

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II MBA  
Subject : Management  
Title of Paper : International Business  
Paper Code : R22MBA401  
W.E.F : 2023-24

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : *9am to 12pm*  
Date : *18/06/2024*

**SECTION-A**

**I. Answer the following Questions**

**5X3=15M**

1. a) What is International business?
- b) What are trade barriers?
- c) Write short note on GATT.
- d) Explain the role of WTO.
- e) Explain role of IMF
- f) What is turnkey contract?
- g) Explain trends in FDI.
- h) What are the benefits of international marketing management?

**SECTION-B**

**II. Answer the following Questions**

**5X8=40M**

2. Explain briefly the concept of economic, political and socio-cultural environment.

**(OR)**

3. Explain the concept of Emerging trends in international business.

4. Explain the concepts of International trade theories.

**(OR)**

5. Discuss the various models of entering into international business.

6. Explain briefly the role of MNCs in Indian economy.

**(OR)**

7. Explain briefly ethics in international business.

8. What is Balance of payment problems in India with example?

**(OR)**

9. What is FDI? Explain the factors that influence FDI.

10. Explain the concept of International production and logistics.

**(OR)**

11. Explain recent trends in international business.

**SECTION-C**

**III. Answer the following Questions**

**1X15=15M**

**12. Case Study (Compulsory)**

Present the case of any one international business firm and the entry strategies adopted by it. Explain the reasons underlying such decisions.

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**PG IV - SEMESTER END EXAMINATIONS**

Class : II MBA  
Subject : Management  
Title of Paper : Sales And Distribution Management  
Paper Code : R22MBA402  
W.E.F : 2023-24

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : 9am to 12pm  
Date : 20/06/2024

**SECTION-A**

**I. Answer the following Questions**

**5X3=15M**

1. Write a short note on
  - a) Functions of sales manager
  - b) Sales budget
  - c) Marketing mix
  - d) Sales presentation
  - e) Sales audit
  - f) Types of Wholesalers
  - g) Supply chain
  - h) Sales forecasting

**SECTION-B**

**II. Answer the following Questions**

**5X8=40M**

2. What is sales management? Explain its nature and scope.  
(OR)
3. Who is a field's sales manager? Explain his tasks and responsibilities.
4. What is forecasting? Explain its methods and procedural steps.  
(OR)
5. Briefly explain about the allocation of field sales resources.
6. What is sales force management? Explain about planning manpower requirements.  
(OR)
7. What are compensation plans? Explain designing and administering of various compensation plans.
8. What is retailing? Explain different types of retailers.  
(OR)
9. What are channels of distribution? Explain its functions and relationships.
10. What are market logistics? Explain its objectives and decisions for distributions channels.  
(OR)
11. What do you mean by supply chain management? Explain new developments in it.

**[P.T.O]**

**SECTION-C**

**1X15=15M**

**III. Answer the following Questions**

**12. Case Study (Compulsory)**

Sudha Home appliances pays its sales people well. They are on expense account. Their promotional prospectus are bright. They get an opportunity to travel to exotic places as a reward for their service. Many sales people draw five figure salaries. Sudha home appliances has thought about an incentive plan to keep the sales people motivated. IT has started to think of ways and means to compensate sales people without increasing their tax liability. It has thought of providing sales people a catalogue of house hold items which can be obtained by redeeming the points earned by them on the basis of performance. It will provide goof opportunity to sales people to point out to others with a great degree of pride what they have achieved by showing the household items and then explaining how they won it.

They also want to introduce a travel plan, because a travel to beautiful locales home and abroad is an ultimate dream of many people. Travel plan scores over reward redemption scheme because a reward that is repeated does not incentive value where as travel plan though repeated keep up its incentive value. Travel plan is also a family affair.

**Questions:**

- a) What is real issue in this case?
- b) Can you think of some more incentives for sudha's sales people?
- c) Should Mr Dass suggest practicing meditation and Yoga to Ms Shilpa to relieve stress?

Regd No: \_\_\_\_\_

Room No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**PG IV SEMESTER END EXAMINATIONS**

Class: MBA

Max.Marks: 70M

Subject: MANAGEMENT

Pass Marks: 28M

Title of the Paper: FINANCIAL DERIVATIVES

Duration: 3Hrs

Paper Code: **R20MBA403FIN** / R22MBA406(F)

Time: 9am to 12pm

W.E.F: 2021-22

Date: 28/06/2024

**SECTION - A**

Answer any FIVE of the following:

5 X 3 = 15 M

1. a) Features of Financial Derivatives
- b) Types of Traders
- c) Options
- d) Forward positions
- e) Credit default Swap
- f) Types of Margins
- g) Time Value of Money
- h) Option Price

**SECTION - B**

Answer All the questions

5 X 8 = 40 M

2. Define Financial derivatives and explain the types of Derivatives.

(OR)

- 3 Describe the Evolution of Derivative Markets in India.

- 4 Define options. Explain the basic principles of options.

(OR)

- 5 What is option strategy? Explain the basic principles of option strategies.

- 6 What are the determinants of Option Pricing.

(OR)

- 7 Analyze the characteristics and methodology of Binomial Option Pricing Model.

8 What is meant by Forwards. Explain the determinants of Forward Prices.

(OR)

9 Calculate the forward price from the following data.

- (i) a forward contract is entered into to purchase a coupon (interest) bearing bond.
- (ii) current price of the bond Rs. 10,000
- (iii) Coupon rate = 8% p.a
- (iv) interest is payable semi annually
- (v) interest payable after 3 months and 9 months respectively from the date of entering into the forward contract
- (vi) the maturity period of the forward contract is 10 months.
- (vii) the risk free interest rate = 6% p.a
- (viii) Spot price of the bond is 9,500.

10 Define Swaps . Explain the features and uses of Swaps.

(OR)

11. Explain the Types of swaps with examples.

**SECTION – C**

**Case Study (Compulsory)**

Answer the following question

1 X 15 = 15 M

12 Current market price of :

		X	Y
Option :	=	16.12	10.62
Stock	=	Rs.80	Rs.80
Exercise price	=	Rs. 70	Rs. 80
Time to Expiration	=	3 months	3 months
Risk – free returns	=	12% p.a	12% p.a
Expected dividend	=	0	0
Stock returns	=	60%	60%

Calculate the option value for X and Y.

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II MBA

Max Marks : 70

Subject : Management

Pass Mark : 28

Title of Paper : Retail Management

Duration : 3 Hrs

Paper Code : R20MBA404MKT / R22MBA403

Time : 9am to 12pm

W.E.F : 2021-22

Date : 22/06/2024

**SECTION-A**

**I. Answer the following Questions**

**5X3=15M**

1. Define Retail management and explain its functions?
2. Explain the Need for Retail Marketing strategy.
3. What are the policies of Retail HRM?
4. Explain the Retail promotion Mix.
5. What is store management and explain the importance?
6. Explain the objectives of CRM.
7. Explain the difference between Retail customers and retail consumers.
8. Explain the innovative Business models in Indian Retailing.

**SECTION-B**

**II. Answer the following Questions**

**5X8=40M**

9. Explain the theories Retail Development.  
(OR)
10. Explain the process of Retail consumer purchase decision.
11. Explain the process of Strategic Retail planning.  
(OR)
12. Define Retail location and explain the types of Retail location.
13. What is concept of Retail management? Explain the it's scope.  
(OR)
14. Briefly explain about the methods of Merchandise procurement.
15. Explain the techniques for Retail increasing sales.  
(OR)
16. Explain the process of Retail communication Budget.
17. Briefly explain about the process of CRM.  
(OR)
18. Explain the different Retention strategies.

**[P.T.O]**

**SECTION- C**  
**CASE STUDY-COMPULSORY**

**III. Answer the following Questions**

**1X15=15M**

**19.** It is one of the leading multiplex chains in India with 101 screens under operation in 14 cities at present. PVR has been successful in building a lifestyle entertainment brand because on its focus on customer service and quality of customer experience. The company has been able to establish itself as one of the premier entertainment destinations which has resulted in the highest occupancies, footfalls and spend per head as compared to all of the other multiplex operators. It attracted 18 million patrons with an occupancy ratio of 41% in FY08, both the highest numbers among all the multiplex players. Today it contributes 10% plus to the total domestic box office collections in the country showing a clear dominance.

1. Discuss the future retail Challenges for PVR in the light of current competitive business scenario?

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II MBA  
Subject : Management  
Title of Paper : Strategic HRM  
Paper Code : R22MBA404(H)  
W.E.F : 2023-24

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : 9am to 12PM  
Date : 24/06/2024.

**SECTION-A**

**5X3=15M**

**I. Answer any FIVE of the following Questions**

1. a) Define SHRM and explain its significance.
- b) Classify and discuss the various multi-national strategies.
- c) Summarize the methods of forecasting the supply of HR.
- d) What is downsizing? When do organizations adopt this strategy.
- e) Write a short note on HR Outsourcing.
- f) What do you mean by Employee Involvement? Explain.
- g) List out the various Retention strategies and explain any three.
- h) Explain the process of Benchmarking.

**SECTION-B**

**5X8=40M**

**II. Answer ALL the following Questions**

2. Explain the framework of Strategic HR Management Process.

**(OR)**

3. Explain the various approaches to SHRM

4. Discuss the role of Human Resources in Mergers and Acquisition.

**(OR)**

5. What is Strategic HR planning? Explain the objectives, benefits and levels of strategic planning.

6. (i) Explain the steps in Strategic implementation
- (ii) What is the role of Human Resources in Strategic implementation

**(OR)**

7. What does 'HR Outsourcing' mean? What are the implications and advantages of HR outsourcing under globalization conditions?

8. Elaborate HR strategies for Effective organization Development.

**(OR)**

9. What are the strategies in training and development?

10. Discuss briefly about HR evaluation process and Explain the various approaches to HR evaluation.

**(OR)**

11. Discuss and Interpret the human resource evaluating strategic contribution of emerging areas in detail.

**[P.T.O]**



**SECTION-C**

**III. Case Study (Compulsory)**

**1X15=15M**

**12.** Hindustan Teleprompters Limited (HTL) was initially set up to manufacture electromechanical teleprompters and associated accessories in technical collaboration with an Italian company by name Olivettie. But within a few years, Indigenization was completed. The company was the only company in India, which was manufacturing teleprompters and supplying to the department of telecommunications. During the first 10 years of operations, the company made reasonable profits and build up fair amount of reserves and surplus. In the nineties, the company looked for queues of diversification as the demand of teleprompters has been stagnant. Export markets were not the answer as the electronic teleprompters had already entered into the scene. The company had decided to go in for manufacture electric typewriters. It was to be an indigenous machine based on in-house research. The management hoped to sell it at a modest price of Rs 5000. But the project failed. In 2002 the entire market was changed and the other companies came with electric typewriters and HTL was not in a position to sell its products. In addition, the requirements for teleprompters whether electro mechanical or electric has dwindled due to the introduction of fax machines on tele phone lines and customers are not interested in telex machines.

**Questions**

1. Comment the company strategic decision in going for electric type writers.
2. Discuss the Area of strategic decision where the company has failed.

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II MBA

Max Marks : 70

Subject : Management

Pass Mark : 28

Title of Paper : International Financial Management

Duration : 3 Hrs

Paper Code : R22MBA404(F)

Time : 9am to 12pm

W.E.F : 2023-24

Date : 24/06/2024

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X3=15M**

1. a) Motives for Going Global
- b) Features of MNCs
- c) Floating Exchange Rate System
- d) Euro Bond Market
- e) Adjusted Present Value Approach
- f) International CAPM
- g) Dividend Policy for Multinational Corporations
- h) Inventory Management

**SECTION-B**

**II. Answer ALL the following Questions**

**5X8=40M**

2. What is IFM? Discuss its significance and role in world economy?  
(OR)
3. Differentiate the terms of Domestic financial management with international financial management.
4. What is gold standard? Explain the various forms and board rules of gold standard.  
(OR)
5. What do you mean by foreign exchange market? Discuss the role played by the main participants in this market.
6. Differentiate among the Economic, Transaction, Translation, and Real Operating Exposure in foreign exchange market ?  
(OR)
7. What are the features of international capital budgeting?
8. How can you identify the optimum portfolios in international level?  
(OR)
9. What are the long-term sources of finance for MNCs?
10. Discuss the centralized cash management system and its advantages.  
(OR)
11. What are the key elements and issues in international taxation?

**[P.T.O]**

**SECTION-C**

**1X15=15M**

**III. Case Study (Compulsory)**

**12. Exchange rate:** AUD \$ 1.317 per US \$ (spot)  
AUD \$ 1.2950 per US \$ (6-months forward)

**6-months interest rate:** US \$ 10 percent  
AUD \$ 6 percent

Work out the possibilities of arbitrage gain.

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**PG IV – SEMESTER END EXAMINATIONS**

Class : II MBA  
Subject : Management  
Title of Paper : Strategic Tax Management  
Paper Code : R22MBA405(F)  
W.E.F : 2023-24

Max Marks : 70

Pass Mark : 28

Duration : 3 Hrs

Time : *9am to 12pm*

Date : *26/06/2024*

**SECTION-A**

**I. Answer the following Questions**

**5X3=15M**

1. Write short notes on

- Finance Act*
- GST Council
- Black Money & Imposition Tax.*
- Tax planning
- IGCT
- Dividend policy
- International taxation
- Term loans

**SECTION-B**

**II. Answer the following Questions**

**5X8=40M**

2. Define GST law. Explain act, rule, and amendment relating to GST law.

**(OR)**

3. Explain current tax structure in India.

4. Explain features and different methods of tax planning.

**(OR)**

5. Explain tax planning process and in relation to small business.

6. Explain how tax system works for businesses.

**(OR)**

7. Briefly explain tax implications in international joint venture.

8. Explain Tax implications in developing capitalization structure and short term loans.

**(OR)**

9. Explain in detail about the Tax incentives.

10. Explain the concept of General Anti-Avoidance rule and its application.

**(OR)**

11. Explain the concept of Advance pricing agreement and its application.

**SECTION-C**

**III. Answer the following Questions**

**1X15=15M**

**12. Case Study (Compulsory)**

Tax planning is very important and vital role in framing strategies for setting up new business. Explain the importance of tax planning for setting up new business towards optimizing tax liability.

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**PG IV – SEMESTER END EXAMINATIONS**

Class : II MBA  
Subject : Management  
Title of Paper : Industrial Relations And Labour Legislations  
Paper Code : R22MBA405(H)  
W.E.F : 2023-24

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : 9am to 12pm  
Date : 26/06/2024

**SECTION-A**

**I. Answer the following Questions**

**5X3=15M**

1. a) Write the objectives of industrial relations.
- b) Write three main parties in industrial relations
- c) Write function of trade union relating to union members.
- d) Write causes of industrial dispute
- e) Define collective bargaining
- f) Define Factories under Factory act 1948.
- g) Benefits of quality circles
- h) What do you mean by employee discipline?

**SECTION-B**

**II. Answer the following Questions**

**5X8=40M**

2. Define Industrial relation. Explain various approaches to Industrial relations.  
(OR)
3. What is trade union? Explain problems of trade unions and remedies.
4. What are the prerequisites for collective bargaining? Explain collective bargaining process.  
(OR)
5. What are the objectives of workers participation? Explain levels and mode of participation.
6. Explain salient features of the factories act 1948.  
(OR)
7. Identify the causes for accidents in the factory. What steps should be taken to ensure industrial safety.
8. Explain salient features of Indian employment (Standing orders) act 1946.  
(OR)
9. Explain in detail about the Industrial disputes act 1947.
10. Explain the major provisions in workmen's compensation act 1923.  
(OR)
11. Explain salient features of payment of wages of 1936.

**SECTION-C**

**III. Answer the following Questions**

**1X15=15M**

**12. Case Study :**

“Workers’ participation in management is neither feasible nor desirable under the prevailing industrial conditions in India.” Critically examine this statement.

Room No: \_\_\_\_\_ Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II MBA  
Subject : Management  
Title of Paper : Human Resources Analytics  
Paper Code : R22MBA406(H)  
W.E.F : 2023-24

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : 9am to 12pm  
Date : 28/06/2024

**SECTION-A**

**5X3=15M**

**I. Answer any FIVE of the following Questions**

1. a) Define HR analytics
- b) What is an HRIS
- c) Define HR score card
- d) What is HR accounting? Explain.
- e) Discuss the Methods of HR Audit.
- f) What is competency mapping? Explain.
- g) Write a short notes on career planning systems.
- h) Discuss the pitfalls of HR Analytics

**SECTION-B**

**5X8=40M**

**II. Answer ALL the following Questions**

2. Discuss the need and importance of HR Analytics in strategic HR decision making?

**(OR)**

3. Explain about need and methods of HR Accounting?

4. Explain how HRIS can help in HR decision making?

**(OR)**

5. What is the development and implementation process of HRIS?

6. Explain how to use HR analytics for employee training and development?

**(OR)**

7. Explain the role of hr analytics in Employee relations systems?

8. What are benefits of Integrated competency based HR system?

**(OR)**

9. Explain about how to measure people management capabilities in HR climate?

10. Describe the role of Big data and predictive analytics in HR?

**(OR)**

11. What are the issues in HR valuation and measurement?

**[P.T.O]**

## SECTION-C

### III. Case Study (Compulsory)

**1X15=15M**

12. "Because we're not sure how many kindergarten students to expect this fall, we're only looking for a parttime teacher to supplement our full-time teacher's load," Patrick McCoy told each interviewee. "But there's a possibility this could become a full-time position at the last minute." Mr. McCoy, principal at Walton elementary school, gave each candidate the same details about the job, though he wished, he could be more precise about those details. The newly created position was based on a one-year grant, which may not be available in the next year. "If the grant is not available next year, we'll do our best, without guarantee, to place you somewhere in the school corporation", Patrick continued. Abby Sanders and Deb Harman, both recent college graduates, waited outside the conference room for their respective interviews. Upon exchanging pleasantries, Abby learned that Deb had been a student teacher in the kindergarten classroom at Walton last spring. Immediately, feeling disappointed, she began to wonder whether Deb would have an inside advantage. Just then, a veteran teacher, Mary Kratz, left the conference room. Mary immediately recognized Deb, then smiled and said, "Good luck!" Abby Sanders now felt as though she had no change of being hired. She had never met Mary Kratz, but it seemed to her as though everyone knew each other and that this interview would be a waste of her time. "Are you Abby Sanders?" Patrick McCoy asked, now standing in the doorway of the conference room. The two exchanged greetings and entered the conference room. "Well, tell me about yourself," Patrick requested. Abby smiled and responded, trying to forget her previous thoughts.

#### Questions:

- a) What constraints are affecting Mr. McCoy's planning activities?
- b) How might hiring a part-time teacher for this position be advantageous?
- c) In this scenario, is the interview alone a valid selection technique?

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**PG IV – SEMESTER END EXAMINATIONS**

Class : II MBA  
Subject : Management  
Title of Paper : Banking Technology Management  
Paper Code : R22MBA407  
W.E.F : 2023-24

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

**SECTION-A**

**I. Answer the following Questions**

**5X3=15M**

1. Write short notes on
  - a) Centralized banking
  - b) MICR Electronic clearing
  - c) Electronic fund transfer
  - d) Data centre management
  - e) E-cheques
  - f) Back office management
  - g) Crypto currency
  - h) Block chain

**SECTION-B**

**II. Answer the following Questions**

**5X8=40M**

2. What are the different approaches to banking computerization? Explain it.

**(OR)**

3. Explain technological impact in banking operations.

4. Explain overview of delivery channels.

**(OR)**

5. Explain the concept of Internet banking.

6. Explain various banking operations in back office management?

**(OR)**

7. Explain in detail about customer relationship management.

8. Explain the concept of interbank payment system.

**(OR)**

9. What is RTGS and how it works?

10. Explain contemporary issues in banking technology.

**(OR)**

11. What is cyber law? How cyber law protecting confidentiality and secrecy data.

**SECTION-C**

**III. Answer the following Questions**

**1X15=15M**

12. Explain the highlights of the Rangarajan committee reports.



Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II MCA

Max Marks : 70

Subject : Computers

Pass Mark : 28

Title of Paper : Big Data Analytics

Duration : 3 Hrs

Paper Code : R22MCA401

Time : 9am to 12pm

W.E.F : 2022-23

Date : 18/06/2024.

**SECTION-A**

**I. Answer ALL the following Questions**

**5X14=70M**

1. Explain about Characteristics of Big Data?

**(OR)**

2. Explain about types of Data used in Big Data

3. Explain about Features of Hadoop and its difference with RDBMS.

**(OR)**

4. Explain about Hadoop Distributed File System.

5. Explain about Combiner, Partitioner, Searching, Sorting, Compression

**(OR)**

6. Explain about Hadoop Eco System

7. Explain about Mongo Db and its Features

**(OR)**

8. Explain about Data types in Mongo Db

9. Explain about HQL

**(OR)**

10. Explain about pig and its anatomy

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II MCA

Max Marks : 70

Subject : Computers

Pass Mark : 28

Title of Paper : Data Processing And Visualization Using Tableau

Duration : 3 Hrs

Paper Code : R22MCA402E1

Time : 9am to 12pm

W.E.F : 2022-23

Date : 20/06/2024

**SECTION-A**

**I. Answer ALL the following Questions**

**5X14=70M**

1. Explain about Tableau Features?

**(OR)**

2. Explain about Tableau Workspace and types of Data Sources supported by Tableau.

3. Explain about Using Show, Me, Choosing Mark Types, Color, Size, Shape, and Label Options in Tableau.

**(OR)**

4. Explain about Dual Axis in Tableau.

5. Explain about Histogram View, Bar Chart, Line Chart.

**(OR)**

6. Explain about Pie Chart, Cross Tab and Hierarchy.

7. Explain about Create a Heat Map in Tableau and Create a Water Fall Chart in Tableau

**(OR)**

8. Explain about Create a Chart with Dual Axis and Synchronize Axis.

9. Explain about Histogram, Creating Parameters in Tableau.

**(OR)**

10. Explain about Create a Simple Dashboard

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II MCA  
Subject : Computers  
Title of Paper : Deep Learning  
Paper Code : R22MCA402E2  
W.E.F : 2022-23

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : *9 am to 12 pm*  
Date : *22/06/2024*

**SECTION-A**

**I. Answer ALL the following Questions**

**5X14=70M**

1. Explain about Deep Learning Vs Machine Learning?

**(OR)**

2. Explain about Perceptron

3. Explain about Architecture, Input and Output Layers in Neural Networks,.

**(OR)**

4. Explain about Back Propagation in Neural Networks.

5. Explain about Building ANN with Keras,

**(OR)**

6. Explain about Regression Neural Networks  
*with*  
↑

7. Explain about CNN

**(OR)**

8. Explain about Alexnet, Google net, LeNet-5

9. Explain about LSTM and GRU Layers

**(OR)**

10. Explain about Stacking Recurrent layers

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II MCA

Max Marks : 70

Subject : Computers **NPTEL (MOOCS)**

Pass Mark : 28

Title of Paper : Programming in Java

Duration : 3 Hrs

Paper Code : **R22MCA406**

Time : **9am to 12pm**

W.E.F : 2022-23

Date : **24/06/2024**

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X20=100M**

1. Explain features of OOPs.

**(OR)**

2. What are the differences between C and Java

3. Explain about encapsulation in java

**(OR)**

4. Explain about Inheritance in Java

5. Explain about Exception handling in Java.

**(OR)**

6. What is Multithreading explain with example.

7. Explain about Applets in Java

**(OR)**

8. Explain about Networking in Java.

9. Explain about Java Object Database Connectivity (ODBC) in Java.

**(OR)**

10. Explain about Interfaces in Java.

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)****PG IV – SEMESTER END EXAMINATIONS**

Class : II M.Sc (OCH)  
 Subject : Chemistry  
 Title of Paper : Advanced Organic Spectroscopy  
 Paper Code : R22OCH401  
 W.E.F : 2022-23

Max Marks : 70  
 Pass Mark : 28  
 Duration : 3 Hrs  
 Time : *From 12pm*  
 Date : *18/06/2024*

**SECTION-A****I. Answer the following Questions**

1. Write a note on Broad band decoupling ? 8M
2. Write the differences and similarities of  $^{13}\text{C}$  and proton NMR 6M
- (OR)
3. Write the factors effecting  $^{13}\text{C}$  NMR ? 14M
4. Explain definitions and importance of NOE , COSY , DEPT. 14M
- (OR)
5. Give importance of HOM 2DJ , HET2DJ 14M
6. Explain Basic principles and Instrumentation of Electron Spin Resonance Spectroscopy? 14M
- (OR)
7. Explain isotropic and anisotropic couplings constants? 8M
8. Explain the factors effecting 'g' value? 6M
- (OR)
9. Explain applications of octant rule 8M
10. Explain theory of ORD in detail and ORD curves 6M
- (OR)
11. Explain octant and heloketo rule 8M
12. Explain positive and negative cotton effects 6M
13. Molecular formula:  $\text{C}_6\text{H}_{10}\text{O}_2$   
 $^1\text{H}$  NMR :  $\delta$  (PPM)= 6.97(dq, J=6.8 and 15.2 Hz, 1H), 5.83 (d, J=15.2 Hz , 1H),  
 4.17(q, J=7.2 Hz , 2H) , 1.87 (d, J=6.8 Hz, 3H), 1.27 (t, J=7.2 Hz , 3H) .  $^{13}\text{C}$  NMR  $\delta$   
 (ppm)= 170.0144.6 123.0 60.3 18.1 14.5 . Discuss the component structure of the given  
 molecule by utilizing the above NMR data. 6M
- (OR)
14. In the MS, the molecular ion occurs at  $m/z = 150$  , The IR shows 1680  $\text{cm}^{-1}$  and  
 1250-1000 $\text{cm}^{-1}$ .  $^{13}\text{C}$ -nmr shows 196 ppm ,163 ppm ,131 ppm , 114 ppm 55ppm and  
 26 ppm. H-NMR

$\delta$ /ppm	multiplicity	integration
8.0	doublet	2
7.0	doublet	2
3.9	singlet	3
2.6	singlet	3

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II M.Sc (OCH)  
Subject : Chemistry  
Title of Paper : Modern Organic Synthesis  
Paper Code : R22OCH402  
W.E.F : 2022-23

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : 9am to 12pm  
Date : 20/06/2024

**SECTION-A**

5 x 14 = 70M.

**I. Answer ALL the following Questions**

1. Write a short note on the following

- i) Alkylation of methylene groups                      ii) Allylic alkylation of  $\alpha$  - thiocarbonions      14M

(OR)

2. Explain the significance of “umpolung” in C-C single bond formation                      14 M

3. Explain the formation of carbon-carbon single bond by the addition of free radicals to alkenes.                      6M

4. Explain Pyrolytic Syn elimination                      8M

(OR)

5. Discuss the stereospecific synthesis of alkenes from 1,2 diols                      6M

6. Write the synthesis of decarboxylation of  $\beta$  lactones.                      8M

7. Explain the oxidative decarboxylation of carboxylic acids.                      6M

(OR)

8. Discuss the cyclisation reactions of nitrenes.                      8M

(OR)

9. Explain synthetic applications of the Hoffmann-Loeffler-Freytag reaction.                      6M

10. Explain the photolysis of hypochlorites.                      8M

11. Write a note on Barton reaction.                      6M

12. Explain the use of chiral auxiliaries and chiral enolates                      8M

(OR)

13. Write a note on Asymmetric reduction.                      6M

14. Write about borate reagents.                      8M

15. Discuss the applications of Heck reaction and Baylis Hillman Reaction.                      14M

(OR)

16. Explain C-H functionalization via C-H bond activation                      14M

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II M.Sc (OCH)  
Subject : Chemistry  
Title of Paper : Retrosynthetic Analysis  
Paper Code : R22OCH404  
W.E.F : 2022-23

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : *9am to 12pm*  
Date : *22/06/2024*

**SECTION-A**

**I. Answer the following Questions**

**5X14=70M**

1. Explain the functional group inter conversion(FGI) 6M
2. Describe linear and convergent synthesis with examples 8M
- (OR)**
3. Write the retrosynthetic analysis of salbutamol and Musk ambrette 14M
4. Discuss two group C-X disconnections (1, 1-difunctionalised, 1,2-difunctionalised and 1,3 -difunctionalised compounds) 14M
- (OR)**
5. Write a note on the following selective organic transformation  
i) Reversal of polarity ii) amine synthesis 14M
6. Explain one group 1,1 C-C 1,2 C-C and 1,3 C-C disconnections in carbonyl compounds 14M
- (OR)**
7. Discuss two group C-C Disconnections in Diels-Alder reactions. 14M
8. Explain the Protection and deprotection of carbonyl group 14M
- (OR)**
9. Discuss the Protection and deprotection of carboxylic acids 14M
10. Give the synthesis of five membered rings 14M
- (OR)**
11. Write the synthesis of three membered rings. 14M

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II M.Sc (OCH&ACH)  
Subject : Chemistry  
Title of Paper : Nano Chemistry  
Paper Code : R22ACH406/R22OCH406  
W.E.F : 2022-23

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : 9am to 12pm  
Date : 24/06/2024

**I. Answer ALL the following Questions**

1. Define following terms.

i) Nano scale    ii) Nano materials    iii) Nano Science    iv) Nanotechnology    14M

(OR)

2. Explain Contributors to the field of Nano Chemistry?    14M

3. Explain Top down and bottom-up approaches for the synthesis of nanospears.    14M

(OR)

4. Write various methods for the synthesis of Gold nanoparticles.    14M

5. Write the principle and applications of atomic force microscopy.    14M

(OR)

6. Write the principle and applications of Transmission electron microscopy.    14M

7. write the applications of Nanomaterials in solar cells and smart materials.    14M

(OR)

8. Explain the applications of Nanomaterials in Drug Delivery and Therapy?    14M

9. Write note on spider silk mechanical Properties of the spider silk?    14M

(OR)

10. Write a note on gecko foot climbing ability of geckos?    14M



Room No: _____	Regd No: _____
<b>KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)</b>	
<b>PG IV – SEMESTER END EXAMINATIONS</b>	
Class : II M.Sc (ACH)	Max Marks : 70
Subject : Chemistry	Pass Mark : 28
Title of Paper : Instrumental Methods of Analysis	Duration : 3 Hrs
Paper Code : R22ACH401	Time : 9am to 12pm
W.E.F : 2022-23	Date : 18/06/2024

**SECTION-A**

**I. Answer ALL the following Questions**

1. Write a note on Beer's law and its limitations? 6M
  2. Explain determination of stability constants of  $P^k$  values of acid –base indicator? 8M
- (OR)**
3. Write a note on photometric titrations? 6M
  4. Write a note on determination of phosphate Spectrophotometry? 8M
  5. Write a note on theory, instrumentation and applications of Nephelometric titrations? 14M
- (OR)**
6. Write a note on theory, instrumentation and applications of Phosphorimetry 14M
  7. Write a note on theory instrumentations of Flame photometry 6M
- (OR)**
8. Explain applications of Flame photometry in the analysis of Ca and Mg 8M
  9. Explain about flame and non-flame Techniques in AAS. 6M
  10. Write a note on applications of AAS? 8M
  11. Explain the theory instrumentation and applications of Thermo gravity. 14M
- (OR)**
12. Explain the theory instrumentation and applications of DSC. 14M
  13. Explain the Principle and Instrumentation of Polarography. 14M
- (OR)**
14. Write the advantages, disadvantages and applications of Amperometric titrations? 14M

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II M.Sc (ACH)

Max Marks : 70

Subject : Chemistry

Pass Mark : 28

Title of Paper : Traditional And Environmental Methods of Analysis

Duration : 3 Hrs

Paper Code : R22ACH402

Time : 9am to 12pm

W.E.F : 2022-23

Date : 20/06/2024

**SECTION-A**

5 × 14 = 70M

**I. Answer ALL the following Questions**

1. Discuss the principle involved in the decomposition of samples by HF and H<sub>2</sub>SO<sub>4</sub>? 14M

**(OR)**

2. Discuss the principle involved in the decomposition of samples by Acidic & oxidation fusion? 14M

3. Give the classification of functional groups with suitable examples 14M

**(OR)**

4. How do you determine the organic compounds with the following functional groups  
i) Secondary amines                      ii) Aldehydes

5. Write a note on analysis of Testosterone and Progesterone 14M

**(OR)**

6. Write a note on analysis of vitamin Riboflavin (B<sub>2</sub>) 14M

7. Explain the Principle and Procedure for the analysis of the following ions Present in water a samples.

i) HCO<sub>3</sub><sup>-</sup>      ii) Cl<sup>-</sup>                      iii) Cr<sup>3+</sup>      iv) Pb<sup>2+</sup> 14M

**(OR)**

8. Define the term Do Explain the Procedure for the determination of Do. 14M

9. Give the composition of pure air and explain the classification of air Pollutants. 14M

**(OR)**

10. Write a note on Chemical analysis for the Nitrogen compounds 14M

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)****PG IV – SEMESTER END EXAMINATIONS**

Class : II M.Sc (ACH)  
 Subject : Chemistry  
 Title of Paper : Spectroscopic Methods  
 Paper Code : R22ACH404  
 W.E.F : 2022-23

Max Marks : 70  
 Pass Mark : 28  
 Duration : 3 Hrs  
 Time : 9am to 12pm  
 Date : 22/06/2024

**SECTION-A****I. Answer ALL the following Questions****5X14=70M**

1. Write a note on basic principle and instrumentation in Mass Spectroscopy 14M  
 (OR)
2. Write a note on Retro Diels Alder Fragmentation and structure determination of heteroaromatic compounds 14M
3. Write a note on basic Principle and Instrumentation of GC-MS 14M  
 (OR)
4. Write a note on basic Principle and Instrumentation of LC-MS 14M
5. Write a note on high resolution NMR Spin Systems of 2, AX and ABC 14M  
 (OR)
6. Write a note on Instrumentation of Fourier Transform NMR 14M
7. Explain the factors effecting chemical shifts in CMR 14M  
 (OR)
8. Write a note on off resonance and Broad band decoupling in CMR 14M
9. Molecular formula:  $C_6H_{10}O_2$  H NMR :  $\delta$  (PPM) = 6.97 (dq, J=6.8 and 15.2 Hz, 1H), 5.83 (d, J=15.2Hz, 1H) , 4.17(q, J= 7.2 Hz, 2H) , 1.87(d, J=6.8 Hz, 3H), 1.27 (t, J =7.2 Hz , 3H)  
 $^{13}C$  NMR  $\delta$  (ppm) =170.0 144.6 123.0 60.3 18.1 14.5 Discuss the component structure of the given molecule by utilizing the above NMR data. 14M  
 (OR)
10. In the MS , he molecular ion occurs at  $m/z=150$  , The IR shows 1680  $cm^{-1}$  and 1250-1000  $cm^{-1}$ .  $^{13}C$ -nmr shows 196 ppm, 131ppm, 130ppm ,114 ppm 55 ppm and 26ppm . H-NMR

$\delta$ /ppm	multiplicity	integration
8.0	doublet	2
7.0	doublet	2
3.9	singlet	3
2.6	singlet	3

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II M.Sc  
Subject : Chemistry(MOOCs)  
Title of Paper : Organic chemistry in Biology  
& Drug Development  
Paper Code : R22ACH412/R22OCH412  
W.E.F : 2022-23

Max Marks : 70

Pass Mark : 28

Duration : 3 Hrs

Time : 9am to 12pm

Date : 28/06/2021

**Max. Marks – 100 M**

**Answer any Five of the Following**

**5\*20 = 100 M**

1. Discuss the Methods used for the determination of amino acid Sequences
2. Describe the structural features and roles of essential amino acids in protein synthesis
3. Describe the secondary and tertiary structures of proteins
4. Explain the the significance and features of the Ramachandran plot
5. Explain the processes of DNA replication, transcription and translation
6. Define coenzymes and explain their role in biological progress
7. Outline the drug development process from discovery to approval
8. Discuss the role of humoral mechanisms and the renin- angiotensin system in hypertension.
9. Discuss anti – cancer drugs, their mechanisms , and their use in chemotherapy
10. Describe the principles and applications of quantitative structure- activity relationship(QSAR) in drug design and discovery

Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG IV – SEMESTER END EXAMINATIONS**

Class : II M.Sc  
Subject : Chemistry  
Title of Paper : DRUG DESIGN AND DRUG CHEMISTRY  
Paper Code : R22ACH409/R22OCH409  
W.E.F : 2022-23

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : 9am to 12pm  
Date : 26/06/2024

**UNIT-I**

1. Discuss general Classification and nomenclature of drugs. 14M  
(OR)  
2. Describe about Quantitative Structure Activity Relationships (QSAR)? 14M

**UNIT-2**

3. Explain the synthesis, properties, uses and dosage of Chlorambucil? 14M  
(OR)  
4. Describe the structure, properties and dosage of Doxorubicin and mitomycin. 14M

**UNIT-3**

5. write the synthesis and properties of diltiazem and quinidine? 14M  
(OR)  
6. Describe the synthesis of verapamil and methyldopa? 14M

**UNIT-4**

7. Write the synthesis and mode of action of Metformin and  $\alpha$ -glucosidase inhibitors 14M  
(OR)  
8. Write a note synthesis and mode of action of saxagliptin and sitagliptin? 14M

**UNIT-5**

9. Write the synthesis of sulphonamides and ciprofloxacin. 14M  
(OR)  
10. Write a note synthesis of amino salicylic acid and isoniazid. 14M