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

MR-21

Course Title: Microwave and Optical Communications   **Course Code: EC701PC**
Time: 3 hours   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 the limitations of Conventional tubes at Microwave frequencies	2	1	1	1
1. b)	Classify the Linear Beam tubes.	2	3	1	4
	Unit-II				
1. c)	What is the need of Strapping in Magnetron?	2	1	2	1
1. d)	Draw the V-I characteristics of Gunn Diode.	2	2	2	2
	Unit-III				
1. e)	What is an Isolator?	2	1	3	1
1. f)	Write about Matched Load?	2	4	3	5
	Unit-IV				
1. g)	What are the properties of S - matrix?	2	5	4	1
1. h)	What precautions need to take while measuring the microwave parameters?	2	3	4	5
	Unit-V				
1. i)	What is Snell's law?	2	3	5	1
1. j)	Write about different types of light sources.	2	2	5	3

Part-B (5 x 10=50 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
	Unit-I				
2. a)	Describe the classification of Crossed field tubes?	5	1	1	1
2. b)	Using Applegate diagram describe the operational principle of a Reflex klystron Oscillator?	5	2	1	3
	OR				
2. c)	What are the difference between Two cavity Klystron amplifier and TWT?	5	3	1	2
2. d)	Derive an expression for efficiency of a two cavity klystron amplifier starting from the basic principles.	5	2	1	3
	Unit-II				
3. a)	Describe the principle of operation for Gunn effect diodes.	5	1	2	2
3. b)	An n-type GaAs Gunn diode has following parameters. Electron drift velocity Vd = 2.5×10^{5} m/s, Negative Electron mobility $|\mu n|$ = 0.015 m²/v-s, Relative dielectric constant εr = 13.1, Determine the criterion for classifying the modes of operation.	5	3	2	1
	OR				
3. c)	Classify the Microwave solid state devices.	5	4	2	3
3. d)	Describe the principle of operation of IMPATT diode.	5	2	2	4
	Unit-III				
4. a)	Discuss in detail about the Ferrite compositions and characteristics.	5	1	3	4
4. b)	Describe the constructional details and operational principle of Gyrator. Write the S - matrix for Gyrator	5	1	3	5
	OR				
4. c)	Explain the principle of faraday rotation.	5	3	3	3
4. d)	Draw the structure diagram of E plane Tee and explain its Characteristics.	5	4	3	6

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	Unit-IV				
5. a)	Calculate the VSWR of a transmission system operating at 10 GHz. Assuming TE_{10} wave of dimensions a = 4 cm, b = 2.5 cm. The distance measured between twice minimum power points = 1 mm on a slotted line	5	5	4	2
5. b)	Describe the method to measure frequency of a microwave signal?	5	2	4	3
	OR				
5. c)	A directional coupler of 10 dB coupling factor and 40dB directivity produces a transmission loss of 1 dB. For an input power of 10 mW at the input port of the main arm, determine the power at the other ports	5	2	4	4
5. d)	Describe how the High value of VSWR can be measured using double minima method	5	1	4	5
	Unit-V				
6. a)	Describe briefly about optical fiber configurations?	5	4	5	3
6. b)	What are the different types of Optical sources? Explain?	5	2	5	1
	OR				
6. c)	Write about Optical fiber system link budget?	5	2	5	3
6. d)	Explain the losses in Optical fiber cables?	5	1	5	6

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

Course Title: Internet of Things and Its Applications   **Course Code: EC702PC**
Time: 3 hours   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)	What is the role of things in IoT?	2	2	1	1
1. b)	What are the technologies that enable IoT?	2	2	1	1
	Unit-II				
1. c)	What are the limitations of SNMP?	2	3	2	1
1. d)	What is the difference between configuration and state data?	2	3	2	1
	Unit-III				
1. e)	List out the difference between lists and tuple?	2	2	3	1
1. f)	What are the control flow statements in Python?	2	1	3	1
	Unit-IV				
1. g)	What is the use of GPIO pins?	2	2	4	1
1. h)	What are the various interfaces in IoT?	2	1	4	1
	Unit-V				
1. i)	List the applications of IoT?	2	1	5	1
1. j)	What is the function of URL patterns in Django?	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)	What is an IoT? Explain the characteristics of an IoT in detail?	5	2	1	1
2. b)	Draw and explain the functional blocks of an IoT in detail?	5	1	1	1
	OR				
2. c)	Draw the layered architecture of IoT protocols and explain the link layer protocols in brief?	5	2	1	2
2. d)	Describe the communication models used in IoT with an example?	5	1	1	1
	Unit-II				
3. a)	What are the differences between M2M and IoT?	5	2	2	1
3. b)	Explain the key elements of SDN architecture with a neat diagram?	5	1	2	1
	OR				
3. c)	Describe the need for IoT systems management?	5	2	2	1
3. d)	Discuss the IoT systems management with NETCONF and YANG?	5	3	2	2
	Unit-III				
4. a)	Explain the following concepts in python with an example? i) Dictionary ii) Modules	5	2	3	1
4. b)	Explain the following file operations in python with an example? i) Open ii) Read iii) Write	5	3	3	2
	OR				
4. c)	Write a python program for sending email using SMTPLib?	5	3	3	3
4. d)	Write short notes on python libraries in brief?	5	2	3	1
	Unit-IV				
5. a)	Explain the SPI and I2C interfaces on Raspberry Pi board?	5	1	4	1
5. b)	Write a program for interfacing LED and Switch with Raspberry Pi?	5	3	4	3

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	OR				
5. c)	Describe the components of Raspberry Pi board in detail?	5	1	4	1
5. d)	Give the list of commands used on Raspberry Pi board?	5	1	4	1
	Unit-V				
6. a)	Describe the components of Web Application Messaging Protocol in detail?	5	1	5	1
6. b)	Explain the architecture of python web application framework Django in detail?	5	2	5	1
	OR				
6. c)	Describe the process involved in collecting and processing of data in Xively Cloud?	5	3	5	2
6. d)	Discuss the role of IoT in the following areas. i) Smart City ii) Smart Parking	5	3	5	2

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

MR-21

Course Title: Pattern Recognition and Machine Learning **Course Code: EC714PE**
Time: 3 hours 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 Un-supervised learning and provide an example.	2	2	1	1
1. b)	Briefly describe the curse of dimensionality and its impact on machine learning models.	2	3	1	1
	Unit-II				
1. c)	Define bias and variance in the context of a predictive model.	2	2	2	1
1. d)	Explain the role of the sigmoid function in logistic regression.	2	2	2	1
	Unit-III				
1. e)	Briefly explain the role of hyperparameters in Gaussian processes.	2	3	3	1
1. f)	Define the concept of a maximum margin classifier in support vector machines (SVMs).	2	2	3	1
	Unit-IV				
1. g)	What is a generative model in the context of Bayesian networks?	2	2	4	1
1. h)	Briefly describe the purpose of the sum-product algorithm in graphical models.	2	3	4	1
	Unit-V				
1. i)	How is the maximum likelihood estimation used in the context of Gaussian mixture models?	2	2	5	1
1. j)	What are tree-based models in the context of machine learning, and what are their primary advantages?	2	3	5	1

Part-B (5 x 10=50 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
	Unit-I				
2. a)	Discuss the concept of regularization in polynomial curve fitting. How does it help in preventing overfitting? Illustrate with equations.	5	2	1	2
2. b)	Consider a dataset where the target variable t is a function of independent variable x. Fit a linear model of degree 1 to the data and calculate the mean squared error. The dataset is given as (x,t) = {(1,2), (2,4), (3,6), (4,8)}.	5	2	1	2
	OR				
2. c)	Discuss the concept of model selection in machine learning. How does cross-validation assist in model selection?	5	3	1	1
2. d)	Describe the process of minimizing misclassification in decision theory. How is the decision boundary determined in this context?	5	2	1	1
	Unit-II				
3. a)	Compare the advantages of regularized least squares over standard least squares mechanism.	5	3	2	2
3. b)	Consider a dataset with two input variable x1 and x2 and a target variable t. Sequentially update the parameters of a linear regression model using the data points {(1,2), (2,4), (3,6)}. Calculate the parameters after each update.	5	2	2	2
	OR				
3. c)	Discuss the concept of Bayesian model comparison. How does it differ from traditional model selection methods?	5	3	2	1
3. d)	Explain how multiclass logistic regression extends binary logistic regression.	5	2	2	2

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	Unit-III				
4. a)	Discuss how Gaussian processes can be used for regression. What is the role of covariance function in making predictions?	5	2	3	1
4. b)	Explain the Laplace approximation method in the context of Gaussian processes for classification?	5	2	3	2
	OR				
4. c)	Describe the concept of support vector regression. How does it differ from support vector classification?	5	3	3	2
4. d)	Given two input vectors x1 = [1,2] and x2 = [2,3], construct a polynomial kernel of degree 3. Calculate the kernel value and interpret its meaning.	5	3	3	2
	Unit-IV				
5. a)	Discuss two different example graphs that illustrate conditional independence. How do these examples help in understanding the concept?	5	2	4	2
5. b)	Consider a Bayesian network with nodes A, B, C, and D. The edges are A→B, A→C, and C→D. Determine whether A is independent of D given B. Use D-separation to justify your answer.	5	2	4	2
	OR				
5. c)	Describe the relationship between Markov Random Fields and directed graphical models. What are the key differences and similarities?	5	3	4	1
5. d)	Explain the challenges of exact inference in general graphical models. Discuss any one method used to perform exact inference.	5	2	4	1
	Unit-V				
6. a)	Explain the EM algorithm as applied to Gaussian mixture models. What are the key steps in the EM algorithm?	5	2	5	1
6. b)	Discuss the concept of mixtures of experts in combining models. How are these models trained?	5	2	5	1
	OR				
6. c)	What is the objective of the K-means clustering algorithm? Explain the steps involved in the algorithm.	5	2	5	1
6. d)	How is the EM algorithm for Gaussian mixtures related to the K-means clustering algorithm?	5	3	5	1

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

MR-21

Course Title: Cellular and Mobile Communications   **Course Code: EC711PE**
Time: 3 hours   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)	Explain Coherent Bandwidth.	2	1	1	1-4
1. b)	Explain frequency reusing in cellular system.	2	1	1	1-4
Unit-II					
1. c)	What is non-co channel interference?	2	2	2	1-4
1. d)	What are the antenna parameters that effect the received signal	2	1	2	1-4
Unit-III					
1. e)	What is near end interference?	2	2	3	1-4
1. f)	Explain straight line path loss.	2	3	3	1-4
Unit-IV					
1. g)	What is delay Hand-off? Explain?	2	2	4	1-4
1. h)	What id drop call?	2	2	4	1-4
Unit-V					
1. i)	Give few applications of Ad hoc Wireless networks.	2	3	5	1-4
1. j)	What are the applications of MAC Protocol?	2	1	5	1-4

Part-B (5 x 10=50 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
2. a)	Explain the limitations of conventional telephone communication.	5	1	1	1-4
2. b)	Describe the uniqueness of mobile radio communication.	5	3	1	1-4
OR					
2. c)	Explain the concept of frequency reusing and mention the significance of frequency reusing	5	2	1	1-4
2. d)	Explain the working of basic cellular system using necessary elements.	5	1	1	1-4
Unit-II					
3. a)	List out the types of non-co channel interference and mention their effects on cellular system.	5	2	2	1-4
3. b)	What are the effect on coverage of a cell and interference by decreasing the carrier power and antenna height	5	3	2	1-4
OR					
3. c)	Define Diversity reception and explain any one technique of diversity used in cellular system.	5	2	2	1-4
3. d)	Discuss the merits of point to point model and Explain Umbrella antenna pattern.	5	3	2	1-4
Unit-III					
4. a)	Explain mobile propagation over water and Flat open area.	5	2	3	1-4
4. b)	What is Lee model and Explain the merits of the model.	5	1	3	1-4
OR					
4. c)	Explain the concepts of Adjacent channel assignment and channel sharing.	5	2	3	1-4
4. d)	Explain the concept of channel setup by considering access channel and paging channel	5	1	3	1-4
Unit-IV					
5. a)	Explain in-detail about different types of Handoff and mention the significance of each in cellular system.	5	3	4	1-4

		M	L	CO	PO
5. b)	Explain in-detail about Mobile assisted Handoff and compare with soft Handoff.	5	2	4	1-4
OR					
5. c)	Define Dropped call rate and explain evaluation procedures in the cellular system.	5	2	4	1-4
5. d)	What are the various methods of delaying the handoff? Explain briefly.	5	3	4	1-4
Unit-V					
6. a)	Discuss the issues in Ad hoc Wireless networks.	5	2	5	1-4
6. b)	Explain design goals of AMAC protocol for Ad hoc Wireless networks.	5	1	5	1-4
OR					
6. c)	Briefly explain issues in designing AMAC protocol for Ad hoc Wireless networks.	5	2	5	1-4
6. d)	Classify MAC Protocol in-detail with neat diagrams.	5	2	5	1-4

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MAHATMA GANDHI INSTITUTE OF TECHNOLOGY (Autonomous)
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MR-21

Course Title: Cloud Computing   **Course Code: EC718PE**
Time: 3 hours   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)	What is cloud computing? Why it is needed?	2	1	1	1
1. b)	Explain the concept of cloud ecosystem.	2	2	1	1
	Unit-II				
1. c)	Explain the different deployment models in cloud computing?	2	1	2	2
1. d)	List and explain the service models in cloud computing with examples	2	2	2	2
	Unit-III				
1. e)	Define Infrastructure as a Service in cloud computing with example	2	3	3	3
1. f)	Give detail about the characteristics of PaaS	2	2	3	4
	Unit-IV				
1. g)	Differentiate between Public and Private clouds	2	2	4	3
1. h)	What are the advantages of using Community cloud?	2	3	4	5
	Unit-V				
1. i)	What do you mean by Cloud service provider? Explain.	2	4	3	2
1. j)	Explain SAP HANA cloud in brief.	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 requirements of cloud services.	5	3	1	1
2. b)	Explain in detail about the benefits and challenges of enterprises adopting cloud computing.	5	4	1	1
	OR				
2. c)	What is virtualization? List and explain the types of virtualization in cloud computing.	5	4	1	2
2.d)	Discuss in detail about Networking technologies used in cloud computing.	5	4	1	3
	Unit-II				
3. a)	Explain in detail the Phases of Cloud Migration	5	3	2	2
3. b)	What are issues associated with cloud deployment models? Explain	5	4	2	2
	OR				
3. c)	Describe the various cloud service models (IaaS, PaaS, SaaS) with examples.	5	3	2	2
3. d)	What are advantages and disadvantages of cloud deployment model? Explain	5	4	2	3
	Unit-III				
4. a)	Explain in detail about the principles of cloud computing.	5	3	3	4
4. b)	What is Software-as-a-Service (SaaS)? Explain the characteristics of SaaS.	5	4	3	4
	OR				

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		M	L	CO	PO
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)	Differentiate between Virtual machines and elastic computing with examples.	5	3	4	3
5. b)	How to achieve security through Virtualization? Explain	5	3	4	4
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)	Explain about support services offered by Amazon Web Services in cloud computing	5	3	4	2
6. b)	Explain in detail different security issues in cloud computing.	5	3	2	2
OR					
6. c)	What is Google Cloud Print? What are its advantages? Explain.	5	4	2	3
6. d)	What do you mean by cloud service provider? Explain about any 2 service providers in detail.	5	2	3	3

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

B.Tech. VII Semester End Examinations
(Common to ECE & CSE)
(Model Question Paper)

Course Title: **Fundamentals of 3D Printing Technology**   Course Code: **ME722OE**
Time: 3 hours   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)	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

		M	L	CO	PO
	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

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

MAHATMA GANDHI INSTITUTE OF TECHNOLOGY (Autonomous)
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MR-21

Course Title: Remote Sensing and GIS **Course Code: CE722OE**
Time: 3 hours 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 a steoroscope.	2	1	1	1, 12
1. b)	Classify of aerial photographs.	2	4	1	1, 12
	Unit-II				
1. c)	Compare Sun synchronous and Geosynchronous orbit.	2	4	2	1, 3,12
1. d)	Explain the term IRS with suitable examples.	2	2	2	1, 3,12
	Unit-III				
1. e)	What is map projection?	2	1	3	1,2, 3
1. f)	Explain how will you link spatial and attribute data.	2	2	3	1, 2,3
	Unit-IV				
1. g)	What is coverage? In which formats you can store?	2	1	4	1,5
1. h)	Illustrate a Geodatabase?	2	1	4	1,5
	Unit-V				
1. i)	Explain metadata.	2	5	5	1,5
1. j)	What is meant by Scanning? In which format output will be generated?	2	1	5	1,5

Part-B (5 x 10=50 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
	Unit-I				
2. a)	Draw and develop a neat sketch of geometry of a vertical aerial photograph.	5	3	1	1, 12
2. b)	What is vertical exaggeration? How will you determine vertical exaggeration?	5	1	1	1, 12
	OR				
2. c)	What is relief displacement of aerial photograph? Explain with a neat sketch.	5	1	1	1, 12
2. d)	Explain how parallax measurements are done using fiducial line.	5	5	1	1, 12
	Unit-II				
3. a)	What are the types of scattering? Explain.	5	1	2	1, 3,12
3. b)	Explain and analyse different data collection methods in remote sensing.	5	4	2	1, 3,12
	OR				
3. c)	What are the types of resolutions involved in remote sensing? Explain.	5	1	2	1, 3,12
3. d)	What do you mean by digital image processing? Explain basic processes involved.	5	1	2	1, 3,12
	Unit-III				
4. a)	Explain different operations performed in GIS.	5	2	3	1,2, 3
4. b)	What is UTM projection? Explain in detail.	5	1	3	1, 2,3
	OR				
4. c)	Distinguish between manual digitization and automated digitization.	5	4	3	1,2, 3
4. d)	List the different data analysis methods in GIS? Brief them.	5	4	3	1, 2,3
	Unit-IV				

P.T.O.

		M	L	CO	PO
5. a)	Elaborate the process of TIN generation. Give applications of TIN.	5	3	4	1,5
5. b)	What are the different vector models available? Give advantages of each.	5	1	4	1,5
OR					
5. c)	Analyze the different methods of compacting vector data.	5	4	4	1,5
5. d)	Explain POLYVRT and GBF/DIME model.	5	3	4	1,5
Unit-V					
6. a)	What impact does grid cell size have on the locational accuracy?	5	1	5	1,5
6. b)	Elaborate how you will store point, line and area in raster system.	5	3	5	1,5
OR					
6. c)	Explain run length encoding and raster chain method of data compression.	5	2	5	1,5
6. d)	What is the significance of source map?	5	1	5	1,5

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