress Management and work life balance?

(OR)

16. Describe the Case study of Work life balance of Women Employees in Service Sector.

17. Explain about types of attitudes, attitude of different persons

(Or)

18. Explain about Case Study on Attitude of Students of using electronic devices in Campus?

Room No: _____ **Regd No** _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG I – SEMESTER END EXAMINATIONS

Class : I M.Sc (DS)
Subject : Computers
Title of Paper : **Programming With R And Python**
Paper Code : R23DS101A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 21/01/2025

SECTION-A

I. Answer any FIVE of the following Questions **5X4=20M**

1. Explain about History of Python?

2. Explain about Variables in Python

3. Explain about Functions in Python

4. Explain about Tuples

5. Explain about Exception Handling

6. Explain about Data Types in R

7. Explain about Functions in R

8. Explain about Arrays

SECTION-B

II. Answer the following Questions 5x10=50M

9. Explain about Control Statements in Python.

(OR)

10. Discuss about Looping Statements in Python

11. Discuss about Lambda functions in Python

(OR)

12. Explain about Lists in Python.

13. Discuss about Inheritance in Python.

(OR)

14. Explain about Dictionaries in Python.

15. Explain about Vectors and Lists in R

(OR)

16. Explain about Data Frames and merging data frames in R.

17. Explain about R Pie- Charts and bar- Charts.

(OR)

18. Discuss about histograms and Line Graphs in R.

Room No: _____ Regd No _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class	: I M.Sc (DS)	Max Marks	: 70
Subject	: Computers	Pass Mark	: 28
Title of Paper	: **Data Structures**	Duration	: 3 Hrs
Paper Code	: R23DS102A	Time	: 9am to 12pm
W.E.F	: 2024-25	Date	: 23/01/2025

SECTION-A

I. Answer any FIVE of the following Questions **5X4=20M**

1. Explain about Control Structures?
2. Explain about Insertion Sort
3. Explain about Linear Search
4. Explain about Two Way Lists
5. Explain about Priority Queues
6. Explain about Heap Sort
7. Explain about Huffman's Algorithms
8. Explain about Sequential representation of Graphs

SECTION-B

II. Answer the following Questions **10X5=50M**

9. Explain about elementary data organization and Complexity.

(OR)

10. Discuss about various asymptotic notations and Data Types.

11. Discuss about Selection Sort

(OR)

12. Explain about Binary search.

13. Discuss about Quick sort with example.

(OR)

14. Explain about Infix to postfix Conversion with example

15. Explain about Binary search tree operations

(OR)

16. Explain insertion and deletion operation in AVL Tree.

17. Explain about Merge Sort.

(OR)

18. Discuss about Radix sort with example

Room No: _____ Regd No _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG I – SEMESTER END EXAMINATIONS

Class : I M.Sc (DS)
Subject : Computers
Title of Paper : **Data Base Management**
Paper Code : R23DS103A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 25/01/2024

SECTION-A

I. Answer any FIVE of the following Questions **5X4=20M**

1. Explain about Databases?

2. Explain about Schemas and Instances

3. Explain about Basic Queries in SQL

4. Explain about SELECT and PROJECT

5. Explain about Functional Dependencies

6. Explain about Indexes

7. Explain about Transaction Processing

8. Explain about ACID Properties

SECTION-B

II. Answer the following Questions **10X5=50M**

9. Explain about Three Schema Architecture of DBMS

(OR)

10. Discuss about ER Diagram

11. Discuss about Relational Model Concepts

(OR)

12. Explain about Triggers and Views.

13. Discuss about First and Second Normal Forms.

(OR)

14. Explain about BCNF and 4NF.

15. Explain about RAID Technology

(OR)

16. Explain about Hashing Techniques.

17. Explain about Multiple Granularity Locking.

(OR)

18. Discuss about 2 Phase Locking.

Room No: _____ **Regd No** _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG I – SEMESTER END EXAMINATIONS

Class	: I M.Sc (DS)	Max Marks	: 70
Subject	: Computers	Pass Mark	: 28
Title of Paper	: **Probability And Statistics**	Duration	: 3 Hrs
Paper Code	: R23DS104A	Time	: 9am to 12pm
W.E.F	: 2024-25	Date	: 27/01/2025

SECTION-A

I. Answer any FIVE of the following Questions **5X4=20M**

1. Explain the types of probability models.

2. Write about the distribution function and its properties.

3. Explain the Poisson distribution.

4. Define correlation and its types.

5. What are the types of errors in hypothesis testing? Explain.

6. Define rank correlation.

7. Explain the procedure for testing a hypothesis.

8. Define ANOVA. What are its assumptions?

SECTION-B

II. Answer the following Questions **5X10=50M**

9. A company has three plants A, B, and C producing 35%, 15%, and 50% of the total output, respectively. The probabilities of non-defective products are 0.75, 0.95, and 0.85, respectively. If a consumer receives a defective product, what is the probability that it came from plant C?

(OR)

10. State and prove Bayes' theorem.

11. A random variable X has the following probability mass function:

X	1	2	3	4	5	6
P(X)	k	3k	5k	7k	9k	11k

i) Find the value of k. ii) Find the cumulative distribution function. iii) Evaluate:
(a) $P(X \geq 4)$ (b) $P(3 \leq X \leq 6)$

(OR)

12. Explain the Binomial distribution. What are its assumptions?

[P.T.O]

13. Write the procedure for testing the hypothesis for the difference of two means.

(OR)

14. A survey was conducted among the citizens of a city to study their preference for tea and coffee. Among 1000 randomly selected persons, 560 were tea-drinkers, and the remaining were coffee-drinkers. Can we conclude at the 1% level of significance that both tea and coffee are equally preferred by the citizens of the city?

15. The following are the details of sales made by three salespersons in three door-to-door campaigns:

Salesperson	Sales in Campaigns
A	8, 9, 5, 10
B	7, 6, 6, 9
C	6, 6, 7, 5

Construct a one-way ANOVA table and find out whether there is a significant difference in the performance of the salespersons.

(OR)

16. Explain the testing procedure of ANOVA for a two-way classification with fixed effects.

17. Obtain the regression equations and estimate Y when X=55from the following data:

X	40	50	38	60	65	50	35
Y	38	60	55	70	60	48	30

(OR)

18. Using the principle of least squares, fit a multiple regression line.

Room No: _____ Regd No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class : I M.Sc
Subject : Chemistry
Title of Paper : General Chemistry
Paper Code : R22ACH101A/ R22OCH101A
W.E.F : 2023-24

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 21/01/2025

ANSWER ANY FIVE OF THE FOLLOWING. **5*4=20M**

1. Write a note on Minimization of errors.
2. Write a note on Criteria of rejection of an observation.
3. Explain classification of reactions in titrimetric analysis.
4. Write a note on Fajjan's method.
5. Write the industrial applications of distillation.
6. Write the Basic principles involved Recrystallization.
7. Write a note on development of TLC plates.
8. Write the applications of HPLC.

ANSWER ANY FIVE OF THE FOLLOWING. **5*10=50M**

UNIT-I

9. a) Define an error explain the types of errors in detailed.

(or)

b) write a note on Significant figures and computation rules.

UNIT-II

10. a) Explain Volhard's and method-Mohr's methods.

(or)

b) Explain how calcium and magnesium can be estimated by using EDTA.

UNIT-III

11. a) Write a note on vacuum distillation and steam distillation.

(or)

b) Write a note on drying Techniques used for alcohols and Tetra hydro furan.

UNIT-IV

12. a) Explain the basic principle, stationary phase and mobile phase used in Column Chromatography.

(or)

b) Write the applications of paper chromatography in the identification of amino acids.

UNIT- V

13.a) Write the applications of GC in the separation, identification and quantitative analysis of organic compounds.

(or)

b) Write the basic principle and instrumentation used in HPLC.

Room No: _____ Regd No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG I – SEMESTER END EXAMINATIONS

Class : I M.Sc [ACH/OCH]
Subject : Analytical Chemistry /Organic Chemistry
Title of Paper : **Organic Chemistry**
Paper Code : R22ACH102A/ R22OCH102A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 23/01/2025

SECTION-A

I. Answer any FIVE of the following Questions **5X4=20M**

1. Explain the aromaticity of Hetero Aromatic compounds.
2. Write a note on Pseudo aromaticity.
3. Explain SN^1 reaction with mechanisms.
4. Write a note on Sommelet Hauser rearrangement.
5. Write a note on Anti markonikovs Rule.
6. Write the mechanism Oppenaur oxidation reaction.
7. Write the mechanism wolf kishner oxidation reaction.
8. Discuss the stereochemistry of Allenes& Spiranes.

SECTION-B

II. Answer any FIVE of the following Questions **5X10=50M**

9. Write a note on Non benzenoidaromatic compounds.

(OR)

10. Describe stability and reactivity of Carbanions.

11. Explain benzyne mechanism and SN^2 Ar Mechanism.

(OR)

12. Write a note on Aliphatic SN^1 & SN^2 reactions.

13. Explain mechanism of E1 and E2 eliminations.

(OR)

14. Write a note on Hydrogenation.

15. Discuss the reaction and mechanism of stobbe condensation & perkin condensation.

(OR)

16. Write a note on Birch reduction and MPV reduction.

17. Discuss asymmetric synthesis.

(OR)

18. Explain Stereospecific and stereo selective synthesis.

Room No: _____ **Regd No:** _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class : I M.Sc [ACH/OCH]
Subject : Analytical Chemistry /Organic Chemistry
Title of Paper : **Inorganic Chemistry**
Paper Code : R22ACH103A/R22OCH103A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 25/01/2024

SECTION-A

I. Answer any FIVE of the following Questions **5X4=20M**

1. Write a note on nature and types of ligands in metal complexes.

2. Explain molecular orbital diagram for BeH_2.

3. Draw the walsh diagrams for bent molecules.

4. Write the splitting of d-orbitals in trigonal bipyramidal .

5. Write the limitations of CFT.

6. Explain overall formation constants.

7. Explain Irving William series.

8. Explain the structure and bonding in Dinitrogen complexes .

SECTION-B

II. Answer any FIVE of the following Questions. **5X10=50M**

9. Discuss the structural isomerism exhibited by the complexes with coordination compounds.

(OR)

10. Discuss the stereo isomerism exhibited by the complexes with coordination number 4.

11. Write a note on VSEPR theory and write its limitations.

(OR)

12. Explain non valence cohesive forces.

13. Explain Jahn Teller effect with suitable example.

(OR)

14. Explain molecular orbital theory of bonding in octahedral complexes.

15. Explain the determination of formation constants by pH metric method (Bjerrum's).

(OR)

16. Explain Hard and soft acid base theory for acid base strengths.

17. Discuss the structure and synthesis S-N cyclic compounds.

(OR)

18. Discuss the structure and synthesis P-N cyclic compounds.

Room No: _____ Regd No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG I – SEMESTER END EXAMINATIONS

Class : I M.Sc [ACH/OCH]
Subject : Analytical Chemistry /Organic Chemistry
Title of Paper : **Physical Chemistry**
Paper Code : R22ACH104A/ R22OCH104A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 27/01/2025

SECTION-A

I. Answer any FIVE of the following Questions. **5X4=20M**

1. Write the importance of wave function.

2. Calculate the entropy change in reversible and irreversible process.

3. Define fugacity and its determination.

4. Derive rate law for thermal decomposition of acetaldehyde.

5. Define critical micelle concentration and explain the factors affecting CMC.

6. Explain Kelvin equation.

7. Define liquid junction potential and write its determination.

8. Derive the equation for solubility product from EMF data.

SECTION-B

II. Answer any FIVE of the following Questions. **5X10=50M**

9. Derive Schrodinger wave equation.

(OR)

10. Explain the behaviour of particle in one dimensional box.

11. Derive Vanthoff equation.

(OR)

12. Derive Gibbs Duhem equation.

13. Explain Lindemann theory of unimolecular reaction rates.

(OR)

14. Explain collision theory and its limitations.

15. Explain Gibbs adsorption equations.

(OR)

16. Explain Young Laplace equation.

17. Write a note on Debye Huckel Onsagar equation, its verification and limitations.

(OR)

18. Write a note on Debye Huckel limiting law and its verification.

Room No: _____ Regd No _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG I – SEMESTER END EXAMINATIONS

Class : I M.Sc (DS)
Subject : Computers
Title of Paper : **Operating System**
Paper Code : R23DS105A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 29/01/2025

SECTION-A

I. Answer any FIVE of the following Questions **5X4=20M**

1. Explain about Types of Operating System?
2. Explain about Threads
3. Explain about Deadlocks
4. Explain about Monitors
5. Explain about Swapping
6. Explain about Segmentation
7. Explain about Disk Structure
8. Explain about Features of Android OS

SECTION-B

II. Answer the following Questions **10X5=50M**

9. Explain about Inter Process Communciation

(OR)

10. Discuss about Systems calls

11. Discuss about Classical Problems of Synchronization

(OR)

12. Explain about Deadlock prevention, avoidance and detection.

13. Discuss about Paging and Demand Paging.

(OR)

14. Explain about Page Replacement Algorithms.

15. Explain about File System Mounting

(OR)

16. Explain about File System Implementation.

17. Explain about Types of Network based system.

(OR)

18. Discuss about Review of Mobile Operating System.