



MAHATMA GANDHI INSTITUTE OF TECHNOLOGY (Autonomous)
B.Tech. VII Semester End Examinations
(Common to CSE & IT)
(Model Question Paper)

MR-21

Course Title: Organizational Behaviour
Time: 3 hours

Course Code: MS705HS
Max. Marks : 70

Note: Answer ALL Questions
Part-A (10 x 2 = 20 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
1. a)	Define Organizational Behaviour	2	1	1	6
1. b)	Explain Attribution Error	2	2	1	6
Unit-II					
1. c)	Describe Job Satisfaction	2	2	2	12
1. d)	Explain Self-Efficacy	2	2	2	12
Unit-III					
1. e)	Define Communication	2	1	3	10
1. f)	What is intra-individual conflict?	2	2	3	6
Unit-IV					
1. g)	What is empowerment in a workplace context? Name one benefit of empowerment for employees.	2	3	4	6
1. h)	Define legitimate power in an organization.	2	3	4	6
Unit-V					
1. i)	Differentiate between leadership traits and leadership behaviors?	2	4	5	6
1. j)	What is socio-technical design?	2	4	5	6

Part-B (5 x 10=50 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
2. a)	Discuss the relationship between Organizational Behaviour and other disciplines.	5	2	1	6
2. b)	Describe the nature and importance of Perception	5	2	1	6
OR					
2. c)	Explain Weiner's attribution model	5	2	1	6
2. d)	Describe strategies of Impression Management.	5	2	1	12
Unit-II					
3. a)	Explain the nature and dimension of attitudes	5	2	2	8
3. b)	Distinguish between Maslow's and Herzberg's theory of motivation.	5	4	2	12
OR					
3. c)	Critically evaluate the determinants of Personality.	5	6	2	8
3. d)	Describe Emotional Intelligence and methods to improve it.	5	4	2	12
Unit-III					
4. a)	Differentiate between formal and informal communication.	5	4	3	10
4. b)	Distinguish between Individual and Group Decision Making.	5	4	3	9
OR					
4. c)	Describe strategies to cope with stress and conflict in the workplace.	5	4	3	6
4. d)	Illustratively explain the different types of conflict in organizations.	5	5	3	6
Unit-IV					
5. a)	Discuss the different types of power in organizations and provide an example for each.	5	3	4	6
5. b)	Describe the process of empowerment and its key determinants.	5	3	4	6
OR					
5. c)	Explain the dynamics and potential dysfunctions of informal groups in an organization.	5	4	4	9

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5. d)	Compare and contrast the nature and functions of groups and teams in organizational settings	5	4	4	9
Unit-V					
6. a)	Discuss how quality of work life (QWL) and high-performance work practices contribute to organizational success.	5	4	5	9
6. b)	Compare and contrast the major leadership theories: Trait theories, Behavioral theories, and Contingency approaches.	5	5	5	9
OR					
6. c)	Analyse how reinforcement and punishment can be applied to influence employee behavior in a workplace setting.	5	5	5	9
6. d)	Discuss the characteristics and effectiveness of different leadership styles: Autocratic, Democratic, and Free-rein.	5	2	5	9

M: Marks; L: Bloom's Taxonomy Level; CO: Course Outcome; PO: Programme Outcome



MAHATMA GANDHI INSTITUTE OF TECHNOLOGY (Autonomous)
B.Tech. VII Semester End Examinations
(Computer Science and Engineering)
(Model Question Paper)

MR-21

Course Title: Big Data Analytics
Time: 3 hours

Course Code: CS703PC
Max. Marks : 70

Note: Answer ALL Questions
Part-A (10 x 2 = 20 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
1. a)	List the various sources of structured data	2	4	1	1
1. b)	Differentiate between traditional data analysis approach and big data analysis approach	2	2	1	1
Unit-II					
1. c)	List out the critical components of Hadoop	2	4	1	1
1. d)	Write the features of Hadoop	2	2	1	2
Unit-III					
1. e)	Define Input Split	2	1	2	2
1. f)	Illustrate the purpose of MapReduce	2	1	2	2
Unit-IV					
1. g)	List HDFS Daemons	2	4	2	3
1. h)	What is the purpose of PIG framework	2	1	2	3
Unit-V					
1. i)	Differentiate Supervised learning with Unsupervised Learning.	2	3	3	2
1. j)	Define BigR	2	1	3	2

Part-B (5 x 10=50 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
2. a)	What is Big data? Why is big data analytics so important in today's digital era? Discuss about the various challenges with Big Data Analytics	4	1	1	2
2. b)	Explain Four V's of Big Data.	6	2	1	1
OR					
2. c)	Discuss what are the drivers used for Big Data	5	5	1	1
2. d)	Briefly Explain Big Data Analytics applications.	5	2	1	2
Unit-II					
3. a)	Explain the features of Cloud Computing and explain how cloud applications are used for Big Data	5	2	1	6
3. b)	What is Predictive analytics? Explain Benefits and applications of Predictive analytics	5	2	1	6
OR					
3. c)	Discuss about Mobile Business Intelligence	4	5	1	6
3. d)	Explain the following concepts a) Data Discovery b) Open source technology for Big Data Analytics	6	2	1	2
Unit-III					
4. a)	Explain in detail about Hadoop Eco System	6	2	2	2
4. b)	Write about inputs and outputs of Map Reduce	4	1	2	2
OR					
4. c)	Explain how data is moved in and out of Hadoop	5	2	2	2
4. d)	Discuss Data Serialization	5	5	2	3
Unit-IV					
5. a)	Draw and explain HDFS Architecture. Explain the function of NameNode and DataNode. What is a Secondary Namenode? Is it a substitute to the Namenode?	5	2	2	5

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5. b)	What are the various components of Hive architecture? Explain each one of them in detail with a neat diagram.	5	1	2	5
OR					
5. c)	Explain Anatomy of reading and writing a file.	4	2	2	2
5. d)	Describe the architecture of MapReduce along with its components with a neat diagram.	6	3	2	5
Unit-V					
6. a)	Discuss Mobile Analytics	5	5	3	6
6. b)	Explain Collaborative filtering	5	2	3	6
OR					
6. c)	Explain how Big Data is analyzed with BigR	5	2	3	2
6. d)	Write short notes on Social Media Analytics	5	3	3	6

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MAHATMA GANDHI INSTITUTE OF TECHNOLOGY (Autonomous)
B.Tech. VII Semester End Examinations
(Common to CSE & IT)
(Model Question Paper)

MR-21

Course Title: Full stack Development
Time: 3 hours

Course Code: CS712PE
Max. Marks : 70

Note: Answer ALL Questions
Part-A (10 x 2 = 20 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
1. a)	Mention some JavaScript Methods used in Full Stack Development	2	1	1	1
1. b)	Define 'Event Queue' in the context of Node.js.	2	1	1	1
Unit-II					
1. c)	What is JSON, and why is it commonly used in web development	2	1	2	1
1. d)	Compare HTTP and HTTPS protocols in Node.js.	2	2	2	1
Unit-III					
1. e)	Define collections in MongoDB and explain their significance in NoSQL databases.	2	2	3	1
1. f)	List and briefly describe the data types supported by MongoDB.	2	1	3	1
Unit-IV					
1. g)	Describe how to configure a route in Express.	2	2	4	1
1. h)	What are Angular directives? Provide examples.	2	2	4	1
Unit-V					
1. i)	What is the Virtual DOM in React?	2	1	5	1
1. j)	Briefly explain the role of lifecycle methods in React.	2	2	5	1

Part-B (5 x 10=50 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
2. a)	Explain the basic components of a web development framework with respect to Node.js and Angular stack components. Discuss how they interact within a full stack application.	5	2	1	1
2. b)	Describe the Node.js event model. Provide an example of how it handles asynchronous operations in a web server environment.	5	3	1	1
OR					
2. c)	Compare and contrast React and Angular in the context of full stack development. Discuss their respective advantages and use cases.	5	4	1	1
2. d)	Describe the process of creating a Node.js application.	5	3	1	1
Unit-II					
3. a)	Discuss how Node.js interacts with the file system. Explain how to perform basic file operations such as reading, writing, opening, and closing files, with examples.	5	3	2	1
3. b)	Explain the purpose and usage of additional Node.js modules such as 'os', 'util', 'dns', and 'crypto'. Provide examples of scenarios where each would be used.	5	2	2	1
OR					
3. c)	Describe how to work with JSON in Node.js. Provide an example of reading a JSON file and parsing its content.	5	3	2	1
3. d)	How do you implement HTTP services in Node.js? Describe the basic steps to create a simple HTTP server with a working example.	5	2	2	1
Unit-III					
4. a)	Explain the advantages of using NoSQL databases like MongoDB over traditional relational databases.	5	2	3	1

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4. b)	How do you access and manipulate collections in MongoDB using Node.js? Provide an example of inserting a document into a collection.	5	2	3	1
OR					
4. c)	Describe the steps involved in setting up and configuring a MongoDB environment for a Node.js application. Include considerations for security and performance.	5	2	3	2
4. d)	Discuss the importance of configuring access control in MongoDB. How can access control be implemented effectively? Provide an example.	5	3	3	1
Unit-IV					
5. a)	Explain how to set up a basic Express application and configure routes. Provide an example.	5	3	4	1
5. b)	Describe the process of creating a basic Angular application. Include the steps and commands needed.	5	3	4	2
OR					
5. c)	Explain the use of request and response objects in Express. How do they help in handling HTTP requests? Provide an example	5	2	4	1
5. d)	How can you implement Angular services in a web application? Provide an example of creating and using a service in an Angular project.	5	3	4	2
Unit-V					
6. a)	Explain the need for React in modern web development Discuss how it compares to other front-end frameworks.	5	2	5	1
6. b)	Explain the concept of data flow in React. How do props and state manage data in a React application? Provide examples.	5	2	5	1
OR					
6. c)	Describe the structure of a simple React application. Include an overview of components, state, and props.	5	2	5	1
6. d)	How do you create a React component? Provide an example of both a functional component and a class component, discussing their differences.	5	2	5	2

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MAHATMA GANDHI INSTITUTE OF TECHNOLOGY (Autonomous)
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(Model Question Paper)

MR-21

Course Title: Cloud Computing
Time: 3 hours

Course Code: CS716PE
Max. Marks : 70

Note: Answer ALL Questions
Part-A (10 x 2 = 20 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
1. a)	Define cloud computing and list its essential characteristics	2	1	1	1
1. b)	Explain the concept of virtualization in cloud computing.	2	2	1	1
Unit-II					
1. c)	What are the different deployment models in cloud computing?	2	1	2	2
1. d)	Describe the service models in cloud computing with examples	2	2	2	2
Unit-III					
1. e)	Illustrate the concept of Service Level Agreements (SLA) in cloud computing	2	3	3	3
1. f)	Explain the importance of cloud security.	2	2	3	4
Unit-IV					
1. g)	What is the significance of cloud storage and data management in cloud computing?	2	2	4	3
1. h)	Discuss cloud-based collaboration tools and their benefits.	2	3	4	5
Unit-V					
1. i)	Compare and contrast cloud computing and traditional IT infrastructure.	2	4	3	2
1. j)	How does cloud computing contribute to green computing?	2	3	4	3

Part-B (5 x 10=50 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
2. a)	Explain in detail the architecture of cloud computing.	5	3	1	1
2. b)	Discuss the benefits and challenges of enterprises adopting cloud computing.	5	4	1	1
OR					
2. c)	Analyze the role of virtualization in cloud computing.	5	4	1	2
2. d)	Evaluate the impact of cloud computing on IT costs.	5	4	1	3
Unit-II					
3. a)	Describe the various cloud service models (IaaS, PaaS, SaaS) with examples.	5	3	2	2
3. b)	Assess the risks associated with cloud deployment models.	5	4	2	2
OR					
3. c)	Explain the process of deploying applications on the cloud.	5	3	2	2
3. d)	Analyze the factors to consider while selecting an organization's cloud deployment model.	5	4	2	3
Unit-III					
4. a)	Explain the different types of Service Level Agreements (SLAs) in cloud computing.	5	3	3	4
4. b)	Discuss the strategies for ensuring data security in cloud computing.	5	4	3	4
OR					
4. c)	Evaluate the importance of compliance in cloud computing environments.	5	4	3	3
4. d)	Analyze the challenges associated with maintaining cloud security.	5	4	3	2
Unit-IV					
5. a)	Describe the architecture of cloud storage systems.	5	3	4	3
5. b)	Discuss the benefits and drawbacks of cloud-based data management.	5	3	4	4

P.T.O.

OR					
5. c)	Explain the process of data migration to the cloud.	5	3	4	2
5. d)	Evaluate the challenges in cloud data storage security.	5	4	4	4
Unit-V					
6. a)	Discuss the economic impact of cloud computing on businesses.	5	3	4	2
6. b)	Explain how cloud computing supports sustainable IT practices.	5	3	2	2
OR					
6. c)	Compare the cost-effectiveness of cloud computing with traditional IT solutions.	5	4	2	3
6. d)	Analyze the role of cloud computing in digital transformation.	5	2	3	3

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Note: Answer ALL Questions

Part-A (10 x 2 = 20 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
1. a)	What is Rapid prototyping and explain the advantages of Rapid prototyping	2	1	1	5
1. b)	What are the advantages of Rapid Prototyping	2	1	1	5
Unit-II					
1. c)	What is the difference between Additive and Subtractive process of manufacturing?	2	2	2	1,5
1. d)	Explain the terms a) photopolymerization b) Laser Scanning	2	2	2	1,5
Unit -III					
1. e)	Explain the working principle of Fused Deposition Modelling (FDM)	2	2	3	5
1. f)	Write a short note on 3D scanning with examples	2	1	3	5
Unit -IV					
1. g)	Mention various types of softwares used in 3D printing	2	1	4	5
1. h)	What do you mean by the term Design for Manufacturing	2	2	4	5
Unit -V					
1. i)	Categorize applications of rapid prototyping technology in manufacturing industries	2	2	5	5
1. j)	Explain materials commonly used for 3D printing as per application	2	1	5	5

Part-B (5 x 10=50 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
2. a)	Explain pre-processing and post processing in detail.	5	2	1	1,5
2. b)	Summarize the key aspects of rapid prototyping. Explain with an example the historical development of rapid prototype technologies.	5	2	1	1,5
OR					
2. c)	Explain the Generic RP process with neat sketch.	5	1	1	1,5
2. d)	Explain rapid prototyping. Explain the difference between traditional prototyping and rapid prototyping.	5	1	1	1,5
Unit-II					
3. a)	What are the factors that influence the performance of the 3D printing process? Explain in detail.	5	2	2	1,5
3. b)	Explain various types of 3D printing technologies. Briefly explain the procedure for Stereolithography.	5	1	2	1,5
OR					
3. c)	List various materials used in 3D printing by featuring various desired properties along with applications.	5	2	2	1,5
3. d)	What is Laser Scanning? Explain advantages and disadvantages of Liquid based 3D printing compared to others in terms of accuracy.	5	2	2	1,5
Unit-III					
4. a)	What are merits and demerits of laminated object manufacturing?	5	1	3	1,5
4. b)	Explain the path generation in fusion decomposition modelling (FDM).	5	2	3	1,5

OR					
4. c)	Describe laminated object manufacturing (LOM) process.	5	1	3	1,5
4. d)	Describe the process of fused deposition modelling and list the factors that affect the part quality.	5	2	3	1,5
Unit-IV					
5. a)	Briefly Discuss on STL files and define slicing relevant to CAD.	5	2	4	1,5
5. b)	Briefly explain various file formats used in 3D printing.		1	4	1,5
OR					
5. c)	Briefly explain the functions of production planning and control.	5	2	4	1,5
5. d)	Explain in detail the structure of .STL file format and enlighten the importance of .STL file format in Rapid Prototyping.	5	2	4	1,2,5
Unit-V					
6. a)	What are the common applications of 3D printing?	5	1	5	1,5,12
6. b)	Can 3D printing technology completely replace other manufacturing technologies in future? Discuss.	5	3	5	1,5,12
OR					
6. c)	Explain with use cases various applications of 3D printing based on material selected.	5	2	5	1,5
6. d)	Mention various Industries that use 3D printing and discuss which Industry is greatly influenced by Rapid prototyping with suitable examples?	5	3	5	1,5

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