



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

SUMMER-2024	
Exam Seat No.:	
Academic Year:2023-2024	Semester:IV
Class:SY	Program:B.Tech
Branch Code:CIV	Pattern:2022
Name of Course:Remote Sensing and GIS	Course Code:CIV222014
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 pages.
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.

**Question No. 1 Attempt following Question**

- 1 Discuss briefly the development of remote sensing in India and its utility. (6) CO1

**Question No. 2 Attempt following Question**

- 2 List various open-source satellite data portals. (6) CO2

**Question No. 3 Attempt following Question**

- 3.a) Express the concept of augmentation and explain about satellite-based augmentation (6) CO3

**OR**

- 3.b) What are the three segments of GPS? Describe them briefly. (6) CO3

- 3.c) Illustrate the advantages and disadvantages of GNSS. (5) CO3

**OR**

- 3.d) Describe briefly the concept of three-dimensional position location via intersection of multiple spheres (5) CO3

- 3.e) Summarize the necessity of GNSS in various fields. (5) CO3

**OR**

- 3.f) Describe the different sources of error in GPS. (5) CO3

**Question No. 4 Attempt following Question**

- 4.a) Illustrate Cloud computing with types and applications. (6) CO4

**OR**

4.b) Write in detail about various components of GIS. (6) CO4

4.c) List down the differences between drafting software's and GIS. (5) CO4

**OR**

4.d) Interpret the fundamentals of Cartography and map creation in GIS. (5) CO4

4.e) Discuss the spatial and non-spatial data with example. (5) CO4

**OR**

4.f) Compare the various definitions of GIS used globally. (5) CO4

**Question No. 5 Attempt following Question**

5.a) Classify the Raster and Vector Data types. Explain with neat diagram. (6) CO5

**OR**

5.b) Differentiate various Attribute Data models and explain any one of them. (6) CO5

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

**OR**

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

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

**OR**

5.f) Categorize the different Database? Name the types of database. (5) CO5

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