



K. K. Wagh Institute of Engineering Education & Research, Nashik
(An Autonomous Institute From A.Y. 2022-23)

WINTER-2025	
Exam Seat No.:	
Academic Year:2025-2026	Semester:IV
Class:SY	Program:B.Tech
Branch Code:CIV	Pattern:2023
Name of Course:Remote Sensing & GIS	Course Code:2304216
Max. Marks:60	Duration:2.30 Hrs.

Instructions: Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use.

1. This question paper contains two page(s).
2. Answer to each new question is to be started on a new page.
3. Assume suitable data wherever required, but justify it.
4. Draw the neat labelled diagrams, wherever necessary.
5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question.

	Marks	CO
Question No. 1		
1a) Define remote sensing. What is its importance?	(6)	CO1
Question No. 2		
2a) Explain types and characteristics of remote sensing sensors.	(6)	CO2
Question No. 3		
3a) Give a brief account of Origin of Global positioning system.	(5)	CO3
OR		
3b) Express the concept of augmentation and explain about satellite-based augmentation.	(5)	CO3
3c) Compare different GNSS Systems throughout the world.	(5)	CO3
OR		
3d) Summarize the necessity of GNSS in various fields.	(5)	CO3
3e) Describe briefly the concept of three-dimensional position location via intersection of multiple spheres.	(6)	CO3
OR		
3f) Describe the different sources of error in GPS	(6)	CO3
Question No. 4		
4a) Discuss applications of GIS in civil engineering.	(5)	CO4
OR		
4b) Write in detail about various components of GIS.	(5)	CO4
4c) List down the differences between drafting software's and GIS.	(5)	CO4
OR		

- 4d) Illustrate the Geographical Information System and state Spatial Data types. (5) CO4
4e) Explain the role of layer combination in map making. (6) CO4

OR

- 4f) Compare the various definitions of GIS used globally. (6) CO4

Question No. 5

- 5a) Classify the Raster and Vector Data types with neat diagram. (5) CO5

OR

- 5b) Differentiate different Attribute Data models and explain any one of them. (5) CO5

- 5c) Outline the Georeferencing of GIS data? And explain its importance in the field of GIS? (5) CO5

OR

- 5d) Explain the application of GIS in Urban Planning. (5) CO5

- 5e) Enlist the applications of GIS in Civil Engineering & Explain any one in detail. (6) CO5

OR

- 5f) Illustrate the different projection systems and explain any one in detail. (6) CO5

..... End of question paper.....