Class : II MBA
Subject : Management
Title of Paper : Strategic Management
Paper Code : R20MBA301
W.E.F : 2021-22

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 19|01|2023

SECTION-A

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

1. Strategy

2. ETOP

3. Stability Strategy

4. Strategic Alliance

5. Triple Bottom Line

6. Corporate Culture

7. Market Penetration

8. Business Ethics

SECTION-B

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

9. Explain the evolution of Strategic Management.

(OR)

10. Explain the basic model of Strategic Management.

11. Describe the Value Chain Model of Michael Porter.

(OR)

12. Describe the BCG Matrix.

13. Analyse the Leadership Styles.

(OR)

14. Analyse the integration of the Organisation Structure and Strategy.

15. Discuss the Expansion Strategies.

(OR)

16. Discuss the Strategies of Turnaround Management.

17. Narrate the process of Strategy Evaluation and Control.

(OR)

18. Give a brief description about 7S Framework.

[P.T.O]

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

19. Mr. Truth Restaurant, a dream project of Mr. Radha Krishna is on the verge of closure. The story began when Mr. Radhakrishna started his restaurant with an objective to bring quality food with full information on the ingredients used in the items and as well as the calories inherited in the food item. The idea is emerged when he was in the service and with frequent interaction with his super annuated colleagues and friends. The initial sales in the restaurant were meager and he expected that it would increase gradually, but but he experienced a different reality. The other restaurant which was opened on the same day in the opposite street resulted in huge sales by attracting teenagers. When Mr. Radhakrishna compared his target customers with other restaurant, he observed more frequency of old age customers to his restaurant. The volume of sales as well as revenue is also declined within three months after the opening of the restaurant.

Mr. Radhakrishna is in the dilemma of either to close his restaurant or implement a strategy to get focused for further improvement.

Questions:

1. As a management student, prepare a strategy to help Mr. Radhakrishna to revive his strategy to improve his Restaurant Business.

2. In case of Restaurant Business, is there any significant impact of type of customers on the profitability of business?

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

Class   : II MBA   Max Marks   : 75
Subject   : Management   Pass Mark   : 30
Title of Paper: Project Management   Duration   : 3 Hrs
Paper Code   : R20MBA302   Paper Time : 9am to 12pm
W.E.F   : 2021-22   Date   : 21/01/2023

SECTION – A

1. Answer any **FIVE** Of the following questions.   5X3=15M

1) Need of Project Management.

2) Project Management Philosophy.

3) CPM Model.

4) Feasibility Studies.

5) Cost Forecasting.

6) PMIS.

7) Risk Analysis.

8) Steps for Closing the Project.

SECTION –B

Answer ALL the following Questions   5X8=40M

9) Explain the Project Management Principals in brief.

(OR)

10) Write the different phases of Project Management.

11) Explain the need and role of Project Planning.

(OR)

12) What in brief about the Project Planning process.

13) Explain the role and Responsibilities of Project Leader.

(OR)

14) Write the brief notes on Leadership Styles.

15) Explain the varies steps of Risk Management.

(OR)

16) Write different phases of Purchase Cycle.

17) Write the benefits and challenges of Performance Measurement and Evolution.

(OR)

18) Explain the purpose of Project Execution and Control.

(P.T.O)

SECTION –C

Case Study

Answer the following Question   **1X15=15M**

19) Located at opposite ends of the country, Northwest Center for Families (NCF) and Southeast Social Services (SSS) are local government agencies specializing in family, child, and school social work in rural areas. After attending a conference on performing social work in small communities, the directors of both organizations return with plans to address the issue of dual relationships, relationships in which social workers maintain both social and professional ties with clients. Each director takes a different approach to the issue.

NCF's director sends out a memo to employees stressing that dual relationships are a conflict of interest prohibited by the organization. In the memo, she states that a dual relationship could be grounds for employee termination and encourages employees to report any non-sanctioned interaction between social workers and their clients. The NCF director's plan also includes the construction of a new employee lounge, with the understanding that employees will eat their lunches in the office, rather than off campus.

The director of SSS holds a meeting with his staff to discuss the organization's role and purpose in the community. He shares what he has learned at the conference: The potential to improve people's lives outweighs any other social or professional interaction that could derail the organization's purpose. The SSS director explains that he will make it his personal mission to solve the problem of dual relationships and asks employees for their input and participation in overcoming this obstacle. The leader explains that all employees must work together to reform the organization in order to better serve the community.

Questions:

1. What type of leadership is practiced at NCF, transactional or transformational? How do you know?

2. What type of leadership is practiced at SSS, transactional or transformational? How do you know?

3. Which style of leadership would you recommend for a human service organization? Explain your answer

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Class   : II MBA
Subject   : Management
Title of Paper : Consumer Behaviour And Marketing Research
Paper Code   : R20MBA303MKT
W.E.F   : 2021-22

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time   : 9am to 12pm
Date   : 02|02|2023

SECTION-A

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

1. Consumer Behavior

2. Ethical Issues

3. Dynamics of Perception

4. Models of Consumer Behavior

5. Data Collection for Market Research

6. Family Decision making

7. Diffusion of Innovation

8. Product Research format

SECTION-B

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

9. Define meaning Consumer Behavior? Explain nature and scope of Consumer behavior.

(OR)

10. "Consumer is the King of the Market." Elucidate.

11. What is Perception? Explain the Perception Process.

(OR)

12. What is meant by motivation? Explain its importance with reference to consumer behavior.

13. Using Howard-Sheth Model, describe the consumer behavior process towards buying a dream home.

(OR)

14. What are the factors governing the consumer decision process?

15. Discuss the significance of marketing research to manufacturers in determining market strategy.

(OR)

16. Discuss various forms of personal influence in consumer behavior.

17. What do you understand by coding of data? Explain why it is necessary?

(OR)

18. Explain. the process of Market Research in detail. Outline the significance of problem formulation with suitable examples.

[P.T.O]

III. Case Study (Compulsory)

19. In June 2010, C.K. Ranganathan, 50, founder of CavinKare, suffered a drug allergy. The enforced six-month break gave him much needed time to reflect on the business he founded as a partnership firm back in 1983. On the face of it, Ranganathan had reasons to feel satisfied. In business circles, CavinKare is a legend - the David of the fast moving consumer goods, or FMCG, sector, which successfully took on Goliaths like HUL, and P&G. Cavinkare's first and most memorable innovation, in 1983, was the sachet: it sold shampoo in tiny, low-priced sachets at a time when the big players only marketed it in high-priced bottles. By doing so it discovered a vast, untapped market and forced its big rivals to follow suit. Today 87 per cent of shampoos sold in India are in sachets, of which CavinKare has a 30percent share. Yet Ranganathan was worried. He was concerned that around seven of every 10 innovations presented to him were aimed at the relatively low-end segment of consumers. No doubt it was this segment that brought CavinKare its initial success, and still provided about 60 per cent of the company's revenues, but Ranganathan wanted to target the premium segments, where margins were much higher. He also felt that CavinKare had become a somewhat reactive organisation and his people were not learning enough. "Innovation is important but without the right culture, it cannot be sustained. " Ranganathan got back to work in December 2010 with definite ideas about how he wanted CavinKare to change.. His first task was to get the employees to become more achievement oriented. He introduced a new working system for better and faster product development, shifted Cavin Kare's marketing office from Chennai to Mumbai and began looking around for acquisitions and tie-ups to bring premium products under his company's umbrella. The workforce was divided into creators (research and development, or R&D, marketing and sales), enhancers (production, purchase, logistics and supply chain) and protectors (accounts, finance and management information system)."Creators are the key group. Their performance is critical The bulk of the resources are targeted at them," says Ranganathan. Brainstorming meetings on Monday were also started. "These meetings speeded up the process of product development as decisions were taken on the spot," says T.D. Mohan, Joint Managing director. Ranganathan also got 3 the team to start anticipating the competition's moves and prepare to counter them early. This helped when, earlier this year; rival Pantene slashed its shampoo sachet price from Rs 1.50 to Rs 1 to match CavinKare's Chik. "We had the response – a better formulation of shampoo - ready and launched it in less than a month. It was an improved product at the same price," says T.Mukhopadhyay, Executive Vice president, and R&D. Profitable growth was chosen as the theme for the company's annual conference in April 2011. The 'creators' were asked to come up with innovations that targeted the high end of the market. "We want 60 per cent of our revenues to come from the premium segment," says Ranganathan. CavinKare has also embraced the 'Blue Ocean Strategy' to identify uncontested market spaces and create products to fill them. For instance, it launched Indica 10, a hair dye which can be washed off within 10 minutes of applying it. Rival hair dye brands require at least 30 to 45 minutes to take effect. The company has set itself a revenue target of Rs 5,200 crore by 2017/18. Ranganathan's reforms have already started yielding results. The product development time has shrunk to 11 months from 12 months earlier. CavinKare is also making a conscious effort to expand itspan-Indian presence. Pursuing Ranganathan's new thrust towards tie-ups, as well as towards improving premium market presence, the company has entered into a strategic alliance with Coty Inc. - the world's largest fragrance company.

Questions:

1) Can the introduction of sachets by Cavin Kare be classified as a disruptive innovation in the shampoo market? Why or Why not?
2) Discuss the areas where Mr.Ranganathan focussed to develop an innovative culture at CavinKare
3) What challenges do you anticipate for Cavin Kare in the coming years?

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

Class	: II MBA	Max Marks	: 75
Subject	: Management	Pass Mark	: 30
Title of Paper	: Product & Brand Management	Duration	: 3 Hrs
Paper Code	: R20MBA304MKT	Paper Time	: 9am to 12pm
W.E.F	: 2021-22	Date	: 25/01/2023

SECTION – A

Answer any FIVE Of the following questions.   5X3=15M

1 New Product Planning.

2 Explain Product Line.

3 Explain Positioning.

4 Explain Models of CBBE.

5 Explain Branding Decisions.

6 Explain Brand Audit.

7 Explain Brand Loyalty.

8 Explain Types of Brands.

SECTION –B

Answer ALL the following Questions   5X8=40M

9 Explain Product Life Cycle.

(OR)

10 Explain various Product Development Strategies.

11 Explain the Elements of Product Positioning.

(OR)

12 Explain Various Product Mix Decisions.

13 Explain Brand Life Cycle.

(OR)

14 What is Brand Management? Explain Various Steps involved in Brand Management Process.

15 Explain Methods for Measuring Brand Equity.

(OR)

16 What is Branding? Explain various Strategies involved in Multiple Branding. Explain role of Takeover and Mergers in Brand Development.

(OR)

17 What is Brand Success? Explain Various Success Strategies.

SECTION –C

Case Study

Answer the following Question   1X15=15M

18 Mr. KARTIKEY wanted to Establish New Product in India. Suggest yourself for Brand Introduction and development Activities?

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

Class   : II MBA
Subject   : Management
Title of Paper : Performance & Reward Management
Paper Code : R20MBA305HRM
W.E.F   : 2021-22

Max Marks : 70
Pass Mark : 28
Duration   : 3 Hrs
Paper Time : 9am to 12 PM
Date   : 27|01|2023

SECTION – A

1. Answer any FIVE Of the following questions.   5X3=15M

1. Define Prerequisites.
2. Concept of Fringe Benefits.
3. What is Competitiveness and Equity?
4. Define HR Score Card.
5. What are the Concepts in Performance?
6. Role Efficiency.
7. Objectives of Reward Management.
8. Define Compensation?

SECTION –B

Answer ALL the following Questions   5X8=40M

9. What are the Characteristics of an Ideal Pm Systems.

(OR)

10. Define Performance Management? Explain the Factors Affecting Performance Management?

11. Discuss about Traditional Methods and Modern Methods in Performance Appraisal System?

(OR)

12. Discuss the Diagnosing the Causes of Poor Performance?

13. Explain Components and Process of Personal Development Plans.

(OR)

14. What is Performance Consulting? Discuss Need for Performance Consulting.

15. What is Reward Management? Explain Objectives of Reward Management.

(OR)

16. Explain the Concept of Performance Linked Career Planning and Promotion Policy.

17. What are the Retirement Benefits Including VRS/Golden Hand Shake Schemes?

(OR)

18. Explain the Various Compensation Types for Special Groups.

(P.T.O)

SECTION –C
Case Study

Answer the following Question   1X15=15M

79 Crystal Hindustan Limited has to retrench 120surplus workers at its Nasik Factory. Among them 60 workers belong to the age group of 50-58, 40belong to the 40-50 age groups and the remaining belongs to the 30-40 age groups. Interestingly ,most of the workers in the first two groups get the same average monthly salary of Rs. 10,000.The company's consultant has offered two parameters for computing the VRS compensation viz. Parameter 1 : 15 days salary for every full year of service completed and two months salary for every full year of service left. Parameter 28 weeks salary for each year completed and 3 weeks salary for each year left. A worker will get which ever is less among the two. Further he/she must have served the company for at least 10 years.

As per provisions of the Income Tax Act, a worker is eligible for maximum nontaxable VRS amount of Rs. 5 lakhs. The company is thinking to club the VRS with a comfortable 'Crystal VRS pension for a maximum period of 10 years. It expects that each employee would expect lump sum compensation up to the nontaxable limit and the taxable portion through a comfortable pension scheme. It is also rightly assumed that an annual5% growth in compensation would be otherwise expected by each employee.

The company can always think of a cost-natural approach in designing the VPS, to get rid of these extra employees. Yet, it should search for a profitable solution while implementing the VRS. It is a well-known fact that employees prefer a risk-free rate of return of 12% pa, whereas the company's average cost of capital is at 17% .

Questions:

(a) What are the salient features of a good wage policy, for handling a VPS strategically?

(b) How would you retain the wanted employee, as you attempt to get rid of the

   "unwanted" employees?

(c) What is your strategic advice for crystal?

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Room No: _____

Regd No: _____

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

Class : II MBA
Subject : Management
Title of Paper : Financial Institutions And Markets
Paper Code : R20MBA305FIN
W.E.F : 2021-22

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12PM
Date : 27|01|2023

SECTION-A

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

1. New Issue Market

2. NABARD

3. Indian Banking System

4. Future trends in capital market

5. SEBI

6. ADB

7. Commodity Market

8. IRDA

SECTION-B

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

9. Define Financial System. Explain the structure of Indian Financial System.

(OR)

10. Explain the Role of Financial Markets in Economic development.

11. What are the functions of RBI. Explain the RBI Monetary Policy.

(OR)

12. Explain the role of NBFCs in the Economic Development.

13. Explain the objectives & functions of IBRD.

(OR)

14. Explain the role of IMF in International Monitoring Co-operation.

15. Define Capital Market. Discuss different types of instruments in Capital Markets.

(OR)

16. Explain the role of Stock Exchanges in Secondary Market.

17. What is meant by Money Market. Explain different Sub Markets of Money Market.

(OR)

18. Define Foreign Exchange Market? Explain the functions of Foreign Exchange Market.

SECTION-C   1X15=15M

19. What is meant by Derivatives? Illustrate various types of Derivatives with examples.

Class   : II MBA   Max Marks   : 75
Subject   : Management   Pass Mark   : 30
Title of Paper : Security Analysis & Protifolio Management   Duration   : 3 Hrs
Paper Code   : R20MBA306FIN   Paper Time : 9am to 12pm
W.E.F   : 2021-22   Date   : 30|01|2023

SECTION – A

1. Answer any **FIVE** Of the following questions.   5X3=15M

1 Investment Vs. Speculation.

2 Characteristics of Investment.

3 Present value method.

4 Economic forecasting techniques.

5 Moving Average Analysis.

6 Randam walk theory.

7 Diversification of risk.

8 Portfolio revision.

SECTION –B

Answer ALL the following Questions   5X8=40M

9 .   What is Investment? Explain different types of Investment avenues.

(OR)

10   What is risk? Discuss different types of Risks in Investment.

11   Discuss about various types of share valuation methods.

(OR)

12   Explain different types of bond valuation methods.

13   's fundamental analysis is important for investing in stock market. Discuss.

(OR)

14   Meaning of Technical Analysis. Explain about various tools of technical analysis.

15   Discuss the importance of efficient Market Hypothesis.

(OR)

16   Explain the process of Portfolio Management.

17   Discuss various methods of portfolio performance of evalution.

(OR)

18   " CAPM can be used to evaluate the Pricing of Securities", Discuss.

(P.T.O)

Answer the following Question

1X15=15M

The historical rates of return of two securities over the past ten years are given.

Year	1	2	3	4	5	6	7	8	9	10
Security-1 Return (%)	12	8	7	14	16	15	18	20	16	22
Security-2 Return (%)	20	22	24	18	15	20	24	25	22	20

Calculate the co-variance and correlation of the two securities

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Class : II MBA
Subject : Management
Title of Paper : Training And Development
Paper Code : R20MBA306HRM/MBA304HRMOB19
W.E.F : 2021-22

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 30/01/2023

SECTION-A

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

1. Define Training & Development

2. Principles of training design

3. Out sourcing

4. Define Human capital

5. Explain EETS

6. Role of external agencies in T& D

7. Define TNA

8. Explain Donald Kirkpatrick's evaluation model

SECTION-B

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

9. Explain the Concept and policies of training & development.

(OR)

10. Define the role of external agencies in training design.

11. What are training needs? Write different types and components of needs.

(OR)

12. Explain the meaning and significance of training design and development.

13. Define training design. Write down different kinds of training & development programmes.

(OR)

14. Elaborate E-Learning environment and flexible learning modules.

15. Define reasons for evaluating training & also explain the significance of training evaluation.

(OR)

16. Explain various evaluation practices in different organizations.

17. What is management development? Write about the factors affecting MDP.

(OR)

18. Define outsourcing training. Explain the emerging trends in training and development.

[P.T.O]

III. Case Study (Compulsory)

1X15=15M

19. US based Motorola is the world's leading electronics and telecom goods company. It has been adjudged as one of the top employee training companies in the world. Motorola gave utmost importance to training right from its inception. This case describes how training and a strong learning ethic has been an integral part of Motorola's culture.

It explains in detail the various employee training and education initiatives undertaken by Motorola University and examines how these initiatives helped in improving employees' productivity, performance and quality of work. The case also describes Motorola's e-learning initiatives and highlights the benefits of e-learning for employee training and development.

Questions:

a) Understand the best practices in training and development of employees.

b) Appreciate how the training and development process evolved over the decades at Motorola.

c) Analyze the role of Motorola University in offering high quality employee training and education programs.

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

Class	: II MBA, MCOM	Max Marks	: 70
Subject	: Computers	Pass Mark	: 28
Title of Paper	: E-Commerce & Web Designing	Duration	: 3 Hrs
Paper Code	:		
	R20COMOE307/R20MBAOE307	Paper Time	: 9:00AM-12:00Noon
W.E.F	: 2021-22	Date	: 01-02-2023

SECTION –A

I. Answer ALL the following Questions   5X14=70M

1.   What is e-commerce. Explain its advantages and disadvantages?

(OR)

2. Explain about three models of electronic market?

3. what is an e-payment system? Explain different types of e-payment methods?

(OR)

4. Explain about online banking?

5. Explain about e-commerce applications in various industries?

(OR)

6. Explain about online services and online learning?

7. what is html and Explain different text formatting tags in html?

(OR)

8. Define list? Explain different types of lists in html?

9. How to create a table in html give example?

(OR)

10. Explain about frames in html?

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

Class   : II MCA
Subject   : Computers
Title of Paper : Big Data Analytics
Paper Code   : R20MCA301
W.E.F   : 2021-22

Max Marks   : 70
Pass Mark   : 28
Duration   : 3 Hrs
Paper Time : 9am to 12PM
Date   : 19/01/2023

SECTION –A

I. Answer ALL the following Questions   5X14=70M

1.   Define Big Data and Explain about Characteristics of Big Data.

(OR)

2   Explain Need and Features of Big Data Environment.

3.   Explain in detail about Top challenges facing Big Data Analytics.

(OR)

4   Explain classification of Analytics with suitable example.

5   What is Hadoop and Explain about RDBMS Vs Hadoop differences.

(OR)

6   Explain the architecture of HDFS in detail.

7   What is MongoDB? Why MongoDB? Explain about Data types in MongoDB.

(OR)

8   Explain the structure of MapReduce program with example.

9   What is Pig on Hadoop? What are Data types in Pig? And explain the running of Pig.

(OR)

10   Explain the Word count Example using Pig.

*****

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

Class	: II MCA	Max Marks	: 70
Subject	: Computers	Pass Mark	: 28
Title of Paper	: Mobile Computing	Duration	: 3 Hrs
Paper Code	: R20MCA302	Paper Time	: 9am to 12pm
W.E.F	: 2021-22	Date	: 21|01|2023

SECTION –A

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

1) Explain the architecture of Mobile Computing? What are the issues related to Mobile Computing?

(OR)

2) Discuss the Android and Blackberry Operating System? Explain its features?

3) Explain in detail Medium Access Control?

(OR)

4) Briefly explain about CDMA?

5) Write note on network aspects in GSM?

(OR)

6) Explain about GPRS network architecture?

7) Write in detail Snooping TCP and Mobile TCP?

(OR)

8) Explain assumptions and entities in Mobile Technology?

9) Discuss the Wireless Lan Architecture?

(OR)

10) Explain about UMTS ....s?

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Regd No: _____

Room No: _____

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

Class   : II MCA
Subject   : Computers
Title of Paper : Artificial Intelligence
Paper Code   : R20MCA303
W.E.F   : 2020-21

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time   : 9am to 12pm
Date   : 2/2/2023

SECTION-A

I. Answer the following Questions   **5X14=70M**

1. Define AI ? Explain the characteristics of AI problem.

(OR)

2. Explain in detail about the mean end analysis procedure with example

3. Discuss various issues and approaches to Knowledge Representation?

(OR)

4. Differentiate between declarative and procedural representation of knowledge.

5. Explain semantic net and frames with proper example.

(OR)

6. What is non – monotonic reasoning? Explain the logics used for non – monotonic reasoning

7. Briefly discuss various components of Planning System

(OR)

8. Explain various steps of Natural Language Processing in detail

9. Write a short notes on Case Based Reasoning Expert Systems

(OR)

10. Explain (i) Expert System Shells and (ii) Knowledge Acquisition

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

Class	: II MCA		Max Marks	: 70
Subject	: Computers		Pass Mark	: 28
Title of Paper	: Machine Learning		Duration	: 3 Hrs
Paper Code	: R20MCA304		Paper Time	: 9am to 12pm
W.E.F	: 2021-22		Date	: 25/01/2023

SECTION –A

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

1.   Explain about supervised learning and unsupervised learning? Difference between supervised learning and unsupervised learning?

(OR)

2   What are elements of Reinforcement Learning?

3   Write Classification And Regression Trees (CART) and explain with suitable example?

(OR)

4   Explain Support Vector Machine (SVM) with s suitable example?

5   Explain K-means clustering with suitable example?

(OR)

6   What is Dimensionality Reduction? Explain in detail about Linear Discriminate Analysis (LDA) for dimensionality reduction?

7   Explain in detail about the following

    i) Gaussian distribution   ii) Bayes' Estimator

(OR)

8   Explain about K-Nearest Neighbor (KNN) Estimator?

9   Explain the applications of IoT devices?

(OR)

10   Explain Developing a simple Math Server?

*****

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

Class   : II MCA   Max Marks   : 70
Subject   : Computers   Pass Mark   : 28
Title of Paper: Software Testing & Fault Analysis   Duration   : 3 Hrs
Paper Code   : R20MCA305   Paper Time   : 9am to 12pm
W.E.F   : 2021-22   Date   : 27|01|2023

SECTION –A

I. Answer ALL the following Questions   5X14=70M

1. Explain the various Testing Techniques in Detail.

(OR)

2. Explain the V shaped software Life cycle model in detail.

3. Write a notes on SRS Document verification.

(OR)

4. Explain Software Metrics used in Testing.

5. Describe Equivalence class Testing.

(OR)

6. Consider a program for determination of largest among three numbers X, Y, Z where the values of X, Y, Z lies in the interval [1,300]. Prepare the test cases for robustness testing.

7. Describe the strategies of control flow testing in detail.

(OR)

8. Explain the Mutation Testing in detail.

9. What is Object Orientation. Explain Object Oriented Testing in detail.

(OR)

10. Explain state based testing and class based testing with examples.

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Class   : II MCA   Max Marks : 70
Subject   : Management   Pass Mark : 28
Title of Paper : Personality Development   Duration : 3 Hrs
Paper Code   : R20MCAOE306   Time   : 9:00 AM -12:00 Noon
W.E.F   : 2021-22   Date   : 01-02-2023

SECTION-A

I. Answer any <u>FIVE</u> of the following Questions   5X3=15M

1. Define the term Personality.

2. List out communication styles.

3. Recall the term Multi-cultural Dressing.

4. Recite workplace.

5. What is stress?

6. What is time management?

7. Restates the Importance of Body Language in General.

8. What is Confidence?

SECTION-B

II. Answer <u>ALL</u> the following Questions   5X8=40M

9. Explain the importance of personality development.

(OR)

10. List out and summarize the body language tips for personality development.

11. Illustrate the Personal Grooming rules to get the Success in career.

(OR)

12. Explain how to dress appropriately for a business casual environment.

13. What is persuasion? Explain different Persuasion Strategies.

(OR)

14. enumerate the techniques in Impression Management.

15. Elucidate the causes of conflicts.

(OR)

16. Discuss various types of Interpersonal relationship.

17. Enumerate steps involved in time management.

(OR)

18. Elucidate the types and causes for stress.

(P.T.O)

SECTION-C

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

19. Once a group of 50 people was attending a seminar. Suddenly the speaker stopped and decided to do a group activity. He started giving each one a balloon. Each one was asked to write his/her name on it using a marker pen. Then all the balloons were collected and put in another room. Now these delegates were let in that room and asked to find the balloon which had their name written, within 5 minutes. Everyone was frantically searching for their name, colliding with each other, pushing around others and there was utter chaos. At the end of 5 minutes no one could find their own balloon. Now each one was asked to randomly collect a balloon and give it to the person whose name was written on it. Within minutes everyone had their own balloon. The speaker begun – exactly this is happening in our lives. Everyone is frantically looking for happiness all around, not knowing where it is. Our happiness lies in the happiness of other people. Give them their happiness; you will get your own happiness. And this is the purpose of human life.

a. What according to you does this case–let tells us when it says, 'that our happiness lies in happiness of other people'?

b. Do you agree that everyone is really looking for happiness all around without knowing about it? Why?

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG III SEMESTER END EXAMINATIONS

Class   : II M.Sc.(OCH)   Max Marks   : 70
Subject   : Chemistry   Pass Mark   : 28
Title of Paper : Advanced Organic Spectroscopy   Duration   : 3 Hrs
Paper Code   : R20OCH301   Paper Time   : 9am to 12pm
W.E.F   : 2020-21   Date   : 1/03/2023

SECTION –A

I. Answer ALL the following Questions   5X14=70M

1. i) Explain the Similarities and differences between 13C NMR and Proton NMR spectroscopy.

   ii) Write a short note on coupling constants.

(OR)

2. Explain Chemical Shift values for various carbons in fallowing compounds.

   i) 1-Hexyne.   ii) Sec-Butyl bromide.   iii) Ethyl benzene.

3. Deduce the structure of the compound from the spectral data given below:

   Molecular formula: C_4H_6O

   UV, λ max: 218 (εmax 18000), 320 (εmax 30)

   IR, cm^{-1} :2855(w), 2740 (w), 1700 (s) 1650 (m)

   ^{1}HNMR (δ ppm): 9.7 (1H, d); 6.7 (1H, m, dq); 6.9 (1H, dd (J= 7 and 17 Hz);

   2.5 (3H,d).

(OR)

4. A carbonyl compound A (molecular formula C_3H_6O) gives a singlet at δ 2.17 in its PMR spectrum. When it is treated with C_6H_5CHO in dilute ethanolic NaOH, it forms B which gives the following data:

   i) Molecular formula **B**: $C_{17}H_{14}O$

   ii) IR, cm^{-1}: 3025, 1665, 1630, 1600, 1495, 763, 753.

   iii) ^{1}HNMR, δ ppm: 7.05 (2H, d(J= 18 Hz); 7.60 (10H, m); 7.82 (2H, d (J=18 Hz).

   Determine the structure of A and B.

5. Explain definition and importance of NOESY, INEPT, HETCOR.

(OR)

6. Explain definition and importance of HOMOCOR, HET2DJ

7. i) Explain Octant rule.

   ii) Explain the terms ORD and CD

(OR)

8. Define "Haloketone rule", Explain, giving one example, how this rule could be used for the determination of absolute configuration of an organic compound

9. i) Write a note on Zero-Field splitting in ESR, Kramer's Degeneracy?

   ii) Explain Hyper fine splitting and factors effecting "g" value

(OR)

10. i) Explain isotopic and anisotropic coupling constants?

    ii) Write the applications of ESR Spectroscopy to phenyl and naphthalene radicals?

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG III SEMESTER END EXAMINATIONS

Class   : II M.Sc. (OCH)
Subject   : Chemistry
Title of Paper : Organic Reactions & Mechanisms
Paper Code   : R20OCH302
W.E.F   : 2020-21

Max Marks   : 70
Pass Mark   : 28
Duration   : 3 Hrs
Paper Time : 9am to 12pm
Date   : 03/03/2023.

SECTION –A

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

1. Write a note on Oxidations by using SeO_2 and $KMNO_4$.

(OR)

2. Write the synthetic applications of.

   a) Ruthenium tetroxide   b) MnO_2

3. Write the synthetic applications of $LIAlH_4$ and DIBAL.

(OR)

4. Write the +synthetic applications of $NaBH_4$ and Diimide.

5. a) Write a short note on Wagner – Meerwein rearrangement.
   b) Explain the following rearrangements

      a) Curtius rearrangement   b) Baeyer villiger rearrangement

(OR)

6. a) Write a note on Pinacol – Pinacolone rearrangement.

   b) Explain the following rearrangements.
      a) Beckmann rearrangement   b) Favorskii rearrangement.

7. a) Draw the molecular orbitals of 1,3 buta diene and 1,3,5 Hexa triene.

   b) Write the correlation diagrams for (4n+2) electro cyclic reactions?

(OR)

8. a) Explain the terms CON rotatory and DIS rotatory motions ?

   b) Explain FMO approach for(2+2) cyclo additions

9. Explain the following reactions with mechanisms.
   a) Paterno buchi resction .

   b) Photo Fries rearrangement.

(OR)

10. a) Explain Norrish type -I and Norrish type – II reactions with examples.

    b) Write about Di – π methane rearrangement.

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG III SEMESTER END EXAMINATIONS

Class   : II M.Sc. (OCH)   Max Marks   : 70
Subject   : Chemistry   Pass Mark   : 28
Title of Paper : Modern Organic Synthesis   Duration   : 3 Hrs
Paper Code   : R20OCH303   Paper Time   : 9am to 12pm
W.E.F   : 2020-21   Date   : 06/03/2023

SECTION –A

I. Answer ALL the following Questions   5X14=70M

1. Write a note on the following.
    1) Alkylation of enolate.

    2) Umpolung reaction.

                           (OR)

2. i) Explain the preparation and synthetic applications of Sulphur ylides.

   ii) Explain the formation of Carbon-carbon single bond by the addition of free radicals to

       alkenes.

3. Write a note on the following.
    i) Claisen rearrangement of allyl vinyl ethers.
    ii) Witting reaction.

                           (OR)

4. i) Explain the Reductive dimerization of carbonyl compounds.

    ii) Explain the Oxidative decarboxylation of carboxylic acids.

5. i) Explain the "Intra molecular Diels -Alder reaction" with suitable examples.
    ii) Explain different types of heterodienophiles.

                           (OR)

6. i) Write a note on Photosensitized Diels -Alder reactions.
    ii) Write a note on ene reactions.

7. Write a note on the following terms.

    i) Synthetic equivalent.
    ii) Functional Group Inter Conversion.
    iii) Functional Group Addition.

                           (OR)

8. Write a note on the Linear and Convergent synthesis.

9. Explain Protection and deprotection of Carbonyl groups and Carboxylic acids.

                           (OR)

10. Explain Protection and deprotection of Hydroxyl groups and Amino groups.

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
PG III SEMESTER END EXAMINATIONS

Class   : II M.Sc. (OCH)   Max Marks   : 70
Subject   : Chemistry   Pass Mark   : 28
Title of Paper : Chemistry of Natural Products   Duration   : 3 Hrs
Paper Code   : R20OCH304   Paper Time   : 9am to 12pm
W.E.F   : 2020-21   Date   : 13|03|2023

SECTION –A

I. Answer ALL the following Questions   5X14=70M

1. Write the general methods for structural elucidation of alkaloids.

(OR)

2. Write the structural elucidation and synthesis of Nicotine

3. Write a note on the following.

   a) Classification of Terpenoids   b) Isoprene rule

(OR)

4. Write the structural elucidation of Zingiberene.

5. Explain the structural elucidation of Cholesterol.

(OR)

6. Explain the structural elucidation and synthesis of Testosterone.

7. Discuss the structural elucidation and synthesis of Kaempferol.

(OR)

8. Discuss the structural elucidation and synthesis of Quercetein.

9. Give the classification of

   a) Natural pigments   b) Carotenoids

(OR)

10. Describe the structural elucidation and synthesis of a- Carotenoid.

: II   M.Sc (ACH/OCH)

: Management

of Paper : E-Commerce And Web Designing

Code :

      R20ACHOE307/R20OCHOE307

.E.F : 2020-21

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Time : 9am to 12pm
Date : 10|03|2023.

SECTION-A

I. **Answer ALL the following Questions**

5X14=70M

1. Define Internet. Explain the History, Advantages and Disadvantages of Internet.

(OR)

2. Define E-Commerce and write the Advantages and Disadvantages. Explain the E-Commerce Transactions on World Wide Web.

3. Explain the concept of Digital Signatures in detail.

(OR)

4. Explain the concept of Online Banking in detail.

5. What are the Advantages and Disadvantages of Online Transactions? Discuss about E- Commerce Applications in various Industries.

(OR)

6. Describe the Online Services and Online Learning.

7. Define HTML. Explain the Basic Structure of HTML with an example.

(OR)

8. Discuss about various Lists in HTML with examples.

9. Explain the concept of Tables in HTML with an example.

(OR)

10. Explain the concept Frames in HTML with an example.

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

Class   : II M.Sc. (ACH)   Max Marks   : 70
Subject   : Chemistry   Pass Mark   : 28
Title of Paper: Separation Methods   Duration   : 3 Hrs
Paper Code   : R20ACH301   Paper Time : 9am-12PM
W.E.F   : 2021-22   Date   : 07/02/2022

SECTION –A

I. Answer *five of* the following Questions

1. Write a note on the following   14M

    i) Development and validation of analytical method.

    ii) Importance of separation methods with one example?

2. Explain the following terminology in Chromatography

    i) Retention Time   **ii)** Efficiency of Column.

    iii) High Equivalent Theoretical Plate (HETP)   **iv)** Van Demeter equation?

3. Discuss the following   14M

    i) Synthetic ion-exchange resins **ii)** Properties of exchange resins

    iii) Ion-exchange mechanism?

4. Discuss the applications of Ion Chromatography in the analysis of water and air pollutants.

5. Write the principle and instrumentation of Gel Exclusion chromatography and discuss its applications for organic compounds.   14M

6. Write the principle, instrumentation and applications of Capillary electrophoresis.

7. Discuss the different sampling techniques for sampling of liquids.   14M

8. Discuss the different types of samplers for sampling the gases.

9. Write about the following   14M

    i) Principle in Solvent extraction   **ii)** Different types of solvent extractions

    iii) Distribution law and Partition coefficient?

10. Discuss the applications of solvent extraction in metallurgy.

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

Class : II M.Sc. (ACH)
Subject : Chemistry
Title of Paper : Spectroscopic Methods
Paper Code : R20ACH302
W.E.F : 2021-22

Max Marks : 70
Pass Mark : 28
Duration : 3 Hrs
Paper Time : 9am -12PM
Date : 09/02/2022

SECTION –A

I. Answer the following Questions

1. (a) i) Write a note on off resonance decoupling   **14M**

    ii) Write the differences and similarities of ^{13}C NMR and Proton NMR?

2. Explain Chemical Shift values for various carbons in fallowing compounds.
    a) Ethyl benzene   b) Acetophenone   c) Sec-Butyl bromide?

3. Deduce the structure of the compound from the spectral data given below: **14M**
Molecular formula: $C_5H_8O_2$
UV, λ max: shows no intense UV absorption above 200 nm
IR: 1740 cm-1
^1HNMR (δ ppm): 4.0 (2H, t); 2.20(2H, m); 2.35 (1H, m) 1.15 (3H, d).

4. Significant spectral features of an organic compound are given below:
Molecular formula: $C_8H_{14}O$
IR, cm-1: 3500, 3300, 2100.
^1HNMR, δ ppm: 1.0 (6H, d); 1.5 (3H, S); 1.6 (2H, d),1.9 (1H, m); 2.3 (1H, s);3.1 (1H, s) exchange with D_2O)
CMR, δ ppm: 23, 24, 30, 50, 68, 71, 87.
Assign suitable structure to the compound and account for the data.

5. Describe the principle and applications of electron energy loss spectroscopy.   **14M**

6. Illustrate the principle and applications of X-Ray spectroscopy.

7. Define "Octant rule", Explain, giving one example, how this rule could be used for the determination of absolute configuration of an organic compound.   **14M**

8. i) Explain Haloketone rule.
    ii) Explain simple ORD and anomalous ORD curves.

9. Explain basic Principle and Instrumentation of Electron Spin Resonance Spectroscopy?   **14M**

10. i) Write about Zero-Field splitting &, Kramer's degeneracy in ESR?
    ii) Explain hyperfine splitting and factors affecting g-value.

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

Class	: II M.Sc. (ACH)	Max Marks	: 70
Subject	: Chemistry	Pass Mark	: 28
Title of Paper	: Applied Analysis	Duration	: 3 Hrs
Paper Code	: R20ACH303	Paper Time	: 9am-12 noon
W.E.F	: 2021-22	Date	: 11/02/2022

SECTION –A

any five of

I. Answer . the following Questions   5×14 = 70M

1.   Write an account on the analysis of following.   **14M**
     (i) Total Iron in Iron ore

     (ii) Total Manganese in Manganese ore

     (iii) Chromium in Chromite ore

2.   Write a note on the analysis of Alumina, Silica and Titania in Bauxite ore.   **14M**

3.   Write the analysis of Copper and Zinc in Bronze.   **14M**

4.   Write the analysis of Chromium and Silicon in Ferrochromium.   **14M**

5.   Write an account on Proximate and Ultimate analysis.   **14M**

6.   Write an account on analysis of Moisture, Total Nitrogen and lime in soil.   **14M**

7.   Write a note on Saponification number and Iodine number present in oils.   **14M**

8.   Analyse Volatile matter, Total alkali and Total fatty matter present in Soap.   **14M**

9.   Write the analysis of $BaSO_4$ and lead chromate present in paints.   **14M**

10. Explain the determination of moisture content in drugs and other samples by using
     Karl- fisher reagent.   **14M**

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

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   : R20ACH304   Paper Time   : 9am –12pm
W.E.F   : 2021-22   Date   : 16/2/2022

SECTION –A

I. Answer any five *the following Questions*

1.   Describe the applications of Flamephotometry and A.A.S.   **14M**

2.   Explain the chemical and spectral interferences involved in A.A. S and explain preventive methods.   **14M**

3.   Discuss the instrumentation and any two applications of D.T.A.   **14M**

4.   Write the principle, instrumentation and applications of D.S.C.   **14M**

5.   Explain following   **14M**

   i)Migration Current   ii)Halfwave potential   iii)ILkovic equation.

6.   What are Amperometric titrations and write its applications.   **14M**

7.   Explain the principle and instrumentation of Electrogravimetric Analysis.   **14M**

8.   Determine the Cu, Pb, Sn in Brass by controlled potential electrolysis.   **14M**

9.   Describe the principles -working instrumentation of Coulometry.   **14M**

10   Illustrate the applications of Coulometric methods for the analysis of Cations.   **14M**

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