

KAKARAPARTI BHAVANRAYANA COLLEGE (Autonomous)
(Sponsored by S.K.P.V.V. Hindu High Schools Committee)

PG IV SEMESTER END EXAMINATIONS TIME TABLE MAY - 2025

Date	Time	II MBA	II MCA	II M.SC(OCH)	II M.SC(ACH)	II M.Sc (DS)
06-05-2025	9:00 A.M TO 12:00 PM	International Business R22MBA401	Big Data Analytics R22MCA401A	Advanced Organic Spectroscopy R22OCH401A	Instrumental Methods of Analysis R22ACH401A	Dynamic Web Programming Using Django and Flask R23DS401
08-05-2025	9:00 A.M TO 12:00 PM	Sales & Distribution Management R22MBA402	Dynamic Web Programming R22MCA402A	Modern Organic Synthesis R22OCH402A	Traditional and Environmental Methods of Analysis R22ACH402A	Big data Using Hadoop and Spark R23DS402
10-05-2025	9:00 A.M TO 12:00 PM	Retail Management R22MBA403	Web Technologies R22MCA404A	Retcro Synthesis Analysis R22OCH404A	Spectro Scopic Methods of Analysis R22ACH404A	Machine Learning R23DS403
13-05-2025	9:00 A.M TO 12:00 PM	Strategic Human Resources Management R22MBA404(H) International Financial Management R22MBA404(F)	***	Nano Chemistry R22OCH406A	Nano Chemistry R22ACH406A	Web technologies R23DS404
15-05-2025	9:00 A.M TO 12:00 PM	Industrial Relations & Labour Legislation R22MBA405(H) Strategic Tax Management R22MBA405(F)	***	Drug Design & Drug Chemistry R22OCH409A	Drug Design & Drug Chemistry R22ACH409A	AI Concepts with Python and Techniques with Python R23DS405
17-05-2025	9:00 A.M TO 12:00 PM	Human Resources Analytics R22MBA406(H) Financial Derivatives R22MBA406(F)	***	***	***	***
20-05-2025	9:00 A.M TO 12:00 PM	Banking Technology & Management R22MBA407	***	***	***	***

CONTROLLER OF EXAMINATIONS

Wm 2025/14/2025

Principal's
PRINCIPAL

KAKARAPARTI BHAVANRAYANA COLLEGE (Autonomous)

**PG IV SEMESTER END EXAMINATIONS(SUPPLEMENTARY) TIME TABLE MAY - 2025
FOR 2021 BATCH**

Date	Time	II MBA	II MCA	II M.SC(OCH)	II M.SC(ACH)
06-05-2025	9:00 A.M TO 12:00 PM	R20MBA401 International Business	Data Science Using Python R20MCA403	Green Chemistry R20OCH402	Green Chemistry R20ACH401
08-05-2025	9:00 A.M TO 12:00 PM	R20MBA402 E- Business	Full Stack Development R20MCA405	Chemistry of Bio Organic compounds R20OCH403	Traditional and Environmental Methods of Analysis R20ACH403
10-05-2025	9:00 A.M TO 12:00 PM	R20MBA404MKT Retail Management	Cryptography and Network Security R20MCA406	Organic Metallic Reagents R20OCH404	Quality Control and Standard methods of Analysis R20ACH404
13-05-2025	9:00 A.M TO 12:00 PM	Stress Management R20MBA404HRM IFM R20 404FIN		****	****
15-05-2025	9:00 A.M TO 12:00 PM	R20MBA406MKT Digital & Social media Marketing	***	****	****
17-05-2025	9:00 A.M TO 12:00 PM	HRD R20MBA403HRM Financail Derivatives R20MBA403FIN		***	***

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KAKARAPARTI BHAVANIRAYANA COLLEGE (Autonomous)
PG IV SEMESTER END EXAMINATIONS(SUPPLEMENTARY) TIME TABLE MAY - 2025
FOR 2022 BATCH

Date	Time	II MBA	II MCA	II M.SC(OCH)	II M.SC(ACH)
06-05-2025	9:00 A.M TO 12:00 PM	International Business R22MBA401	Big Data R22MCA401	Advanced Organic Spectroscopy R22OCH401	Instrumental Methods of Analysis R22ACH401
08-05-2025	9:00 A.M TO 12:00 PM	Sales & Distribution Management R22MBA402	Data Processing & Visualization Using Tabluea R22MCA402	Modern Organic Synthesis R22OCH402	Traditional and Environmental Methods of Analysis R22ACH402
10-05-2025	9:00 A.M TO 12:00 PM	Retail Management R22MBA403	Deep learning R22MCA404	Retcro Synthesis Analysis R22OCH404	Spectro Scopic Methods of Analysis R22ACH404
13-05-2025	9:00 A.M TO 12:00 PM	Strategic Human Resources Management R22MBA404(H) International Financial Management R22MBA404(F)		Nano Chemistry R22OCH406	Nano Chemistry R22ACH406
15-05-2025	9:00 A.M TO 12:00 PM	Industrial Relations & Labour Legislation R22MBA405(H) Strategic Tax Management R22MBA405(F)		Drug Design & Drug Chemistry R22OCH409	Drug Design & Drug Chemistry R22ACH409
17-05-2025	9:00 A.M TO 12:00 PM	Human Resources Analytic R22MBA406(H) Financial Derivatives R22MBA406(F)		***	***
20-05-2025	9:00 A.M TO 12:00 PM	Banking Technology & Management R22MBA407	***	***	***

CONTROLLER OF EXAMINATIONS

PRINCIPAL

Room No: _____

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**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 : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am - 12 noon
Date : 06/05/2025

SECTION-A

I. Answer any FIVE of the following Questions

5X3=15M

1. a) Define International business. Explain the nature of International Business
- b) Discuss the importance of International Business.
- c) Write a note on Mergers and acquisitions.
- d) Explain the features of multinational corporations
- e) Describe the objectives of WTO.
- f) Write a note on Balance of Payments.
- g) Discuss the factors influencing FDI.
- h) Define IHRM. Explain Objectives of IHRM.

SECTION-B

II. Answer ALL the following Questions

5X8=40M

2. Briefly discuss the factors influencing International Business.
(OR)
3. How is socio – cultural environment impacts a country's business Internationally?
Explain
4. Elucidate the modes of International Business.
(OR)
5. Discuss the instruments of International Trade policy.
6. What are the ethics to be associated with International Business? Explain.
(OR)
7. Describe the role of MNCs in Global Economy.
8. What are the International Financial Institutions. Discuss individually.
(OR)
9. What are the recent trends associated with Foreign Direct Investments.
10. Explain the recent trends in International Business.
(OR)
11. Briefly describe the International Marketing Management.

SECTION-C

1X15=15M

III. Case study (Compulsory):

12. Coca-Cola, the world's largest soft drink company, started expanding internationally in the early 20th century and now operates in more than 200 countries. Despite its global dominance, Coca-Cola faced many challenges while entering new markets due to cultural, legal, and taste preferences.

In **India**, for example, Coca-Cola faced backlash in the early 2000s when a local NGO claimed that the company's drinks contained pesticide residues. This created a massive PR crisis. Coca-Cola responded by launching a rigorous water purification and quality control system, making their water usage and safety measures more transparent.

In **China**, Coca-Cola adapted its marketing slogans to match the language and emotions of Chinese consumers, turning the drink from a symbol of Western culture into a local favourite by connecting it to family, togetherness, and festivals.

In **Muslim-majority countries** during Ramadan, Coca-Cola tailors its ads to focus on themes of unity and togetherness, resonating deeply with local customs and practices.

- Coca-Cola uses a **standardized product** with **localized marketing**.
- The company invests in **CSR (Corporate Social Responsibility)** to recover from cultural misunderstandings.
- Cultural sensitivity, regulatory compliance, and brand adaptation are crucial to international success.

Questions:

1. What business strategy did Coca-Cola use to succeed in diverse global markets?
2. Why is it essential for international businesses to adapt to local cultures?
3. How did Coca-Cola respond to regulatory challenges in India?
4. Give one reason why CSR is important for multinational companies.
5. Suggest another global brand that successfully adapted its marketing for local culture.

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

Class : II MCA
Subject : Computers
Title of Paper : **Big Data Analytics**
Paper Code : R22MCA401A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9 am - 12 noon
Date : 06/05/2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Define Big Data & Evolution of Big Data
2. Explain the Classification of Big Data Analytics?
3. Explain the key advantages of Hadoop
4. Discuss about RDBMS Vs Hadoop
5. Explain about Map Reduced programming
6. Explain about Combiner and partitioner
7. Explain about HIVE Query Language
8. Explain the execution mode of PIG

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Explain Traditional Business Intelligence Vs Big Data
(OR)
10. What is Big Data and Explain the Terminologies used in Big Data Environment?
11. What is HDFS? Explain about the Architecture of HADOOP distributed File System
(OR)
12. Explain the Features of HADOOP and also the overview of HADOOP ecosystem
13. What is YARN? Explain the Architecture of YARN
(OR)
14. Explain i) Mapper ii) Reducer each with example
15. What is HIVE? Explain the architecture of HIVE
(OR)
16. Discuss about RC File Implementation
17. Explain about HDFS commands, relational operators & EVAL functions
(OR)
18. Explain briefly about Data types in PIG and execution mode of PIG

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KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG IV – SEMESTER END EXAMINATIONS

Class	: II M.Sc [DS]	Max Marks	: 70
Subject	: Computers	Pass Mark	: 28
Title of Paper	: Dynamic Web Programming Using Django and flask	Duration	: 3 Hrs
Paper Code	: R23DS401	Time	: 9 am - 12 noon
W.E.F	: 2024-25	Date	: 06/05/2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Discuss about Django
2. Discuss the Integration Variables in Django
3. Discuss the connection between Django and MYSQL
4. Explain about Dry URL
5. Narrate the steps of Django Model Form preparation
6. Discuss about Flask Web
7. Use of CRUD operations using Python code
8. Explain about SQL Alchemy

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Explain about Templates in Django
(OR)
10. Narrate the Basic Steps for Installing Django
11. Explain MVT architecture & Data Base in Django
(OR)
12. Write a program to insert the value in the Database using Models
13. Explain the process of creating Customer Feedback form in Django
(OR)
14. Explain about Session Management and Session Management using cookies
15. Explain about Rendering HTML templates
(OR)
16. Discuss about Handling HTTP requests (GET, POST) and routing
17. Explain about Django REST. API and types of Web services.
(OR)
18. Narrate the steps in connecting Python to Database MYSQL.

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KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG IV – SEMESTER END EXAMINATIONS

Class : II MCA
Subject : Computers
Title of Paper : Data Science Using Python
Paper Code : R20MCA403
W.E.F : 2020-21

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9 am - 12 noon
Date : 06/05/2025

SECTION-A

I. Answer ALL the following Questions

5X14=70M

1. What are the features of Numpy Library?

(OR)

2. What are the advantages of Numpy arrays over python arrays and lists?

3. Explain data index and selection in pandas.

(OR)

4. Explain string operations in pandas with examples.

5. How to create a Simple Line Plots with Matplotlib.

(OR)

6. Explain the steps to create Histograms with Matplotlib.

7. Explain three-dimensional plotting.

(OR)

8. How to use seaborne Data Visualization in Matplotlib.

9. Briefly explain categories of Machine Learning.

(OR)

10. Explain Naive Bayes classification

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

Class : II M.Sc [DS]
Subject : Computers
Title of Paper : **Big Data Using Hadoop and Spark**
Paper Code : R23DS402
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9 am - 12 noon
Date : 08-05-2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Explain the evolution of Big Data
2. Traditional Business Intelligence Vs Big Data
3. Explain the Key advantages & versions of Hadoop
4. Explain Distribution Computing Challenges
5. Explain the interfacing with Hadoop Ecosystem
6. Explain briefly about combiner and partitioner
7. Explain about HIVE Data types
8. Explain anatomy of PIG

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Define Big Data & Explain the Characteristics, Challenges of Big Data
(OR)
10. What is Big Data Analytics and classification of Big Data Analytics
11. Explain the overview of Hadoop Ecosystem
(OR)
12. Explain the overview of Hadoop distributed File System.
13. Explain about Managing Resource and applications with Hadoop and YARN
(OR)
14. Explain briefly about Mapper & Reducer
15. What is HIVE and explain the HIVE architecture in Detail
(OR)
16. Explain RC file implementation
17. Explain about HDFS command, relational operators and user defined functions
(OR)
18. Explain data types in PIG & Execution mode of PIG

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KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG IV – SEMESTER END EXAMINATIONS

Class : II M.Sc [OCH]
Subject : Organic Chemistry
Title of Paper : **Modern Organic Synthesis**
Paper Code : R22OCH402A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9 am - 12 noon
Date : 08-05-2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Write a note on Allylic alkylation of alkenes .
2. Explain Aldol Reaction with suitable example.
3. What is Pyrolytic Syn Elimination reaction.
4. Write a short note on Fragmentation Reactions.
5. Write a note on Sharpless Epoxidation.
6. Write a note on Racemization.
7. Explain Organo Catalysis using proline.
8. What is Baylis Hillman Reaction.

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Explain Alkylation of enolates and enamines with examples.

(OR)

10. Write the Synthetic Applications of Carbenes and Carbenoids.

11. Explain Wittig and Modified Wittig Reactions with examples.

(OR)

12. Write briefly about the reductive dimerisation Carbonyl compounds.

13. Write a brief note on Hoffmann-Loeffler-Freytag reaction.

(OR)

14. Explain Photolysis of organic hypohalites and hypochlorites.

15. Explain the use of chiral auxiliaries and Chiral enolates.

(OR)

16. Describe Diastereoselectivity and Enantioselectivity.

17. Discuss the applications of Fujiwara Moritani Reaction and Heck reaction.

(OR)

18. Explain Asymmetric C-H functionalization via C-H Activation.

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KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG IV – SEMESTER END EXAMINATIONS

Class : II M.Sc [ACH]

Max Marks : 70

Subject : Analytical Chemistry

Pass Mark : 28

Title of Paper : Traditional and Environmental Methods of Analysis

Duration : 3 Hrs

Paper Code : R22ACH402A

Time : 9am - 12 noon

W.E.F : 2024-25

Date : 08-05-2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. What is Dissolution.
2. Write a note on Oxidation Fusion.
3. Write the classification of functional groups with two examples.
4. Write the method for the determination of Ketones.
5. Write a note on steroids.
6. Explain the chemistry of Ascorbic Acid.
7. Write a note on different types of water pollutants.
8. Define primary and secondary pollutants.

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Explain the process of decomposition of samples by H_2O and HNO_3 .

(OR)

10. Describe the decomposition of samples by alkali and reductive fusion.

11. Explain the method for the quantitative determination of thiol, phenolic hydroxyl.

(OR)

12. Describe the method for quantitative determination of Nitro and Methoxy groups.

13. Explain the analysis of Benzyl penicillin and Tetracycline.

(OR)

14. Describe the analysis of Anti hyper tensive agents.

15. Explain the analytical methods for the determination of Fluoride, Chloride Nitrate in water.

(OR)

16. Explain the procedure for the determination of BOD and COD.

17. Describe the analysis of Carbon compounds and Hydrocarbons.

(OR)

18. Write a note on chemical analysis of Secondary pollutants PBN and PAN in Air sample.

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KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG IV - SEMESTER END EXAMINATIONS

Class : II M.Sc [OCH]
Subject : Organic Chemistry
Title of Paper : **Advanced Organic Spectroscopy**
Paper Code : R22OCH401A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am - 12noon
Date : 06/05/2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Differentiate the following compounds by using C13 NMR SPECTROSCOPY
a) cis 2- butane b) Trans 2- butane.
2. Write a short note on broad band and off resonance decoupling.
3. Define NOE and explain with an example.
4. Define COSY with an suitable example.
5. Explain basic principle in ESR Spectroscopy.
6. Write a short note on zero field splitting.
7. Explain phenomena of ORD.
8. Give the structure of molecule(C4H8O) with given PMR data. 8.94 τ (3H,t), 7.86 τ (3H, s) 7.57 τ (2H, q).

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Write a essay on factors affecting C13 NMR Spectroscopy.

(OR)

10. Differentiate the following compounds by using C13 NMR Spectroscopy.

i) O-Xylene ii) P-Xylene iii) M-Xylene

11. Write a essay on HOM2DJ AND HET2DJ IN 2D NMR Spectroscopy.

(OR)

12. Write a essay on NOESY and INEPT IN 2D NMR Spectroscopy.

13. Write a essay on kramers degenerancy in ESR Spectroscopy.

(OR)

14. Write a note on factors affecting "g" values in ESR Spectroscopy.

15. Explain the applications of octant rule.

(OR)

16. Write a note on cotton effect.

17. An organic compound having molecular formula (C₅H₁₀O) exhibits the following Spectral data. Deduce the structure of the compound.

UV(λ_{max}) 280nm

IR ν (cm⁻¹) 1715

¹H NMR (δ ppm) : 0.90(3H, t) 1.60(2H, m) 2.20(3H, s) 2.40(2H, t)

Mass (m/z): 86, 71, 58, 43(100%).

(OR)

18. An organic compound having Molecular Formula C₄H₈O₂ exhibits the following molecular spectral data. Deduce the structure of compound basing on given spectral data.

UV(λ_{max}) 271nm

IR ν (cm⁻¹) 1718, 3430

¹H NMR (δ ppm) : 4.22(1H, q, J=7HZ) 3.73(1H, s, br) 2.18(3H, s) 1.36(3H, d J=7HZ)

Mass (m/z): 88(M⁺), 45(100%) 43(80%)

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

Class : II M.Sc [ACH]
Subject : Analytical Chemistry
Title of Paper : Instrumental Methods of Analysis
Paper Code : R22ACH401A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am - 12 noon
Date : 06/05/2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Derive Beer's law. Write the applications of Beer's law.
2. Explain single beam Instrumentation with a block diagram
3. Write the applications of Nephelometry.
4. Differentiate fluorimetry and phosphorimetry.
5. What is Flame photometry.
6. Write a note on chemical interferences in AAS.
7. Write the application of DSC.
8. Write a brief note on Dropping Mercury Electrode.

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Write a note on determination of manganese by spectrophotometry.

(OR)

10. Write a note on simultaneous spectrophotometric determinations.

11. Explain the theory and instrumentation of Turbidimetry.

(OR)

12. Write the theory and instrumentation of Fluorimetry.

13. Explain the Errors in Flame photometry. Also write the applications of Flame photometry.

(OR)

14. Write the theory and applications of AAS.

15. Write the theory and instrumentation of Thermo gravimetry.

(OR)

16. Write the differences between TG and DTA.

17. What is Half wave potential. Also explain Ilkovic Equation.

(OR)

18. What are Amperometric titrations. Write a brief note on applications of Amperometric titrations.

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

Class : II MCA
Subject : Computers
Title of Paper : Dynamic Web Programming
Paper Code : R22MCA402A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am - 12 noon
Date : 08-05-2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Discuss about Django
2. Discuss the Integration Variables in Django
3. Discuss the connection between Django and MYSQL
4. Explain about Dry URL
5. Narrate the steps of Django Model Form preparation
6. Discuss about Flask Web
7. Use of CRUD operations using Python code
8. Explain about SQL Alchemy

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Explain about Templates in Django

(OR)

10. Narrate the Basic Steps for Installing Django

11. Explain MVT architecture & Data Base in Django

(OR)

12. Write a program to insert the value in the Database using Models

13. Explain the process of creating Customer Feedback form in Django

(OR)

14. Explain about Session Management and Session Management using cookies

15. Explain about Rendering HTML templates

(OR)

16. Discuss about Handling HTTP requests (GET, POST) and routing

17. Explain about Django REST. API and types of Web services.

(OR)

18. Narrate the steps in connecting Python to Database MYSQL.

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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 : 9 AM - 12:00 PM
Date : 08-05-2023

SECTION-A

I. Answer any FIVE of the following Questions

5X3=15M

1. a) Distinguish between Transactional Selling and Relational Selling.
- b) What are the different modes of sales presentation?
- c) What is a sales budget? What are the purposes of the sales budget?
- d) Write a short note on Executing and Evaluating Sales Training Programs.
- e) Define sales audit and explain.
- f) What do you mean by Hybrid Channel?
- g) Classify the types of Wholesalers.
- h) Discuss the new developments in supply chain management.

SECTION-B

II. Answer any FIVE of the following Questions

5X3=15M

2. Explain the process of personal selling. Describe the roles and skills of modern manager.
(OR)
3. Discuss various theories of selling.
4. Explain in detail the process of sales forecasting.
(OR)
5. (i) What are the various methods of setting sales quotas
(ii) Define sales territories and the factors affecting the size of sales territories.
6. Explain different sources of sales force recruitment.
(OR)
7. "If you pay a sales person enough, you will have a well-motivated sales person".
Comment on the statement.
8. What is Retailing? How does the use of technology enhance the efficiency of retail business?
(OR)
9. Explain the levels of channels and functions of channel partners with relevant examples
10. What do you understand from market logistics? Explain its objectives and decisions of market logistics with suitable examples.
(OR)
11. What are various modes of transportation in distribution management?

[P.T.O]

III. Case Study (Compulsory)

12. Mayank Chopra is a new sales representative for Aurore Cosmetics (Aurore). Besides his other responsibilities, Mayank has a very important task at hand. A year ago, his company lost a prime customer and major retailer, Jabby, following an issue with a former sales representative. It is important for him to get Jabby back on board because the retailer has now tied up with his company's biggest competitor, Soleil Cosmetics (Soleil). Jabby now buys products worth Rs. 50,000 per month from Soleil Cosmetics. Until last year, Jabby had been purchasing Aurore products worth Rs. 20,000 per month; however, the unfortunate experience with a former sales representative had led the retailer to stop stocking or selling Aurore products. Jabby is very satisfied with Soleil as its sales executive provides gifts worth Rs. 5000 every month and the company's distributor offers 45 days credit to Jabby. Jabby's biggest outlet "La Femme Shoppe" is located in Lajpat Nagar, a prime shopping location in Delhi. Having its products stocked in this shop will do wonders for Aurore's bottom-line in the National Capital Region. So far, several attempts by Mayank's manager to convince Jabby to return to their organization has been unsuccessful.

- a) Discuss importance of customer relationship management and retention in light of the case.
- b) Suggest a strategy for Mayank as he is about to call on Jabby to try to recover its business.

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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 - 12noon
Date : 08-05-2025

SECTION-A

I. Answer ALL the following Questions

1. Write a short note on the following
- i) Alkylation of methylene groups ii) Allylic alkylation of α - thiocarbonions 14M
- (OR)**
2. Explain the significance of “umpolung” in C-C single bond formation 8M
3. Explain the formation of carbon-carbon single bond by the addition of free radicals to alkenes.
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 β lactones. 8M
7. Explain the oxidative decarboxylation of carboxylic acids. 6M
- (OR)**
8. Discuss the cyclisation reactions of nitrenes. 8M
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 14M
- (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

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

Class : II MBA
Subject : Management
Title of Paper : Retail Management
Paper Code : R22MBA403
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am - 12 noon
Date : 10-05-2025

SECTION-A

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

5X3=15M

1. a) Retail consumer purchase Decision Making Process
- b) Opportunities and challenges of Retailing in India
- c) Retail Growth strategies
- d) Types of Retail location.
- e) Strategic profit model
- f) Emergence of private labels
- g) Multichannel retailing -issues and challenges
- h) Supply Chain Management in Retailing

SECTION-B

II. Answer **ALL** the following Questions

5X8=40M

2. Discuss the nature and importance of Retail Management.
(OR)
3. Describe the Types and Functions of Retailing in detailed.
4. What is Retail market strategy? Describe briefly the components of Retail Market Strategy
(OR)
5. Write about Strategic Retail planning process.
6. Explain scope and process of Retail management.
(OR)
7. Explain about process of merchandise planning and methods of Merchandise Procurement.
8. Discuss about various Retail Pricing Strategies.
(OR)
9. Write about Retail Promotional Mix elements with suitable examples.
10. What is store management? Explain concepts of Store layout and store design.
(OR)
11. Define Customer Relationship Management. Explain about Customer Retention Strategies.

SECTION-C

Case study (Compulsory)

1X15=15M

12. D-Mart: Most Successful Indian Chain of Hypermarkets

D-Mart is an Indian chain of hypermarkets established by DMart owner Radhakishan Damani on May 15, 2002. D-Mart has 387 stores across 14 states in India including Maharashtra, Andhra Pradesh, Telangana, Gujarat, Madhya Pradesh, Chhattisgarh, Rajasthan, National Capital Region, Tamil Nadu, Karnataka, Uttar Pradesh, Daman, and Punjab. D-Mart is a discount retail chain in India that operates a chain of physical stores and an online platform. The company's business model is based on providing a wide range of products at competitive prices to attract price-sensitive customers. DMart sources its products directly from manufacturers and suppliers, which helps to keep costs low and pass on the savings to customers. The company operates an efficient supply chain, with a central warehouse system that enables it to quickly and efficiently distribute products to its stores. This helps to reduce lead times, lower inventory costs, and improve the overall shopping experience for customers.

Questions:

- a) Discuss the pricing strategies followed by D-mart.
- b) Describe the impact of E-commerce on store based retailers.

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

Class : II MCA
Subject : Computers
Title of Paper : **Web Technologies**
Paper Code : R22MCA404A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am - 12 noon
Date : 10-05-2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Explain about JDBC Architecture.
2. Explain about Types of Drivers in JDBC.
3. Difference Between GET and POST Methods
4. Write a short note on HTTP Servlet.
5. Explain about JSP Scripting Elements.
6. Explain about Wrappers.
7. Explain about JSP:set Property.
8. Explain the difference between Servlets and JSP.

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Explain about Steps for Developing a JDBC Application with an example.

(OR)

10. Briefly discuss about Data Base Operations (insert, delete, select) in JDBC.

11. Explain about Servlet Technology Model.

(OR)

12. Explain about Request Dispatcher in Servlet.

13. Explain about JSP Implicit Objects.

(OR)

14. Explain about MVC Architecture.

15. Explain about JSP Expression Language.

(OR)

16. Explain about JSP Standard Action Tags with example.

17. Explain the procedure for developing a Todo Application using JSP, Servlets and JDBC.

(OR)

18. Explain about Net beans with an example.

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

Regd No: _____

Class : II M.Sc [OCH]
Subject : Organic Chemistry
Title of Paper : **Retro Synthesis Analysis**
Paper Code : R22OCH404A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am - 12 noon
Date : 10-05-2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Explain the terms Target molecule and synthetic equivalent.
2. Write a short note on guidelines for choosing Disconnections.
3. Explain C-X disconnection in Carbonyl derivations.
4. Write a note on reversal of polarity.
5. Explain C-C disconnection in α , β unsaturated compounds.
6. Give a brief note on Michael addition.
7. Discuss the protection and deprotection of amines.
8. Give a brief account on Robinson annelation.

SECTION-B

II. Answer any FIVE of the following Questions

5X10=50M

9. Define FGI and Describe linear and convergent synthesis with examples.
(OR)
10. Carry out a retrosynthetic analysis of Musk Ambrette and Propoxycaine and write key steps involved in their synthesis.
11. Explain one group C-X disconnections in alcohols and sulphides.
(OR)
12. Write a note on chemo selectivity and amine synthesis.
13. Explain the one group C-C disconnections (1,1), (1,2) and (1,3) in carbonyl compounds.
(OR)
14. Write the two group C-C disconnections in 1,5 difunctionalised compounds.
15. Explain the protection and deprotection of alkenes and alkynes.
(OR)
16. Discuss the protection and deprotection of carboxylic acids.
17. Explain the steps involved in synthesis of six membered rings.
(OR)
18. Discuss the synthesis of four membered rings.

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KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG IV - SEMESTER END EXAMINATIONS

Class : II M.Sc [ACH]
Subject : Analytical Chemistry
Title of Paper : **Spectroscopic Methods**
Paper Code : R22ACH404A
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am - 12noon
Date : 10-05-2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Write a note on different types of peaks in Mass Spectrometry.
2. Determination of nitrogen compounds in Mass Spectroscopy.
3. How do you analyze drugs by using GC-MS.
4. Write a note on application of LC-MS for environmental samples.
5. Write a note on High resolution NMR Spin systems of AB
6. Explain NOE effect.
7. Differences between PMR and CMR
8. Deduce the structure of the compound with molecular weight 58, with the following spectral data

UV: λ max at \approx 300 nm

IR ν max in EtOH: cm^{-1} : 2965, 1705, 1280

$^1\text{H-NMR}$ (CDCl_3 , TMS): δ 2.8 (6H,s)

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Write a note on basic principle and instrumentation in Mass Spectrometry.

(OR)

10. Write a note on Mass spectral fragmentation and structure determination of Heteroatomic and sulfur compounds.

11. Write the principle, instrumentation of GC-MS and write the application for trace constituents.

(OR)

12. Write the principle, instrumentation of LC-MS and write the application for drug analysis.

13. Write a note on High resolution NMR Spin systems of AX,ABC and AMX.

(OR)

14. Explain instrumentation of FT-NMR.

15. Explain the factors effecting chemical shifts in CMR.

(OR)

16. Write a note on Off resonance and Broad band decoupling in CMR.

[P.T.O]

17. An organic compound shows the following spectral characteristics

UV λ max : 240 ($\epsilon=8,000$), 300 nm ($\epsilon=100$)

IR γ max KBr: Cm^{-1} : 3400, 3200, 2900, 1620, 1600, 1500, 1380, 880, 820

$^1\text{H-NMR}$: δ 7.20 (1H, d, $J=9\text{Hz}$), 6.50 (1H, d, $J=3.5\text{ Hz}$), 6.30 (1H, dd, $J=9$ and 3.5 Hz), 3.50 (2H, br s, removed by adding D_2O) and 2.30 (3H, s)

M.S m/z (R.A): 187 (90), 185(90), 186(20), 184(20), 160(10), 158(10), and 106(100) deduce its structure

(OR)

18. An organic compound having molecular formula $\text{C}_4\text{H}_9\text{NO}$

UV λ max: 220 nm (ϵ max =63)

IR γ max Cm^{-1} : 3500, 3402, 2960, 1682, 1610, 1398, 1372, 700, 650

$^1\text{H-NMR}$: δ 1.0 (6H, d), 2.1 (1H, septet), 8.08 (2H, br s).

Deduce the structure of the compound based on the above data

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

Class : II M.Sc [DS]
Subject : Computers
Title of Paper : **Machine Learning**
Paper Code : R23DS403
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am - 12 noon
Date : 10-05-2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Explain the types of Machine Learning
2. Explain the tools used in Machine Learning
3. Explain about Dimensionality reduction
4. Discuss briefly about SK Learn Package
5. Explain about Decision Trees
6. Explain about Support Vector Machines
7. Explain briefly about Polynomial Regression
8. Explain about Convolution Neural Networks

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Explain briefly about Framework for Developing Machine Learning Models
(OR)
10. Explain Modeling and Evaluation Matrix
11. Explain about feature Transformation and Feature Scaling in Machine Learning
(OR)
12. Explain briefly about Explorative Data Analysis
13. Explain Navie Bayes Classifier
(OR)
14. Explain KNN algorithm with an Example
15. Explain Logistic Regression
(OR)
16. Differentiate Simple Linear Regression and Multiple Linear Regression
17. What is Neural Networks? Explain briefly about ANN
(OR)
18. Explain the procedure for building Recurrent Neural Network

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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 - 12 noon
Date : 10-05-2025

SECTION-A

1. Write the retrosynthetic analysis of propoxycaine and musk ambrette? 14M
(OR)
2. a) Explain Retrosynthetic and target molecule? 7M
b) Describe Synthons and Synthetic equivalent? 7M
3. Discuss one group C-X disconnections (Carbonyl derivatives, ethers, sulphides and alcohols) 14M
(OR)
4. Write a note on the following selective organic transformations 14M
i) Cyclisation reactions ii) Reversal of polarity
5. Explain one group 1,1 C-C, 1,2 C-C and 1,3 C-C disconnections in alcohols 14M
(OR)
6. Discuss two group C-C disconnections in 1,3 difunctionalized compounds 14M
7. Explain the protection and deprotection of hydroxyl group? 14M
(OR)
8. Discuss the protection and deprotection of carboxylic acids? 14M
9. Give the synthesis of four membered rings. 14M
(OR)
10. Write the synthesis of six membered rings. 14M

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KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG IV – SEMESTER END EXAMINATIONS

Class : II MCA
Subject : Computers
Title of Paper : **MOOCS – Programming Java**
Paper Code : R22MCA408
W.E.F : 2024-25

Max Marks : 100
Pass Mark : 40
Duration : 3 Hrs
Time : 2pm to 5pm
Date : 12/05/2025

SECTION-A

5X20=100M

I. Answer the following Questions.

1. Explain the features of Java

(OR)

2. Explain about Operators in Java

3. Explain about Encapsulation in Java

(OR)

4. Explain about Inheritance in java

5. Explain about Exception handling in Java

(OR)

6. Explain about Multithreading in Java

7. Explain about Java Applets

(OR)

8. Explain about JDBC

9. Explain about Interfaces in Java.

(OR)

10. Explain about Packages in Java

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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 - 12 noon

W.E.F : 2024-25

Date : 13/05/2025

SECTION-A

I. Answer any FIVE of the following Questions

5X3=15M

1. a) Define IFM
- b) What is gold standard?
- c) Explain PPP
- d) Floating exchange rate system
- e) What is Interest rate Swap
- f) Types of Exposure
- g) Significance of International Portfolio Management
- h) Tax heavens for MNCs

SECTION-B

II. Answer ALL the following Questions

5X8=40M

2. Explain the features and motives of Multinational Corporations in detail. How do they maximize Profits globally?
(OR)
3. Elaborate on the objectives and importance of International Financial Management and distinguish it from domestic financial Management?
4. Explain the determination of exchange rates under different systems and the role of parity conditions?
(OR)
5. Discuss the Role and Functions of Global Financial Markets?
6. Discuss the various types of foreign exchange exposure faced by firms and how they can be managed?
(OR)
7. Discuss the difference between contractual hedges and natural hedges?
8. Discuss how the International Capital Asset Pricing Model differ from the domestic CAPM explain with examples?
(OR)
9. What are the Long Term finances available for MNCs?
10. What is international working capital management? How do exchange rate fluctuations impact international cash management?
(OR)
11. Explain the issues and key elements of International taxation?

SECTION-C

1X15=15M

Compulsory

12. The Argentine Peso was fixed through a currency board at PS.1.00/\$. In January 2022 The Argentine Peso was Floated. As of January 29,2023 , it had depreciated to ps.3.20/\$. During the one year period Argentina's inflation was 20% on annualized basis. Inflation in the United States was 2.2% annualized.

Questions:

- a) What should have been the exchange rate in January 2023 if the PPP Held?
- b) By What Percentage was the Argentine Peso undervalued on an annualized basis?

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

Class : II M.Sc [DS]
Subject : Computers
Title of Paper : **Web Technologies**
Paper Code : R23DS404
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am - 12 noon
Date : 13/05/2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Explain about JDBC
2. JDBC features and its Versions
3. Explain Servlet Technology Model
4. Explain Generic Servlet
5. Explain INIT params in Servlet
6. JSP : getProperty
7. Create a sample Web Applications using JSP
8. Explain the difference between Servlets and JSP

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Discuss in details about Database operations (INSERT, DELETE & SELECT) in JDBC
(OR)
10. Explain Procedure in JDBC and Prepared statements in JDBC
11. Steps to develop first Web application using Servlets
(OR)
12. Difference between GET & POST methods in Servlets
13. Explain MVC architecture in detail
(OR)
14. Explain Session Management using Cookies
15. Explain in detail about JSP standard action tags
(OR)
16. Explain i) JSP: useBean ii) JSP: forward
17. Narrate the steps to develop TODO application using JSP
(OR)
18. How to connect to NetBeans Database and retrieve the data from Tables

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**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 : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am - 12noon
Date : 13/05/2025

SECTION-A

I. Answer any FIVE of the following Questions

5X3=15M

1. a) Importance of Strategic HRM.
- b) HR Investment Consideration.
- c) HR Outsourcing.
- d) Cross Cultural Training.
- e) Ethical Dimensions.
- f) Strategic Planning.
- g) Project Based Employment.
- h) Competency Mapping.

SECTION-B

II. Answer ALL the following Questions

5X8=40M

2. Explain Strategic Framework for HRM and Process of Strategic HRM.
(OR)
3. What do you know about Strategic HR Planning? Explain Acquisition & Development.
4. Explain the importance and Methods of Forecasting the Supply of HR.
(OR)
5. Discuss about Ensuring Alignment and ensuring Strategic flexibility for the future.
6. Define Retrenchment Strategies. Explain about Downsizing and VRS.
(OR)
7. Describe Behavioural Issues in Strategy Implementation. How to match Culture with Strategy? Explain.
8. Explain about Recruitment and Retention Strategies followed by Organizations now-a-days.
(OR)
9. Discuss about Training Development and Performance Strategies Practiced in Indian Organizations.
10. What is meant by HR Strategy Evaluation? Explain HR Evaluation Process.
(OR)
11. How to Evaluate Strategic Contribution in emerging areas like Management of Diversity and Quality Readiness? Explain in brief.

[P.T.O]

12. Case Study (Compulsory)

ABC Inc. is a leading Retail Company with over 1000 Stores across the country. The company has experienced significant growth in recent years. But this growth has led to various challenges in managing its workforce. The company's HR Department has traditionally focused on Administrative tasks, but the CEO recognizes the need for a more strategic approach to HR Management.

The Company is facing intense competition for skilled workers as well as struggling to attract and retain top talent. They conducted Employee Engagement Surveys which indicated low levels of motivation and job satisfaction among employees.

Moreover the company's workforce lacks of Diversity and there are concerns about creating an Inclusive work environment. Finally, the company needs to develop a pipeline of future leaders to drive business growth. But, ABC Inc.'s diversity and inclusion initiatives have been met with resistance from some employees, who feel that the programs are unnecessary or unfair.

Questions :

1. What are the key challenges of ABC Inc.'s HR Department and how can they be addressed through Strategic HR Management?
2. How can ABC Inc. ensure that its program is aligned with the company's Business objectives? Explain.

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

Class : II M.Sc (ACH/OCH)
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-12noon
Date : 13/05/2025

SECTION-A

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

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

Class	: II M.Sc [ACH/OCH]	Max Marks	: 70
Subject	: Analytical Chemistry/Organic Chemistry	Pass Mark	: 28
Title of Paper	: Nano Chemistry	Duration	: 3 Hrs
Paper Code	: R22ACH406A/R22OCH406A	Time	: 9 am - 12 noon
W.E.F	: 2024-25	Date	: 13/05/2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Write a note on Nano science.
2. Write a short note on Nano Technology.
3. Write a note on silver Nano particles.
4. Define nano roads and quantum dots.
5. What is Scanning Electron Microscopy.
6. Write a note on XPS.
7. Write a note on biosensors.
8. Explain the mechanical properties of the spider silk.

SECTION-B

II. Answer any FIVE of the following Questions

5X10=50M

9. Explain nano science practiced during ancient and modern periods.

(OR)

10. Explain the terms nano scale, nano materials briefly.

11. Write a note on Top down and bottom up approaches for synthesis of nano particles.

(OR)

12. Write various methods for the synthesis of Gold Nano Particles.

13. Write the principle and applications of transmission electron microscopy.

(OR)

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

15. Write the applications of nano materials in solar cells and smart materials.

(OR)

16. Explain the applications of nano materials in the detection of cancerous cells.

17. Describe the anti-wetting property of water striders.

(OR)

18. Describe the foot climbing ability of geckos in detail.

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KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG IV - SEMESTER END EXAMINATIONS

Class	: II M.Sc [ACH/OCH]	Max Marks	: 70
Subject	: Analytical Chemistry/Organic Chemistry	Pass Mark	: 28
Title of Paper	: Drug Design and Drug Chemistry	Duration	: 3 Hrs
Paper Code	: R22ACH409A/R22OCH409A	Time	: 9 am - 12 noon
W.E.F	: 2024-25	Date	: 15/05/2025

SECTION-A

5X4=20M

I. Answer any FIVE of the following Questions

1. Discuss the concept of Prodrugs.
2. What is Lead and write the properties of Lead compound.
3. Write the Classification Of Anti neoplastic Agents.
4. Write the structures and Properties of Pyrimidine analogues-5-flurouracil.
5. Discuss the synthesis of Methyl Dopa.
6. Write the Synthesis of Quinidine.
7. Describe the Structure, Synthesis of Miglitol.
8. Describe the Structure and Synthesis of isoniazid.

SECTION-B

5X10=50M

II. Answer ALL the following Questions

9. Discuss the Structure activity relationship of drugs(SAR).
(OR)
10. Discuss the procedure followed in drug design.
11. Explain the Synthesis, Properties, Uses And Dosage of Chlorambucil.
(OR)
12. Write the Structures and Properties of Doxorubicin And Mitomycin.
13. Discuss the Structure and Synthesis of Verapamil.
(OR)
14. Write a brief note on Cardiovascular Drugs with suitable Examples.
15. Explain the Structure. Properties, MOA , Uses of Glipizide.
(OR)
16. Explain the Structure, Properties, MOA, Uses of Dipeptidyl Peptidase-4(DPP-4)
17. Discuss the Structure and Synthesis of sulphonamides.
(OR)
18. Discuss the Structure and Synthesis of Norfloxacin.

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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 : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am - 12 noon
Date : 15/05/2025

SECTION-A

I. Answer any FIVE of the following Questions

5X3=15M

1. a) Direct taxes Vs indirect taxes
- b) Tax planning process
- c) Export Vs Local sale
- d) Bonus shares
- e) What is GAAR?
- f) Retain Vs Replacement.
- g) Income tax rates for AY 25-26
- h) Role of GST Council.

SECTION-B

II. Answer ALL the following Questions

5X8=40M

2. Discuss the nature and significance of Tax Management in business organization
(OR)
3. Describe briefly the important provisions of GST Law.
4. Explain the features and benefits of different types of tax planning.
(OR)
5. How can tax planning will be applied in real estate and securities investment?
6. Discuss various tax considerations arising while making a decision regarding Make or Buy.
(OR)
7. Write a note on Tax aspects in relation to mergers and amalgamation of companies.
8. Explain various tax incentives and export promotion schemes.
(OR)
9. Describe the tax implications in developing the capitalization structure and short term loans
10. Discuss the challenges and opportunities of international taxation for businesses.
(OR)
11. Explain the concept of transfer pricing and its importance in international taxation.

[P.T.O]

SECTION-C

1X15=15M

III. Compulsory Question

12. From the following information determine whether the assessee should purchase an asset or take on lease:

1. Cost of asset Rs.1,00,000
2. Rate of depreciation 15%
3. Rate of interest 10%
4. Repayment of loan by the assessee Rs. 20,000 p.a.
5. Rate of tax 26%
6. Residual value Rs.20,000 after 5 years
7. Profit of the assessee Rs.1,00,000 before depreciation, interest and tax/before lease rent and tax.
8. Lease rent Rs. 30,000 p.a.

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

Class	: II MBA	Max Marks	: 70
Subject	: Management	Pass Mark	: 28
Title of Paper	: Industrial Relations and Labour Legislations	Duration	: 3 Hrs
Paper Code	: R22MBA405(H)	Time	: 9am - 12 noon
W.E.F	: 2024-25	Date	: 15/05/2025

SECTION-A

5X3=15M

I. Answer any FIVE of the following Questions

1. a) Importance of Industrial Relations
- b) Quality Circles.
- c) Causes of Grievance.
- d) Objectives of Factories Act
- e) Industrial Dispute Act 1947
- f) Strikes & Lockouts.
- g) ESI Act 1948.
- h) PF Act 1952.

SECTION-B

5X8=40M

II. Answer ALL the following Questions

2. Define Industrial Relations. What are the Approaches to Industrial Relations?
(OR)
3. What are the Problems of Trade Unions?
4. What is Collective Bargaining. Explain the steps in the Process of Collective Bargaining
(OR)
5. What are the forms of Worker's Participation of management in India
6. What are the salient features of Factories Act, 1948?
(OR)
7. What are the important Provisions in the Factories Act, 1948?
8. How are Trade Unions Recognized?
(OR)
9. What do you mean by Industrial Conflicts ? Explain the causes for Industrial Conflicts.
10. What are the Rules & Benefits relating to the payment of wages Act 1936
(OR)
11. Write a detailed note on workmen's compensation Act 1923.

[P.T.O.]

SECTION-C

1X15=15M

III. CASE STUDY

12. In 2008, workers at the Tata Nano car manufacturing plant in Singur, West Bengal, India, engaged in mass protests against the acquisition of farmland for the plant. The dispute was between the West Bengal state government, Tata Motors, and local farmers. The strikes escalated when the local workers, who had been promised benefits and job security, complained of low wages, inadequate safety conditions, and a lack of proper labor agreements.

Questions:

1. How did the land acquisition for the Tata Nano plant create tension between the state government, Tata Motors, and the workers?
2. What were the key labor-related issues at the Tata Nano plant, and how could they have been addressed through better industrial relations practices?
3. To what extent did the role of trade unions influence the outcome of the Singur protests?

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

Class	: II M.Sc [DS]	Max Marks	: 70
Subject	: Computers	Pass Mark	: 28
Title of Paper	: AI Concepts and Techniques With Python	Duration	: 3 Hrs
Paper Code	: K23DS405	Time	: 9am - 12 noon
W.E.F	: 2024-25	Date	: 15/05/2025

SECTION-A

I. Answer any FIVE of the following Questions

5X4=20M

1. Data types in Python
2. AI libraries in Python
3. Difference between Supervised and Unsupervised Learning
4. Explain Functions in Neural Networks
5. Explain briefly about Recurrent Neural Networks (RNNs)
6. Explain about Sentiment analysis with NLP
7. What are the steps involved in building NLP models in Python.
8. Future trends in AI driven Health care Systems

SECTION-B

II. Answer ALL the following Questions

5X10=50M

9. Explain the overview of AI and its Applications
- (OR)
10. Explain foundation of AI
- (OR)
11. Explain model Evaluation and Validation in Machine Learning
- (OR)
12. Explain briefly about Classification and Regression algorithms
- (OR)
13. Explain the architecture of Neural Network and its components
- (OR)
14. Define CNN and Applications of CNN
- (OR)
15. Discuss about Tokenization and the process of Word Embed Design in NLP
- (OR)
16. Explain Text Pre-processing techniques
- (OR)
17. Explain Predictive Modeling for Disease Diagnosis
- (OR)
18. Explain in detail about Medical Image Analysis

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KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG IV - SEMESTER END EXAMINATIONS

Class : II M.Sc (ACH/OCH)
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 - 12 noon
Date : 15/05/2025

SECTION-A

I. Answer ALL the following Questions

5X14=70M

1. What are the Concepts of Drug Receptors

(OR)

2. What is Drug metabolism?

3. Define folic acid analogues-Methotrexate

(OR)

4. Describe the structure, properties and dosage of Doxorubicin and Mitomycin

5. Define cardiovascular diseases and what are its symptoms

(OR)

6. What are the synthesis of amyl nitrate , sorbitrate , diltriazem. Explain?

7. Write the synthesis and properties of tolbutamide and glipzide

(OR)

8. Write the synthesis of sulphonamides and ciprofloxacin

9. What are the synthesis of norfloxacin.

(OR)

10. ~~Disc~~^{ss} Local Anti-infective Drugs.

DISCUSS

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 : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : *9am to 12pm*
Date : *17/05/2025*

SECTION-A

I. Answer any FIVE of the following Questions

5X3=15M

1. a) What is meant by HR Analytics?
- b) Discuss the future of HR Analytics
- c) Write a note on concept of Human Resource Information System.
- d) What are the HR Analytics used for Staffing?
- e) Write a short note on HR Scorecard
- f) What is HR-Sub systems?
- g) Write about competency Mapping.
- h) What is the role of social media in HR Analytics?

SECTION-B

II. Answer ALL the following Questions

5X8=40M

2. Describe the Models and frameworks for HR Analytics.
(OR)
3. Explain the Methods of HR Accounting and Audit.
4. Briefly explain the process for development and implementation of HRIS.
(OR)
5. What are the various applications of HRIS? Explain in detail.
6. Elucidate the HR analytics for Training and Development.
(OR)
7. Discuss the HR Analytics used for Rewards and Compensation Management.
8. What are the key metrics for measuring HR effectiveness? Explain in detail.
(OR)
9. Briefly Explain the HR performance frameworks & Competency mapping.
10. Brief about the emerging challenges associates with the HR analytics.
(OR)
11. Discuss the issues related with the HR valuation and measurement.

[P.T.O]

SECTION-C

III. Compulsory Question:

1X15=15M

12. AlphaTech, a mid-sized software company, noticed its employee turnover rate was rising — especially among new hires leaving within their first year. The HR team decided to apply HR Analytics to tackle this problem. They collected data on Recruitment sources, Training participation, Performance ratings, Exit interview feedback. The analysis revealed that employees who didn't complete onboarding training were 3x more likely to quit. Those hired through referral programs had the highest retention rate. The company adjusted its hiring strategy to Favor referrals and made onboarding training mandatory.

Questions:

1. What type of HR metric was AlphaTech using to measure turnover?
2. How did HR Analytics help identify the key issue behind early resignations?
3. Suggest two more data points AlphaTech could analyse to further improve retention.

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

Class : II MBA
Subject : Management
Title of Paper : Financial Derivatives
Paper Code : K22MBA406(F)
W.E.F : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : *12 PM to 3 PM*
Date : *17/05/2025*

SECTION-A

5XS=15M

I. Answer any FIVE of the following Questions

1. a) Define 'Risk'. How to manage the Risk in derivatives market?
- b) Explain down size risk and upside risk.
- c) What is the margining system in Futures contract?
- d) Highlight the evolution of Futures market in India.
- e) Options Vs Futures
- f) Basic Option positions
- g) Highlight the equity index swaps.
- h) Basis risk Vs Price risk

SECTION-B

5XS=40M

II. Answer ALL the following Questions

2. Highlight the products, participants and functions of derivatives.
(OR)
3. Explain the Regulatory Framework of Derivatives Trading in India.
4. What are the types of Futures contract?
(OR)
5. Highlight the hedging strategies with futures contract.
6. What are the factors influencing on Option Prices?
(OR)
7. Discuss the Binominal Option trading model.
8. What is the meaning of Swap? Explain the types of Swaps.
(OR)
9. What is the role of Swap Dealer in Swaps market?
10. What is the concept of Hedging? Explain the objectives of Hedging.
(OR)
11. Explain the Hedging models.

[P.T.O]

SECTION-C
(Compulsory)

1X15=15M

Answer the following

12. Calculate the value of an option under Black-Scholes model from the following information

Price of stock now = Ra.120

Exercise price = Ra.115

Standard deviation of continuously compounded annual returns = 0.6

Years to maturity = 3 months or 0.25 years

Interest rate per annum = 10%

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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 : 2024-25

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : *9am to 12pm*
Date : *20/05/2025.*

SECTION-A

5X3=15M

I. Answer any FIVE of the following Questions

1. a) Explain the evolution of Bank Management.
- b) Automated Teller Machine
- c) Treasury Management
- d) Electronic fund transfer
- e) Information Security
- f) Total Branch Computerisation
- g) Mobile banking
- h) Structured financial messaging system

SECTION-B

5X8=40M

II. Answer ALL the following Questions

2. Give a detailed analysis of Rangarajan committee report.

(OR)

3. Explain the significant impact of technology in banking operations in India.

4. Give an overview of Delivery channels.

(OR)

5. Explain the concept of Internet Banking.

6. Explain the concept of FOREX operations.

(OR)

7. What do you understand by Customer Relationship Management.

8. Explain Structured financial messaging system.

(OR)

9. Explain the significance of E cheques.

10. What is Crypto Currency analysis.

(OR)

11. Explain the concept of Computer and Information System Audit.

[P.T.O]

SECTION-C

12. CASE STUDY (Compulsory Question)

1X15=15M

ABC bank, a mid-sized commercial bank in India, was facing increasing competition from fintech companies and new age digital banks. To remain relevant and competitive, ABC bank decided to implement a large -scale digital transformation strategy focusing on core banking upgrades, mobile banking, artificial intelligence and cybersecurity. It has taken some initiatives. It has migrated its legacy systems to a cloud-based core banking solution and launched a user-friendly mobile banking app with biometric login and instant fund transfers. And, it has integrated AI-powered chatbots for 24/7 customer support along with implementation of robust cyber security protocols. The bank also has trained employees on new digital tools and conducted digital literacy programs. And as a result of all the above steps customer satisfaction increased by 30% within one year. Mobile app adoption rose by 65%. Operational costs decreased by 20% and fraud incidents reduced by 40%.

Questions:

1. How did technology help ABC bank improve its services?
2. What are main outcomes of digital transformation?
3. What lesson can other banks learn from ABC bank's strategy?