



KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

☎: 0866-2565679

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Kothapeta, Vijayawada - 520 001.

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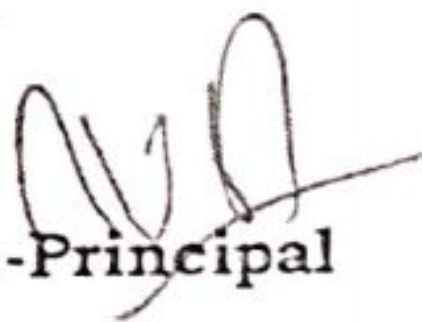
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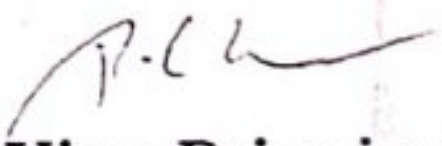
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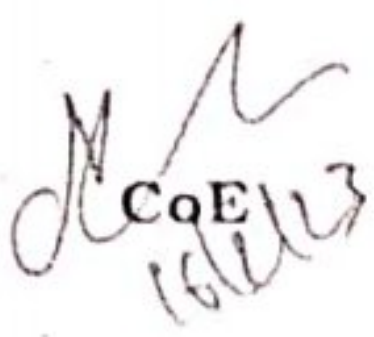
STUDENT NOTICE

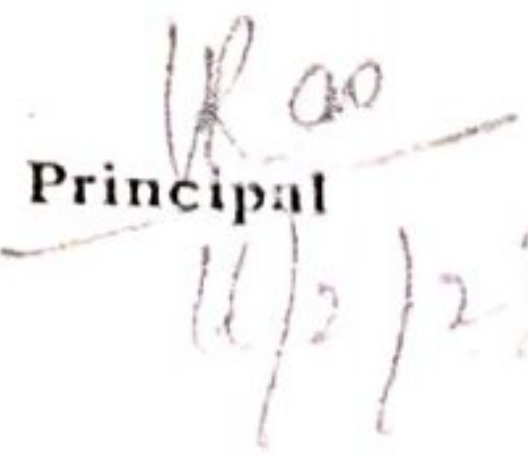
PG I Semester End Examinations for I MBA & I MCA are going to be held as per the following schedule. Hence, all the students are advised to make a note of this. Timetable is herewith enclosed and bulletined in the notice board. For more details, visit www.kbncollege.ac.in

Date	Time	MBA	MCA
24/02/2023	09:00 AM to 12:00 Noon	R20MBA101 Management Process & Organisational Behaviour R22MBA101	R20MCA103 Programming and Problem solving using Python R22MCA101
27/02/2023	09:00 AM to 12:00 Noon	R20MBA102 Managerial Economics R22MBA102	R20MCA102 Data Structures R22MCA102
01/03/2023	09:00 AM to 12:00 Noon	R20MBA103 Business Environment and Business laws R22MBA103	R20MCA101 Mathematical and Statistical Foundations R22MCA103
03/03/2023	09:00 AM to 12:00 Noon	R20MBA104 Financial Reporting and analysis R22MBA104	R20MCA105 Operating Systems R22MCA104
06/03/2023	09:00 AM to 12:00 Noon	R20MBA105 Business Analytics for Managerial Decision making R22MBA105	R20MCA104 PROBABILITY AND STATISTICS (OLD BATCH)
08/03/2023	09:00 AM to 12:00 Noon	R20MBA106 Managerial Communication R22MBA106	R20MCA106 COMPUTER ORGANISATION (OLD BATCH)
10/03/2023	09:00 AM to 12:00 Noon	R20MBA107 Personality Development through Life Enlightenment skills R22MBA107	Personality Development through Life Enlightenment skills R22MCA105


Vice-Principal


Vice-Principal


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Principal

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**KAKARAPATI BAVANARAYANA COLLEGE (AUTONOMOUS) :: PG
I SEMESTER END EXAMINATION**

Class: I MBA

Subject: Management

Title of the Paper: MANAGEMENT PROCESS AND ORGANIZATIONAL BEHAVIOUR

Subject Code: R20MBA101/MBA10118/22MBA101

W.E.F: 2020-21

Max.Marks: 70M

Pass Marks: 28M

Duration: 3Hrs

Date: 24/02/2023

Time: 9am to 12PM

SECTION : A

I. Answer any Five of the following.

5 X 3 = 15 M

1. Nature of Management.
2. Decentralization.
3. Organizational Behaviour.
4. Decision Tree Analysis.
5. Perception.
6. Organizational conflict.
7. Control Process.
8. Organizational Development.

SECTION : B

II. Answer the following questions.

5 X 8 = 40M

9. Define Management. Explain the functions of Management.
(OR)
10. Explain Recent Trends in Management Practices in the wake of Globalization.
11. What is Planning? Explain the process of planning.
(OR)
12. What are Formal and Informal Organizations? Explain.
13. Explain Maslow, Herzberg Theories of Motivation.
(OR)
14. Explain different Leadership Styles.
15. What is Personality? Explain the Theories of Personality.
(OR)
16. Define Organizational Behaviour. Explain the importance of OB.
17. Define the term "GROUP". What are the different types of groups? Explain.
(OR)
18. What is meant by Organizational Conflict? What are the steps taken to reduce it.

SECTION - C (15 X 1 = 15M)

Case Study:

19. Tony Stark had just finished his first week at Reece Enterprises and decided to drive upstate to a small lakefront lodge for some fishing and relaxation. Tony had worked for the previous ten years for the O'Grady

Company, but O'Grady had been through some hard times of late and had recently shut down several operating groups, including Tony's, to cut costs. Fortunately, Tony's experience and recommendations made finding another position fairly easy. As he drove the interstate, he reflected on the past ten years' apparent situation at Reece. At O'Grady, things had been great. Tony had been part of the team from the beginning. The job had met his personal goals and expectations perfectly, and Tony believed he had grown into a better person. His work was appreciated and recognized; he had received three promotions and many salary increases. Tony had also liked the company itself. The firm was decentralized, allowing its employees considerable autonomy and freedom. The corporate culture was easy going. Communication was open and it seemed that everyone knew what was going on at all times, and if you didn't know about something, it was easy to find out. The people had been another plus. Tony and three other managers went to lunch and often played golf every Saturday. They got along well both personally and professionally and truly worked as a team. Their boss had been very supportive, giving them the help they needed but also staying out of their way and letting them work. When word about the shutdown came down, Tony was devastated. He felt that nothing could replace O'Grady. After the final closing was announced, he spent only a few days looking around before he found a comparable position at Reece Enterprises. As Tony drove, he reflected that "comparable" probably was the wrong word. Indeed, Reece and O'Grady were about as different as you could get. Top managers at Reece apparently didn't worry too much about who did a good job and who didn't. They seemed to promote and reward people based on how long they had been there and how well they played the never-ending political games.

Maybe this stemmed from the organization itself, Tony pondered. Reece was a bigger organization than O'Grady and was structured much more bureaucratically. It seemed that no one was allowed to make a sort of decision without getting three signatures from higher up. Those signatures, though, were hard to get. All the top managers usually were too busy to see anyone, and interoffice memos apparently had very low priority. Tony also had had some problems fitting in. His peers treated him with polite indifference. He felt that a couple of them resented that he, an outsider, had been brought right in at their level after they had worked themselves up the ladder. On Tuesday he had asked two colleagues about playing golf. They had politely declined, saying that they did not play often. But later in the week, he had overheard them making arrangements to play that very Saturday. It was at that point that Tony had decided to go fishing. When he steered his car off the interstate to get gas, he wondered if perhaps he had made a mistake in accepting Reece's offer without finding out more about what he was getting into.

Questions:

1. Identify several concepts and characteristics from the field of organizational behaviour that this case illustrates?
2. What advice can you give Tony? How would this advice be supported or tempered by organizational behaviour concepts and processes?
3. Is it possible to find an "ideal" place to work? Explain.

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I SEMESTER END EXAMINATION

Class : I MBA
Title of paper : Managerial Economics
Paper Code : MBA 10218 / R201MBA102 / R22MBA102
Duration : 3 Hrs
W.E.F : 2018-2019

Max Marks : 70
Pass Marks : 28
Time : 9am to 12pm
Date : 27/02/2023

SECTION-A

5X3=15M

Answer any FIVE of the following

I. Write a short notes on :

1. Define Managerial Economics and write its Nature.
2. Law of Demand.
3. ISO Quants and ISO Cost.
4. Monopolistic Competition and Monopoly.
5. Measurements of Inflation.
6. Investment Function.
7. Project Maximisation.
8. Fiscal Policy.

SECTION-B

5X8=40M

Answer the following questions

9. Explain Functions and Responsibilities of a Managerial Economist.
(OR)
10. Explain types of Elasticity of Demand and their Managerial uses.
11. Explain various kinds of Costs.
(OR)
12. Explain perfect & Imperfect competition Markets with an example.
13. Explain Economies and Diseconomies of Scale.
(OR)
14. Write an essay on Baumol's Model.
15. Explain recent changes found in Indian Economy.
(OR)
16. Explain various types of Inflation.
17. Define Trade Cycle and explain its features and types.
(OR)
18. Explain Consumption Function.

(P.T.O)

SECTION-C

Case Study Compulsory

1X15

19. Maruthi Udyog Limited is a classic example of monopoly in spare parts, service repairs, etc. Along with its authorised dealers, the MUL is looking the Maruthi users.

Often one has to change the clutch plate twice in six months and pay ₹ 3,567. Maruthi Udyog charges the price of clutch at imported cost while clutch plate is actually made by Clutch Auto Pvt. Ltd. at Faridabad.

The replacement of silencer costs ₹ 800. The costs of spare parts and repairs reckoning is three to four times compared to Ambassador or Fiat.

A random sample indicates that every eighth car has faulty clutch. In the context of defective parts and exorbitant cost of repairs, saving in fuel in Maruthi as compared to other makes is of little consequence.

Maruthi vehicle users are in a dilemma. They cannot get spare parts or get their cars repaired except through Maruthi Udyog or through its authorised dealers. But both charge fantastic amounts and do not give guarantee even for a day. Maruthi Udyog is thus insensitive to the genuine grievances of its customers.

Questions:-

- (1) Define a monopoly. State the monopoly features of Maruthi.
- (2) In what ways does a customer of Maruthi suffer its monopoly activities, give an example.
- (3) Does Maruthi enjoy monopoly in car manufacture? Explain.

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**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG I - SEMESTER END EXAMINATIONS**

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

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : 9am to 12pm  
Date : 01/03/2023

**SECTION-A**

**5X4=20M**

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

1. Explain the Scope of Business Environment
2. NITI Aayog
3. Technological Environment
4. Discharge of Contract
5. Consumer Protection Act
5. Sales of Goods Act
7. Environmental Scanning

**SECTION-B**

**5X8=40M**

**II. Answer the following Questions**

8. Explain the Porter's five force Model.
9. Explain the various types of Business Environment
10. Explain about functions of Stock Exchange.
11. Explain 1. Monetary Policy (OR) 2. Fiscal Policy
12. Explain the Issues and Challenges of Technology Management
13. Explain the Social Objectives of Business. (OR)
14. Define Contract. Explain the Valid contract and its essential Elements. (OR)
15. Explain the Creation and Termination of Agency.
16. Explain the Competition Act 2002. (OR)
17. Explain the Negotiable Instruments Act 1881.

**[P.T.O]**



## SECTION-C

1X10=

### III. Answer the following Questions

18. PQR Enterprises is a startup that provides digital marketing services to small businesses. The company has a turnover of Rs. 30 lakhs per annum and is registered under the Goods and Services Tax (GST) Act.

In 2022, the company was audited by the GST department, which found that PQR Enterprises had not been complying with several provisions of the GST Act. Specifically, the department found that:

1. The company had not been filing GST returns on time. As per the GST Act, businesses must file returns on a monthly or quarterly basis, depending on their turnover.
2. The company had not been charging the correct GST rate on its sales. The GST Act has a complex tax rate structure with multiple tax rates for different types of goods and services.
3. The company had not been claiming input tax credit (ITC) correctly. ITC is a mechanism that allows businesses to claim can take to ensure GST compliance and avoid penalties.

As a result of these violations, the GST department imposed penalties and interest on PQR Enterprises. The company was also required to pay back the incorrect ITC claimed and rectify its GST returns.

#### **Questions:**

1. Discuss the GST rate structure and the different tax rates applicable to goods and services.
2. Analyze the case study of PQR Enterprises and identify the GST compliance issues.
3. Discuss the measures that businesses can take to ensure GST compliance and avoid penalties.



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**KAKARAPATI BAVANARAYANA COLLEGE (AUTONOMOUS) :: PG  
I SEMESTER END EXAMINATION**

Class: I MBA

Subject: Management

Title of the Paper: BUSSINESS ANALYTICS FOR MANAGERIAL DECISION MAKING

Subject Code: R20MBA103 / MBA10319

W.E.F: 2020-21

Max.Marks: 70M

Pass Marks: 28M

Duration: 3Hrs

Date: 01/07/2023

Time: 09:00 to 12:00

**SECTION-A**

I. Answer any FIVE of the following questions

5X3=15 M

1. Explain importance of business analytics.
2. Explain the Cramer's rule?
3. Explain the properties of Poisson distribution
4. Types of Research
5. Chi-Square test
6. Factor analysis
7. Types of analytics

**SECTION-B**

any FIVE of the following questions

5X9=45 M

8. Define Business Analytics. Discuss the scope and importance of Business Analytics.

(OR)

9. Define the analytical approaches for decision making its suitable examples

10. Solve the system of equations by the matrix inversion method

$$3x + 2y + 4z = 7; 2x + y + z = 7; x + 3y + 5z = 2$$

(OR)

11. State and prove Bayes' theorem

12. Explain various components of Time - series

(OR)

13. Define Cluster Analysis. Explain Clustering methods

14. Define and explain Financial and Risk Analysis.

(OR)

15. Discuss Web and Social Media Analytics. Explain their role in marketing

16. Briefly describe the different steps involved in research process.

(OR)

17. Random sample of 10 boys had the following I.Q.'s:

100, 70, 120, 110, 101, 88, 83, 95, 98, 107.

Do these data support the assumption of a population mean I.Q. of 100? Find a 95% Confidence limits.



## SECTION-C

### (8) Case study

1X10=10M

A random samples of 400 men and 600 women were asked whether they would like to have a near their residence. 200 men and 325 women were in favour of the proposal. Test the hypothesis proportions of men and women in favour of the proposal, are same against that they are not, at 5% level.



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

Class : I MBA  
Subject : Management  
Title of Paper : Financial Reporting And Analysis  
Paper Code : R22MBA104  
W.E.F : 2022-23

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

**SECTION-A**

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

**5X4=20M**

1. Objectives of Financial Reporting
2. Auditors Report
3. Basic accounting concept
4. Users of Financial statement analysis
5. C-V-P analysis technique
5. Cash flow statement
7. IFRS
3. Nature of ratio analysis

**SECTION-B**

**II. Answer ALL the following Questions**

**5X8=40M**

9. Discuss the benefits and limitations of financial reporting.

**(OR)**

10. Explain the elements of Financial Statements

11. Briefly explain the different types of disclosures under companies Act - 2013

**(OR)**

12. Describe the different categories of disclosures under listing agreement.

13. Discuss the advantages and disadvantages of financial statements.

**(OR)**

14. From the following Trial balance of Sri Ram & sons, prepare the Trading and Profit and loss account for the year ended 31<sup>st</sup> march, 2012

2 BIS

**[P.T.O]**



| Particulars                        | Debit (Rs.)   | Credit (Rs.)  |
|------------------------------------|---------------|---------------|
|                                    |               | 29,000        |
| Ram's Capital                      |               |               |
| Ram's Drawings                     | 760           |               |
| Purchase And Sales                 | 8,900         | 15,000        |
| Sale And Purchase Returns          | 280           | 450           |
| Stock (1-4-2011)                   | 1,200         |               |
| Wages                              | 800           |               |
| Building                           | 22,000        |               |
| Freight and Carriage               | 2,000         |               |
| Advertisement                      | 240           |               |
| Interest                           | -             | 350           |
| Taxes and insurance                | 130           |               |
| Debtors and Creditors              | 6,500         | 1,200         |
| Bills Receivable and bills payable | 1,500         | 700           |
| Cash at bank                       | 1,200         |               |
| Cash in hand                       | 190           |               |
| Salaries                           | 800           |               |
|                                    | <b>46,700</b> | <b>46,700</b> |

**Adjustments:**

i) Stock on 31<sup>st</sup> march, 2012 was valued at Rs.1,500.

15. Describe the purpose and significance of preparing cash flow and funds flow statement

(OR)

16. Prepare cash flow statement from the following

| Liabilities       | 2016            | 2017            | Assets    | 2016            | 2017            |
|-------------------|-----------------|-----------------|-----------|-----------------|-----------------|
| Share capital     | 2,00,000        | 2,50,000        | Building  | 2,00,000        | 1,90,000        |
| General Reserve   | 50,000          | 60,000          | Machinery | 1,50,000        | 1,69,000        |
| P&L A/c           | 30,500          | 30,600          | Stock     | 1,00,000        | 74,000          |
| Term Loan         | 70,000          | -               | Debtors   | 80,000          | 64,200          |
| Creditors         | 1,50,000        | 1,35,200        | Cash      | 500             | 600             |
| Provision for Tax | 30,000          | 35,000          | Bank      | -               | 8,000           |
|                   |                 |                 | Goodwill  | -               | 5,000           |
|                   | <b>5,30,500</b> | <b>5,10,800</b> |           | <b>5,30,500</b> | <b>5,10,800</b> |

In 2017 dividend of Rs. 23,000 was paid, machinery of book value 3,000 was sold for Rs. 2,800. Depreciation on machinery Rs.12,000. Income tax provided during 2017 Rs.30,000.

17. Discuss the advantages and limitations of Ratio Analysis

(OR)

18. Balance sheet of XYZ Ltd., as on 31<sup>st</sup> Dec.2013

[Continued to Next Page]



| Liabilities              | Amount          | Assets               | Amount          |
|--------------------------|-----------------|----------------------|-----------------|
| Preference share capital | 1,50,000        | Goodwill             | 20,000          |
| Equity share capital     | 2,50,000        | Land and Buildings   | 2,50,000        |
| General Reserve          | 20,000          | Machinery            | 1,75,000        |
| Profit and Loss A/c      | 15,000          | Furniture            | 10,000          |
| 5% Debentures            | 1,00,000        | Stocks               | 90,000          |
| Sundry Creditors         | 28,000          | Debtors              | 21,000          |
| Bills Payable            | 12,000          | Cash at bank         | 5,000           |
|                          |                 | Preliminary Expenses | 4,000           |
|                          | <b>5,75,000</b> |                      | <b>5,75,000</b> |

Comment on the liquidity and solvency position of the company with suitable ratios (at least 8 ratios).

### SECTION-C

#### Case study (Compulsory)

1X10=10M

9. From the following balance sheets prepare a funds flow statement of Mr. Raju Ltd.,

| Liabilities   | 31.12.2015      | 31.12.2016    | Assets      | 31.12.2015      | 31.12.2016    |
|---------------|-----------------|---------------|-------------|-----------------|---------------|
| share capital | 60,000          | 65,000        | Patents     | 30,000          | 25,000        |
| P & L A/c     | 34,000          | 26,000        | Plant       | 60,000          | 50,000        |
| Creditors     | 10,000          | -             | Cash        | 2,000           | 7,000         |
|               |                 |               |             |                 |               |
| Bills Payable | 2,000           | 3,000         | Debtors     | 10,000          | 3,000         |
|               |                 |               | Receivables | 4,000           | 9,000         |
|               | <b>1,06,000</b> | <b>94,000</b> |             | <b>1,06,000</b> | <b>94,000</b> |

- Depreciation of Rs. 30,000 on plant was charged to profit and loss A/c in 2016 another plant for Rs. 25,000 was purchased during the year.
- Dividend Rs. 13,000 Were paid during 2006.
- Patents with Rs. 15,000 were sold for Rs. 20,000



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

**I SEMESTER END EXAMINATION**

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

Class : I MBA  
Subject : Commerce  
Title of paper : Managerial Communication  
Subject Code : MBA 10418 / R20MBA104  
W.E.F : 2018-19

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

**SECTION-A**

Answer any FIVE of the following

5X3 = 15M

Write a short note on.

1. Importance of Communication in Business Organisation.
2. Group Discussion.
3. Presentation Skills.
4. Press Conference.
5. Principles of non verbal Communication.
6. Business Messages.
7. Blogs.
8. Communication in Conflict Resolution.

**SECTION-B**

Answer ALL of the following

5X8 = 40M

1. Define Communication and explain the classification of Communication.

(OR)

10. Explain the Communication structure in an organization.

11. Define Oral Communication and list out the Principles of Successful oral Communication.

(OR)

12. Explain the models for understanding interpersonal Communication .

13. What is Managerial Writing and explain the Seven C's of effective Written Communication.

(OR)

14. Explain the structure of business reports and proposals in detail.

15. What is Negotiation? How Communication takes place in the process of Negotiation?

(OR)

16. Explain the Advanced Visual support for Manager's during presentation.

17. In what way Communication takes place in an Interview and Give some techniques of Interviews.

(OR)

18. Explain briefly about Technology enabled Communication.

P.T.O



## SECTION-C

### Case Study (Compulsory)

1X15=15M

19. John is a 27 year old who is a food service Manager at a casual dining restaurant. John is responsible for supervising and managing all employees in the back house. Employees working in the back of the house range in age from 16-55 old. In addition the employees come from diverse cultural and ethnic backgrounds. For many English is not their Primary Language.

John is SerrSafe R certified and tries his best to keep up with food safety issues in the Kitchen but he admits its not easy. Employees receive "On the job training" about food safety basics. But with high turnover of employees, training is often rushed and some new employees are put right into the job without training. The owners of the restaurant are supportive to the John in his food safety efforts because if food safety outbreaks it leads to them out of business. Still the owners note there are additional costs for training and making sure food is handled safely.

One day John comes to work and is rather upset even before he steps into the restaurant. Things haven't been going well at home. He then realizes and takes some relative actions for improving the things done effectively like hair cut, hand scrubbing, preserving the food in an appropriate temperatures. Even though he tells to the employees no employee is doing things in a right manner. John is frustrated and doesn't know what to do.

John has taken many efforts to get employees be safe and how they handle food. All employees are given a thermometer when they start so that they can check the temperature food. Hand Sinks, Soaps, Paper towels are available. So that the employees are encouraged to wash their hands frequently.

Questions:

- i) What are the Communication challenges and barriers John faces?
- ii) What are some ways John might use effective Communication as a motivation for employees to follow safe food handling practices.



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

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

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : 9am to 12pm  
Date : 06/03/2023

**SECTION-A**

**5X4=20M**

**Answer any FIVE of the following Questions**

- Types of Data
- Different kinds of analytical tools
- Rank of a Matrix
- Conditional Probability
- Normal distribution
- Factor Analysis
- Types of Research
- Formulation of hypothesis.

**SECTION-B**

**5X8=40M**

**Answer ALL the following Questions**

- Define Business Analytics. Discuss scope and importance of business analytics in management science.
- (OR)
0. Describe the types of Analytics tools. How do you identify problems and opportunities through data analytics.
1. Solve the following system of equations by using Cramer's rule method  
 $x + y + z = 6, 2x + 3y - z = 5, 6x - 2y - 3z = -7.$
- (OR)
2. Solve the following equations by using Gauss elimination method  
 $5x_1 + 6x_2 = 7, 3x_1 + 4x_2 = 5.$
3. What is a measures of central tendency? Explain various measures of central tendency.
- (OR)
4. State and prove Bayes' theorem.
5. What is the difference between Correlation and Regression Analysis.
- (OR)
6. Obtain the two regression equations from the following data

|   |   |   |    |    |    |    |    |    |    |
|---|---|---|----|----|----|----|----|----|----|
| X | 1 | 2 | 3  | 4  | 5  | 6  | 7  | 8  | 9  |
| Y | 9 | 8 | 10 | 12 | 11 | 13 | 14 | 16 | 15 |

**[P.T.O]**



17. Briefly describe the different steps involved in a research process.

(OR)

18. Two samples polls of votes for two candidates A & B for a public office are taken, from among the residents of rural areas. The results are given in adjoining table. Examine whether the nature of the area is related to voting preference in this election.

| Area  | Vote for |     | Total |
|-------|----------|-----|-------|
|       | A        | B   |       |
| Rural | 620      | 380 | 1000  |
| Urban | 550      | 450 | 1000  |
| Total | 1170     | 830 | 2000  |

**SECTION-C**

1X10=

**III. Case Study (Compulsory)**

19. The following data give the yields on 12 plots of land in samples, each of 4 plots under three varieties of fertilizers A, B & C.

| A  | B  | C  |
|----|----|----|
| 25 | 20 | 24 |
| 22 | 17 | 26 |
| 24 | 16 | 30 |
| 21 | 19 | 20 |

Is there any significant difference in the average yields of land under the three varieties of fertilizers?

(10)

(10)

(10)

(10)



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**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**PG : I SEMESTER END EXAMINATIONS**

Class: MBA

Max.Marks: 70M

Subject: MANAGEMENT

Pass Marks: 28M

Title of the Paper: **LEGAL FRAMEWORK FOR BUSINESS**

Duration: 3Hrs

Paper Code: **R20MBA105/MBA10518**

Time: **9am to 12pm**

V.E.F:2017-18

Date: **06/03/2023**

**SECTION - A**

Answer any FIVE of the following questions.

5 X 3 = 15 M

1. Write short notes on:

1. Consideration
2. Difference between Agreement and Contract
3. Differences between LLP and Partnership
4. Whistle blowing
5. Explain the features of Competition Act
6. Explain about Articles of Association
7. Objectives of IT Act
8. Consumer Redressal Agencies

**SECTION - B**

Answer ALL Questions

5 X 8 = 40 M

9. Explain briefly the law relating to Capacity to Contract.

(OR)

10. Discuss the Essentials of a Valid Contract?

11. Explain briefly about LLP Act, 2008? Conversion of LLP and liability of LLP?

(OR)

12. Explain in detail about winding up and dissolution of the partnership firm.

13. Write the difference between Sale and Agreement to Sell.

(OR)

14. What is negotiable Instruments Act? Explain the process of discharging the Negotiable Instruments.

15. Write briefly about the Companies Act, 2013.

(OR)

16. Write about the Memorandum of Association and Articles of Association?

17. Explain briefly about IT Act, 2000

(OR)

18. Discuss the rights of consumer rights and suggestion the ways and means to legally protect the rights of the consumer.



SECTION-C

19 . Case Study

1 X 15 = 15 M

The Carbolic Smoke Ball Co. offered by advertisement reward of £ 100 to any person should contract "Influenza" (disease) after having used the smoke ball three time daily for two w according to the printed directions. It also added that £ 1,000 was deposited in the bank showing sincerity in the promise. The plaintiff Mrs. Carlill used the smoke ball according of the directions t company but contracted "Influenza". The plaintiff sued the defendant for the reward. Can Mrs. C claim? Will she succeed?



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

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

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

Class : I MBA /MCA  
Subject : Management  
Title of Paper : Personality Development Through  
Life Enlightenment Skills  
Paper Code : R22MCA105/R22MBA107  
V.E.F : 2022-23

Max Marks : 70

Pass Mark : 28

Duration : 3 Hrs

Time : 9am to 12PM

Date : 10/03/2023

**SECTION-A**

**Answer ALL Questions**

**5X14=70M**

1. Define Personality? Explain the different Dimensions of Personality.

**(OR)**

2. Write an essay on "SWOT Analysis".

3. Elaborate the concept of Attitude? Explain the different types of attitudes.

**(OR)**

4. What do you mean by Motivation? Illustrate the definition and nature of motivation.

5. Discuss various qualities of a successful leader.

**(OR)**

6. What are the different dimensions of emotional Intelligence?

7. Explain about Holistic Development of Personality verses?

**(OR)**

8. Discuss about "Bhagavad Gita" in the real world.

9. Explain the historical perspective of Yoga in detail?

**(OR)**

10. Define Stress and explain the different types of stress.



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

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

## I SEMESTER END EXAMINATION

Class : I MBA  
Title of paper : Business Environment  
Paper Code : MBA 10718 / R20MBA107  
Duration : 3 Hrs

Max Marks : 70  
Pass Marks : 28  
Time : 9am to 12pm  
Date : 10/03/2023

### SECTION-A (5 x 3 = 15 Marks)

Answer any three of the following questions

1. SEZs
2. Fiscal Policy
3. EXIM Bank
4. Public Sector
5. MNCs
6. BIFR
7. Mixed Economy
8. Privatization

### SECTION -B (5 x 8 = 40 Marks)

Answer all of the following questions

9. Explain the concept of Business Environment. How economic environment can influence business?  
(or)
10. Describe the concept of Social Responsibility of Business. Explain the Social Responsibility of Business towards customers and employees.
11. Describe the structural dimensions of Indian Economy? Distinguish between Private Sector and Public Sector.  
(or)
12. Illustrate Small-scale Industries, identify the reasons for Sickness. What should be done to promote Small-scale Industries?
13. Trace the Industrial Policy Resolutions and statements! Discuss the future directions?  
(or)
14. Critically examine the rationale for encouraging Foreign Direct Investments. What is the need for foreign capital in Indian Economy.
15. What are the components of Balance of Payments. Discuss about the recent Trends in India's BOP position.  
(or)
16. What are the objectives of the New EXIM Policy.

(PTO)



17. Discuss the recent economic policy of the government. What more is to be done to achieve faster economic development in the country?

(or)

18. What is the importance of Corporate Governance?

### SECTION - C (15 Marks)

19. **Case Study:**

The public sector Indian Oil Corporation (IOC), the major oil refining and marketing company which was also the canalizing agency for oil imports and the only Indian company in the Fortune 500, in terms of sales, planned to make a foray in to the foreign market by acquiring a substantial stake in the Balal Oil field in Iran of the Premier Oil. The project was established to have recoverable oil reserves of about 11 million tonnes and IOC was supposed to get nearly four million tonnes.

When IOC started talking to the Iranian company for the acquisition in October 1998, oil prices were at rock bottom (\$ 11 per barrel) and most refining companies were closing shop due to falling margins. Indeed, a number of good oil properties in the Middle East were up for sale. Using this opportunity, several developing countries "made a killing by acquiring oil equities abroad".

IOC needed Government's permission to invest abroad. Application by Indian company for investing abroad is to be scrutinized by a special committee represented by the Reserve Bank of India and the finance and commerce ministries. By the time the government gave the clearance for the acquisition in December 1999 (i.e., more than a year after the application was made), the prices had bounced back to \$ 24 per barrel. And the Elf of France had virtually taken away the deal from under IOC's nose by acquiring the Premier Oil.

The RBI, which gave IOC the approval for \$ 15 million investment, took more than a year for clearing the deal because the structure for such investments were not in place, it was reported.

**Questions:**

- a) Discuss internal, domestic and global environment of business revealed by this case.
- b) Discuss whether it is the domestic or global environment that hinders the globalization of Indian business.



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**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**I SEMESTER END EXAMINATIONS**

Class : I MBA  
Subject : Management  
Title of Paper : Managerial Communication  
Paper Code : R22MBA106  
V.E.F : 2022-23

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Paper Time : 9am to 12pm  
Date : 13/03/2023

**SECTION - A**

Answer any **FIVE** Of the following questions.

**5X4=20M**

Communication Process

E-Mail

Listening Skills

External Communication

Rapport Building

Body Language

Negotiation Skills

**Section - B**

1. Answer **ALL** the following Questions

**5X8=40M**

Define Communication? Explain the barriers of Communication?

(OR)

Explain importance of Communication in the Workplace?

Explain the presentation skills in Oral Communication?

(OR)

Write about Written Communication?

Explain the 7C's of effective Written Communication?

(OR)

Write about how to improving Listening & reading Body language?

Write about the types & channels of Internal Organizational Communication?

(OR)

Explain the types & channels of External Organizational Communication?

Write about JOWHARI WINDOW Theory?

(OR)

What are the effective elements of a good CV?

**SECTION - C**

**CASE STUDY ( COMPULSORY )**

3. Answer the following question

**1x10=10M**

Bruce, a research chemist for a major petro - chemical company, wrote a dense report about some new compounds he had synthesized in the laboratory from oil-

**P T O**



refining by products. The bulk of the report consisted of tables of tables listing chemical and physical properties, diagrams of their molecular structure, chemical formulas and data from toxicity tests. Buried at the end of the report was a speculation that one of the compounds might be a particularly safe and effective insecticide.

Seven years later, the same oil company launched a research program to find more effective but environmentally safe insecticides. Six months of research, someone uncovered Bruce's report and his toxicity tests. A few hours of further testing confirmed that one of Bruce's compounds was the economical insecticide they had been looking for.

Bruce had since left the company, because he left the importance of his research was not being appreciated.

1. SWOT Analysis on Bruce.



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

**KAKARAPATI BAVANARAYANA COLLEGE (AUTONOMOUS) :: PG  
I SEMESTER END EXAMINATION**

Class: I MBA

Subject: MANAGEMENT

Title of the Paper: FINANCIAL STATEMENTS ANALYSIS AND REPORTING

Subject Code: R20MBA106

A.E.F: 2020-21

Max.Marks: 70M

Pass Marks: 28M

Duration: 3Hrs

Date: 13/05/2023

Time: 9am to 12pm

**SECTION-A**

I. Answer any FIVE of the following Questions.

5X3=15M

- |                            |                        |
|----------------------------|------------------------|
| 1. Branches of Accounting. | 5. Trail Balance       |
| 2. Funds Flow Statement    | 6. Cash Flow Statement |
| 3. Forfeiture of Shares    | 7. Debentures          |
| 4. IFRS                    | 8. Marginal Costing    |

**SECTION-B**

I. Answer the following Questions.

5X8=40 M

9. Explain the Generally Accepted Accounting Principles.

(OR)

10. Journalise the following Transactions

|                                            | Rs.    |
|--------------------------------------------|--------|
| 2015 June 1 Raju Started Business with     | 50,000 |
| 2 Paid into Bank                           | 40,000 |
| 4 Bought goods for cash                    | 10,000 |
| 12 Sold goods for cash                     | 20,000 |
| 17 Purchased Furniture from Vijay          | 5,000  |
| 18 Sold goods to Ganesh                    | 10,000 |
| 19 Withdraw from the Bank for personal use | 5,000  |
| 31 Salaries paid                           | 10,000 |

11. What are the various techniques of Financial Statement Analysis?

(OR)



12- From the following Balance Sheet of a Firm, prepare Funds Flow Statement.

| Liabilities       | 2012     | 2013     | Assets               | 2012     | 2013     |
|-------------------|----------|----------|----------------------|----------|----------|
|                   | (Rs.)    | (Rs.)    |                      | (Rs.)    | (Rs.)    |
| Share capital     | 1,20,000 | 1,50,000 | Goodwill             | 10,000   | 6,000    |
| General reserve   | 25,000   | 28,000   | Plant & Machinery    | 1,00,000 | 1,20,000 |
| P&L Account       | 18,000   | 32,000   | Investments          | 49,000   | 62,000   |
| Debentures        | 80,000   | 60,000   | Stock                | 40,000   | 38,000   |
| Creditors         | 40,000   | 46,000   | Debtors              | 86,000   | 82,000   |
| Bills Payable     | 27,000   | 20,000   | Bills receivable     | 14,000   | 20,000   |
| Provision for tax | 25,000   | 34,000   | Cash                 | 26,000   | 34,000   |
|                   |          |          | Preliminary expenses | 10,000   | 8,000    |
|                   | 3,35,000 | 3,70,000 |                      | 3,35,000 | 3,70,000 |

Additional Information:

- Depreciation provided on machinery during the year Rs.25,000
- Interim dividend paid Rs.15,000

13 Explain the Accounting Procedures for Declaring and Distributing Dividends.

(OR)

14 ABC Ltd., issued 50,000 equity shares of Rs.10 each, payable Rs.2 on application, Rs.2 on first call, Rs. 2 on second call and Rs.2 on final call. All the shares subscribed and the amount duly received. Pass necessary Journal entries in the books of the Company.

15 Explain the legal requirements relating to Auditing

(OR)

16 Explain the legal requirements relating to Accounting Disclosures.

17 The sales and profit during the years were as follows.

| Year | Sales<br>(Rs.) | Profit<br>(Rs.) |
|------|----------------|-----------------|
| 2014 | 2,40,000       | 30,000          |
| 2015 | 2,70,000       | 42,000          |

You are required to calculate:

- P/V Ratio
- BEP
- Profit when sales are Rs.1,50,00.
- The sales required to earn a profit of Rs.57,000

(OR)

18 Explain Cost – Profit – Volume analysis



SECTION -C

III. Answer the following Question

1X 15= 15 M

19. Following is the Trial Balance of shukla as on 31-12-2016

| Particulars           | Dr<br>Rs.         | Cr<br>Rs.                  |
|-----------------------|-------------------|----------------------------|
| Capital and Drawings  | 10,000            | 90,000                     |
| Purchases and sales   | 21,900            | 51,800                     |
| Returns               | 800               | 500                        |
| Debtors and Creditors | 16,100            | 30,000                     |
| Discount              | 1,000             | 2,200                      |
| Opening Stock         | 12,000            |                            |
| Wages                 | 1,840             |                            |
| Furniture             | 2,560             |                            |
| Motor Car             | 24,000            |                            |
| Buildings             | 60,000            |                            |
| Rent & Rates          | 900               |                            |
| Advertisements        | 1,300             |                            |
| Salaries              | 8,200             |                            |
| Insurance             | 3,400             |                            |
| Interest              |                   | 1,500                      |
| Cash                  | 12,000            |                            |
|                       | -----<br>1,76,000 | -----<br>1,76,000<br>----- |

Adjustments:

- a) Closing stock Rs.25,000
- b) Outstanding wages Rs.160
- c) Prepaid insurance Rs.400

Prepare the trading and profit and loss account and balance sheet of Shukla.



d.No:

Room No:

**KAKARAPATI BAVANARAYANA COLLEGE (AUTONOMOUS) :: PG  
I SEMESTER END EXAMINATION**

Class: I MCA

Subject: COMPUTER SCIENCE

Title of the Paper: OPERATING SYSTEMS

Subject Code: R20MCA105

S.E.F: 2020-21

Max.Marks: 70M

Pass Marks: 28M

Duration: 3Hrs

Date: 03/03/2023

Time: 9am to 12pm

Answer ALL Questions. All Questions carry equal marks

5X14=70M

1. What is an operating system? Explain about Operating System Services.

(OR)

2. a) What is System Call. Discuss variants of System Calls.

b) Explain about Memory Management and Storage Management.

3. Explain Inter process communication with example.

(OR)

4. Explain about Multithreading. Discuss

5. Define a Dead Lock? What are methods for Handling Dead Locks?

(OR)

6. Explain the concepts of the following

(i) Monitors (ii) Swapping (iii) Segmentation

7. Explain about Demand paging ?

(OR)

8. Explain about file sharing and protection in detail

9. Briefly explain about RAID structure in OS ?

(OR)

10. Explain about disk structure and disk scheduling in detail.



d.No:

Room No:

KAKARAPATI BAVANARAYANA COLLEGE (AUTONOMOUS) :: PG  
I SEMESTER END EXAMINATION

Class: IMCA

Subject: COMPUTER SCIENCE

Title of the Paper: COMPUTER ORGANIZATION

Subject Code: R20MCA106

S.E.F: 2020-21

Max.Marks: 70M

Pass Marks: 28M

Duration: 3Hrs

Date: 13/3/2023

Time: 9:00 AM - 12:00 Noon

Answer all Questions. All Questions carry equal marks

5X14=70M

1. What is Flip-Flop? Explain various types of Flip-Flop?

(OR)

2. Explain about Fixed point and floating point data representation.

3. Describe the Mechanism of an instruction Cycle and Memory reference instructions.

(OR)

4. What is Error Detection code. Explain different binary codes with examples.

5. Explain variants of addressing Modes.

(OR)

6. Explain about Stack Organization and Instruction formats.

7. Explain about Multiplication algorithm.

(OR)

8. Explain about Decimal Arithmetic unit and Decimal Arithmetic Operations.

9. What is Input- Output Interface? Explain about Asynchronous Data Transfer.

(OR)

10. What is Main Memory? Explain about Cache Memory.



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

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

Class : I MCA  
Subject : Computer Science  
Title of Paper : Operating Systems  
Paper Code : R22MCA104  
V.E.F : 2022-23

Max Marks : 70

Pass Mark : 28

Duration : 3 Hrs

Time : 9am to 12pm

Date : 03/03/2023

**SECTION-A**

**5X14=70M**

**Answer ALL Questions**

1. Discuss Operating System Services. What are various types of Operating Systems.

**(OR)**

2. What is System Call? Explain various types of System Calls.

3. What is Semaphores? Explain Critical Section Problem.

**(OR)**

4. Define a Dead lock? Differentiate Dead lock Prevention and Avoidance.

5. Discuss demand paging and page segmentation.

**(OR)**

6. Illustrate page Replacement Algorithm.

7. Explain about access methods and files sharing in detail.

**(OR)**

8. What is Disk structure? Explain about Disk Scheduling Algorithms.

9. What is network structure? Explain network Topology.

**(OR)**

10. Explain review of Mobile Operating Systems.



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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 : 2020-21

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

**SECTION -A**

Answer ALL the following Questions.

5X14=70M

- a) Write a note on CMR Spectroscopy with two typical examples.  
b) Write the differences and similarities of  $^{13}\text{C}$  NMR and Proton NMR.

(OR)

- Explain Chemical Shift values for various carbons in following compounds.  
a) Hetero Aromatic Compounds. b) Acetophenone c) N,N Dimethyl Formamide.

- Deduce the structure of the compound from the spectral data given below:

Molecular formula:  $\text{C}_5\text{H}_8\text{O}_2$

UV,  $\lambda$  max: shows no intense UV absorption above 200 nm.

IR:  $1740\text{ cm}^{-1}$

$^1\text{H}$ NMR ( $\delta$  ppm): 4.0 (2H, t); 2.20(2H, m); 2.35 (1H, m) 1.15 (3H, d).

(OR)

- Significant spectral features of an organic compound are given below:

Molecular formula:  $\text{C}_8\text{H}_{14}\text{O}$

IR,  $\text{cm}^{-1}$ : 3500, 3300, 2100.

$^1\text{H}$ NMR,  $\delta$  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  $\text{D}_2\text{O}$

CMR,  $\delta$  ppm: 23, 24, 30, 50, 68, 71, 87.

Assign suitable structure to the compound and account for the data.

- Discuss the theory and principle of X-ray Spectroscopy and explain it with one example.

(OR)

- Write a note on theory and principle of Auger Photoelectron Spectroscopy and write example.

- Discuss the following

1. ORD Curves 2. CD Curves 3. Cotton effect-its types with examples.

(OR)

- Ascertain and explain the various rules to determine the configurations and conformation of Organic molecules.

- a) Explain the Principle and Instrumentation of Electron Spin Resonance Spectroscopy.

b) g-factor.

(OR)

- a) Discuss Zero-Field splitting &, Kramer's degeneracy in ESR with examples.

b) Explain hyperfine splitting in ESR with Three examples.



**KAKARAPATI BAVANARAYANA COLLEGE (AUTONOMOUS) :: PG  
I SEMESTER END EXAMINATION**

Class: 1MCA

Subject: COMPUTER SCIENCE

Title of the Paper: PROBABILITY AND STATISTICS

Subject Code: R20MCA104

W.E.F: 2020-21

Max.Marks: 70M

Pass Marks: 28M

Duration: 3Hrs

Date: 06/03/2021

Time: 9am to 12pm

Answer ALL questions. All questions carry equal marks.

5 x 14 = 70M

1. State and prove Bayes' theorem.

(OR)

2. Define Poisson Distribution. Mention its properties and applications.

3. Explain the criteria of good estimator or best estimator.

(OR)

4. Define Normal Distribution. Explain some important properties of Normal distribution and also write its applications.

5. Define Correlation. Explain various methods for calculating Correlation.

(OR)

6.

|   |   |   |    |    |    |    |    |    |    |
|---|---|---|----|----|----|----|----|----|----|
| X | 1 | 2 | 3  | 4  | 5  | 6  | 7  | 8  | 9  |
| Y | 9 | 8 | 10 | 12 | 11 | 13 | 14 | 16 | 15 |

From the above data ,

(i) Calculate the two regression equations

(ii) Calculate the correlation coefficient

(iii) Estimate the value of Y which should correspond on an average to  $x = 6.2$ 

7. In a simple sample of 600 men from a certain large city A, 450 are known to be smokers. In one of 900 men from another large city B, 450 are smokers. Do the data A and B indicate that the cities are significantly different with respect to the habit of smoking among men?

(OR)



8. Samples of two types of electrical bulbs were tested for length of life and the following data were obtained.

|              | Type - I | Type - II |
|--------------|----------|-----------|
| Sample Sizes | 8        | 7         |
| Sample Means | 1234 hrs | 1036 hrs  |
| Sample S.Ds  | 36 hrs   | 40 hrs    |

Is the difference in the means sufficient to warrant that type I is superior to type II regarding length of life.

9. Define time series. Explain various components of time series.

(OR)

10. Set up an analysis of variance table for the following two - way design results per acre production data of wheat.

| Variety of fertilizers | Variety of seeds |   |   |
|------------------------|------------------|---|---|
|                        | A                | B | C |
| W                      | 6                | 5 | 5 |
| X                      | 7                | 5 | 4 |
| Y                      | 3                | 3 | 3 |
| Z                      | 8                | 7 | 4 |

Also state whether variety differences are significant at 5% LOS.



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**KAKARAPATI BAVANARAYANA COLLEGE (AUTONOMOUS) :: PG  
I SEMESTER END EXAMINATION**

Class: I MCA

Subject: Computer Science

Title of the Paper: Discrete Mathematics

Subject Code: R20MCA101

W.E.F: 2020-21

Max.Marks: 70M

Pass Marks: 28M

Duration: 3Hrs

Date: 01/03/2023

Time: 9am to 12pm

Answer ALL Questions. All Questions Carry equal marks

5 X 14 = 70M

1. A) Check whether the following prepositions are Tautology or Contradiction. (7M)
- i)  $(p \rightarrow \sim p) \rightarrow \sim p$     ii)  $(\sim p \rightarrow q) \rightarrow (q \rightarrow p)$     iii)  $(p \rightarrow q) \leftrightarrow (\sim p \vee q)$

- B) Prove the following without using Truth Tables (7M)
- i)  $\sim (p \vee (\sim p \wedge q)) \leftrightarrow \sim p \wedge \sim q$
- ii)  $\sim (p \wedge q) \rightarrow (\sim p \vee (\sim p \vee q))$

(OR)

2. Explain briefly the concept of Free of Bound Variables and solve the following problem (14 M)

i) All integers are rational numbers. Some integers are powers of 2. Therefore some rational numbers are power.

ii)  $(\exists x)[P(x) \wedge Q(x)] \Rightarrow (\exists x) P(x) \wedge (\exists x) Q(x)$

3. By using mathematical induction prove that the given equation is true for all positive integers.

$$1 \cdot 2 + 2 \cdot 3 + 3 \cdot 4 + \dots + n(n+1) = (1/3) \{n(n+1)(n+2)\} \quad (14 M)$$

(OR)

4. Write the equation for multinomial thermo and solve the problems (14 M)

i) Find the Coefficient of  $a^2 b^3 c^2 d^5$  in expansion of  $(ab+2b-3c+2d+5)^{16}$

ii) Find the Coefficient of  $x^{11} y^4$  in expansion of  $(2x^3-3xy^2+z^2)^6$

5. Solve the following Recurrence relations (14 M)

i)  $a_n = 5a_{n-1} - 6a_{n-2}$      $a_0 = 1$      $a_1 = 0$

ii)  $a_n = 8a_{n-1} - 16a_{n-2}$      $a_0 = 16$      $a_1 = 18$

(OR)

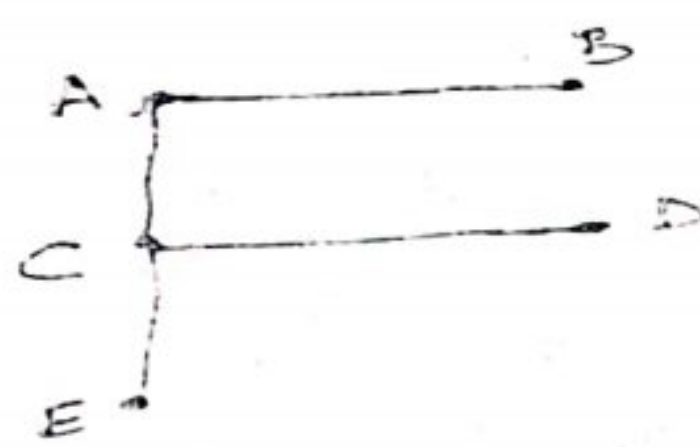
6. Solve by using generating function (14 M)

$$a_{n+2} - 2a_{n+1} + a_n = 2^n \quad a_0 = 2 \quad a_1 = 1$$

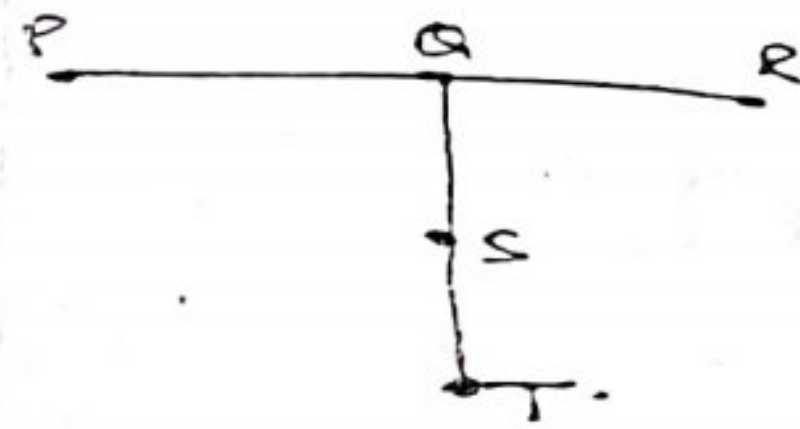


7. show whether the below given graphs are isomorphic or not

(14 M)



$G(V, E)$



$G'(V', E')$

(OR)

8. Explain all pair shortest path algorithm with example

(14 M)

9. Justify your answer that the minimum spanning tree calculated by using Prim's and Kruskal's Algorithms are same

(14 M)

(OR)

10. Explain briefly the concept of Boolean Function representation?

(14 M)

Minimize the following Boolean expressions using Boolean identities -

a)  $F(A, B, C) = (A+B)(A+C)$

b)  $F(A, B, C) = A'B + BC' + BC + AB'C'$



Roll No: \_\_\_\_\_

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

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG : I SEMESTER END EXAMINATIONS**

Course: MCA

Max.Marks: 70M

Subject: COMPUTER APPLICATIONS

Pass Marks: 28M

Title of the Paper: PROGRAMMING AND PROBLEM SOLVING USING PYTHON

Duration: 3Hrs

Paper Code: **R20MCA103**

Time: 9am to 12PM

S.E.F: 2020-21

Date: 24/02/2023

Answer ALL Questions. All Questions carry equal marks

5 X 14 = 70 M

1. Define Python. Explain about Numeric Data types in python with examples.

(OR)

2. What is an Operator? Explain about various Operators in Python with examples.

3

What is an Array? Explain about Creating an Array and Types of Arrays with examples.

(OR)

4

Define Function. Explain about Calling a Function and Functions with/without return values in detail.

5

Explain the concept of Inheritance in Python with examples.

(OR)

6

What is an Abstract Class? Explain about the concept of interfaces in Python with an example.

7

Explain about the concept of files in detail.

(OR)

8

What is an Exception? Explain about the concept of Exception Handling in Python with an example.

9

Explain about the concept of Lists in Python and Give examples.

(OR)

10

What is Thread? Explain about creating threads in Python with examples.



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

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**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**I SEMESTER END EXAMINATIONS**

Class : I MCA  
Subject : Computers  
Title of Paper: Programming and problem solving using  
Paper Code : R22MCA101  
W.E.F : 2022-23

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Paper Time : 9am to 12pm  
Date : 24/02/2023

**SECTION -A**

**Answer ALL the following Questions.**

**5X14=70M**

1. Explain about Attributes, binding and semantic functions.

**(OR)**

2. Explain about variables and Constants, Aliases.

3. Explain control statements in Python.

**(OR)**

4. Explain about Iterative statements in Python.

5. Explain about string concept in Python.

**(OR)**

6. Explain about Function in Python.

7. Explain Exception Handling in python.

**(OR)**

8. Explain the concept of ~~list~~ **List** in Python.

9. Explain about Inheritance in Python.

**(OR)**

10. Explain dictionary methods in Python.



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**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**PG : I SEMESTER END EXAMINATIONS**

Class: MCA

Max.Marks: 70M

Subject: COMPUTER APPLICATIONS

Pass Marks: 28M

Title of the Paper: DATA STRUCTURES

Duration: 3Hrs

Paper Code: R20MCA102

Time: 9am to 12pm

V.E.F:2020-21

Date: 27/02/2023

Answer ALL Questions. All Questions carry equal marks

5 X 14=70 M

1. What is Data Structure? Explain about Operations of Data Structure with examples.

(OR)

2. Define an Algorithm. Discuss about various Asymptotic Notations.

3. Define String. Explain about storing Strings and various String Operations with examples.

(OR)

4. Write about Linear Arrays. Explain Binary Search with an example.

5. Define Linked List. Explain about Two Way Lists with an example.

(OR)

6. Define Stack. Explain about Array representation of Stack with an example.

7. What is Binary Tree? Explain about Binary Search Trees with example.

(OR)

8. Explain about Heap Sort and Huffman's Algorithms with examples.

9. What are the operations of Graph. Explain about Graph Traversals with examples.

(OR)

10. What is sorting? Explain about Merge Sort with an example.



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

Class : I MCA  
Subject : Computers  
Title of Paper : Data Structures  
Paper Code : R22MCA102  
S.E.F : 2022-23

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Paper Time : 9am to 12pm  
Date : 27/02/2023.

**SECTION -A**

Answer ALL the following Questions.

**5X14=70M**

1. Explain about Linear Search and Binary Search with example?

**(OR)**

2. Explain about Matrices and Sparse Matrices?

3. What is Stack? Explain about Stack implementation with example?

**(OR)**

4. Explain about types of Linked List with example?

5. Explain about Binary Tree Traversing algorithms with example?

**(OR)**

6. Explain about Heap Sort with example.

**(OR)**

7. Explain about M-Way Search Tree with example?

8. Explain about insertion into B+ Tree and Deletion from a B+ Tree?

**(OR)**

9. Explain about Graph Traversing algorithms with example?

**(OR)**

10. Explain about Dijkstra's algorithm with example?



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

Class : I MCA  
Subject : Computer Science  
Title of Paper : Mathematical And Statistical Foundations  
Paper Code : R22MCA103  
S.E.F : 2022-23

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : 9am to 12PM  
Date : 01/03/2023

**SECTION-A**

**Answer ALL Questions**

**5X14=70M**

1. Give a proof by equivalence of the theorem "If  $n$  is a positive integer, then  $n$  is odd if and only if  $n^2$  is odd".

**(OR)**

2. Use mathematical induction to show that  $1 + 2 + 2^2 + \dots + 2^n = 2^{n+1} - 1$  for all non-negative integers  $n$ .

3. How many solutions does the equation  $x_1 + x_2 + x_3 + x_4 + x_5 = 20$ , where  $x_i \geq 2, 1 \leq i \leq 5$ .

**(OR)**

4. Find the solution of the recurrence relation  $a_n = a_{n-1} + 2a_{n-2}$  with  $a_0 = 2$  and  $a_1 = 7$ .

5. Explain Isomorphism of Graphs with an example.

**(OR)**

6. Show that the Relation  $R = \{ (x, y) / 3 \text{ divides } (x-y) \}$  on a set  $A = \{1, 2, 3, 4, 5, 6, 7\}$  is an equivalence relation.

7. Explain about different probability distributions.

**(OR)**

8. Explain about Conditional and Discrete Probability.

9. Explain about Hypothesis and Significance Testing.

**(OR)**

10. Explain estimating and testing hypothesis on a proportion.



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Regd No: K8225521

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**PG I - SEMESTER END EXAMINATIONS**

Class : I-M.Sc (ACH)

Max Marks : 70

Subject : Chemistry

Pass Mark : 28

Title of Paper : General Chemistry-I

Duration : 3 Hrs

Paper Code : R22ACH101 / R22OCH101

Time : 9am to 12pm

W.E.F : 2022-23

Date : 13/04/2023

**SECTION-A**

**I. Answer ALL Questions**

**5X14=70M**

1. i) What is an error? Explain different types of errors with suitable examples  
ii) Write a short note on significant figures with examples.

**(OR)**

2. i) Explain Gaussian distribution curve;  
ii) Explain T-test and F-test and write their significance.

3. i) Write a note on complexometric titrations.  
ii) Explain the estimation of Calcium and Magnesium by EDTA in detail.

**(OR)**

4. a) What are Redox titrations and write different titrations which falls under this Redox titrations?

b) Explain change of redox potential during Fe (II) Vs Ce(IV) titration with graphical representation.

5. Write a brief note on steam, fractional distillation and their industrial applications.

**(OR)**

6. i) Explain the basic principle of Soxhlet extraction and write its industrial applications  
ii) Write a short note on drying agents.

7. Write a short note on the following

i) Column Chromatography ii) Packing of Column iii) Paper Chromatography

**(OR)**

8. Discuss the following.

i) TLC-Principle ii) Methods of TLC plates iii) Applications of TLC

9. Discuss the following.

a) Gas Chromatography-Principle b) Detectors & Columns used in Gas Chromatography.

**(OR)**

10. Discuss normal & reverse-phase HPLC and its applications.



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Room No: 222

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

Class : I MSc.(ACH, OCH)  
Subject : Chemistry  
Title of Paper: Organic Chemistry  
Paper Code : R22ACH102/R220CH102  
W.E.F : 2022-23

Max Marks : 75  
Pass Mark : 30  
Duration : 3 Hrs  
Paper Time : 9am to 12pm  
Date : 15/04/2023

**SECTION -A**

**I. Answer ALL the following Questions.**

**5X14=70M**

1. (a) Explain the aromaticity of benzenoid and non - benzenoid Compounds. (8M)  
(b) Write a note on anti - aromaticity. (6M)

**(OR)**

2. (a) Describe Stability and reactivity of Carbocations. (7M)  
(b) Write the generations and reactivity of Carbenes. (7M)
3. (a) Explain SN<sup>1</sup> and SN<sup>2</sup> Reactions with Mechanisms. (8M)  
(b) Write a note on Benzyne Mechanism. (6M)

**(OR)**

4. (a) Explain Von - Richter Rearrangement. (8M)  
(b) Explain Neighbouring group participation. (6M)

5. (a) Discuss the stereo chemical aspects and mechanism of Halogenation of alkenes. (8M)  
(b) Write a note on homogeneous catalytic hydrogenation of alkenes. (6M)

**(OR)**

6. (a) Explain the Mechanisms of E<sub>1</sub> and E<sub>2</sub> eliminations. (7M)  
(b) Explain the Mechanisms of Hofmann and Saytzeff rules. (7M)
7. (a) Discuss the Reaction and Mechanism of Benzoin Condensation. (7M)  
(b) Explain the Reaction and Mechanism of Perkin Condensation. (7M)

**(OR)**

8. (a) Explain the Clemmensen reduction and Wolf - Kishner Reduction Reactions. (8M)  
(b) Explain the Mechanism of oppenaur oxidation reaction. (6M)
9. (a) Write a note on Enantiomers and Diastereomers with suitable examples. (8M)  
(b) Explain R, S - nomenclature with suitable examples. (8M)

**(OR)**

10. (a) Explain Fischer and Sawhorse Projections of Organic Molecules. (8M)  
(b) What are Geometrical Isomerism. Explain E, Z - Nomenclature with an example. (8M)



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Room No: 214

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

Class : I.M.Sc.(ACH,OCH)  
Subject : Chemistry  
Title of Paper: Inorganic Chemistry  
Paper Code : R22ACH103/R22OCH103  
W.E.F : 2020-21

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Paper Time : 9am to 12pm  
Date : 17/04/2023

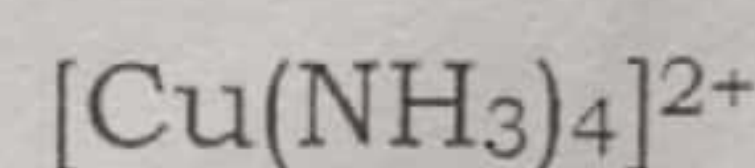
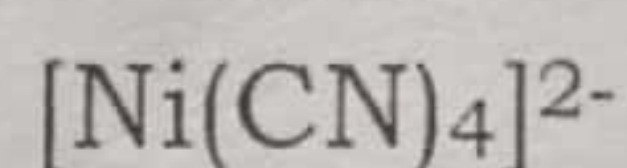
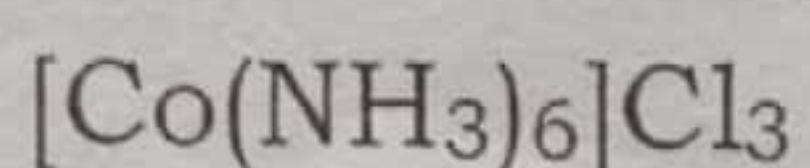
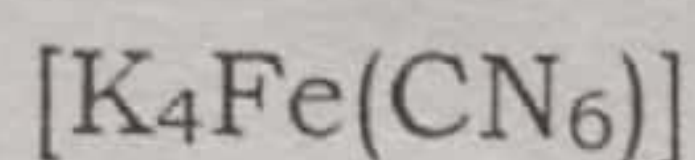
**SECTION -A**

**I. Answer ALL the following Questions.**

**5X14=70M**

1. i) Given the IUPAC name of the following compounds.

8 marks



ii) Write about Werner's theory of coordination compounds.

6 marks

**(OR)**

2. Discuss the geometrical isomerism exhibited by the complexes with Coordination Number 4 & 6.

14 marks

3. (i) What is VSEPR theory? Explain how this model useful in explain the shape of molecule.

9 marks

(ii) Write about Bent's rule. 5 marks

**(OR)**

4. (i) Explain M.O diagram for  $[NO_2]^{-1}$  ion.

8 marks

(ii) Explain Walsh diagram for bent shape of water ( $H_2O$ ) molecule.

6 marks

5. What is John - Teller effect? How does it influence the geometry of octahedral complexes, explain with suitable examples.

14 marks

**(OR)**

6. (i) Write the splitting of d- orbitals in octahedral and square pyramidal complexes. 8 marks

(ii) Discuss the effects of  $\pi$  - donor and  $\pi$ - acceptor ligands on  $\Delta_o$ .

6 marks

7. Determination of formation constant by.

14 marks

(i) Job's method (ii)  $P^H$  metric method

**(OR)**

8. (i) Write a brief note on Pearson Hard and Soft Acid Base theory.

8 marks

(ii) Explain Irving William series.

6 marks

9. Describe the structure, synthesis and properties of.

(i) B - N cyclic compounds (ii) P - N cyclic compounds.

14 marks

**(OR)**

10. (i) What are clathrate compounds.

3 marks

(ii) Analytical applications of Lanthanoids.

5 marks

(iii) Explain structure and bonding in dinitrogen complexes.

6 marks



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KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)

PG I - SEMESTER END EXAMINATIONS

Class : I M.Sc (OCH)  
Subject : Chemistry  
Title of Paper : Physical Chemistry-I  
Paper Code : R22ACH104 / R22 OCH 104  
W.E.F : 2022-23

Max Marks : 70  
Pass Mark : 28  
Duration : 3 Hrs  
Time : 9am to 12pm  
Date : 19/04/2023.

SECTION-A

I. Answer ALL Questions

5X14=70M

1. Discuss the quantum mechanics of 1-D box in detail. 14M  
(OR)
2. Derive Wave equation based on Operator concept. 14M
3. Discuss the following  
i) Entropy of mixing of Ideal gases ii) Classius-Clapeyron equation 7+7  
(OR)
4. a) What is Chemical Potential? Explain its variation with temperature and pressure 7M  
b) Write a short note on first and second law of thermodynamics. 7M
5. What are the drawbacks of Collision theory and how these are rectified by Transition state theory? Derive the thermodynamical formulation of rate constant. 14M  
(OR)
6. Discuss Primary & Secondary Salt effects. 7+7
7. Write a short note on the following  
i) Surfactants- Classification ii) Factors affecting CMC iii) Micro emulsions 6+6+2  
(OR)
8. Derive BET equation and explain its significance. 14M
9. a) Derive Nernst equation for EMF measurements. 7M  
b) Explain the determination of solubility product from EMF measurements. 7M  
(OR)
10. Derive an equation for EMF of Concentration Cells with transference & without transference. 14M.



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Room No: 221

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

|                |                                                             |            |               |
|----------------|-------------------------------------------------------------|------------|---------------|
| Class          | : I MCA, MBA, M.Sc. (ACH, OCH)                              | Max Marks  | : 70          |
| Subject        | : Management / <i>Chemistry</i>                             | Pass Mark  | : 28          |
| Title of Paper | : Personality Development through Life Enlightenment Skills | Duration   | : 3 Hrs       |
| Paper Code     | : R22MCA105/R22MBA107/R22ACH105/R22OCH105                   | Paper Time | : 9am to 12pm |
| W.E.F          | : 2022-23                                                   | Date       | : 24/04/2023  |

**SECTION -A**

**I. Answer ALL the following Questions.**

**5X14=70M**

1. Define Personality Development. Explain various Theories of Personality Development.  
(OR)
2. Explain the SWOT Analysis.
3. Explain about the various Theories of Motivation.  
(OR)
4. Define Self Esteem. Explain the Nature and Importance of Self Esteem.
5. Explain about dimensions of Emotional Intelligence and Building Emotional Intelligence.  
(OR)
6. Explain about Decision Making Skills and Leadership and Qualities of a Successful Leader.
7. Explain about Neetisatakam – Holistic Development of personality Verses.  
(OR)
8. Describe the Concept of Personality of Role Model.
9. Explain : 1 Instant Relaxation Technique.  
2 Quick Relaxation Technique.  
3 Deep Relaxation Technique.  
(OR)
10. Explain about the Anulom and Vilom Pranayama.