



# SHRI VISHWAKARMA SKILL UNIVERSITY

(A State Skill University, setup by an Act of Legislature in 2016)

188053

**Course** : PGD in Geo Informatics  
**Subject** : Fundamentals of GIS & Digital Cartography  
**Subject Code** : KPGE-101  
**Semester** : First  
**Duration** : 3 Hours  
**Maximum Marks** : 35

---

## Instructions to the Students

1. This Question paper consists of two Sections. All sections are compulsory.
2. **Section A** comprises ten questions of objective type in nature. All questions are compulsory. Each question carries one mark.
3. **Section B** comprises eight essay type questions out of which students need to do any five. Each question carries five marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled.

**Roll Number**

--	--	--	--	--	--	--	--	--	--	--	--	--

**SECTION -A (OBJECTIVE TYPE QUESTIONS)****(10x1=10 Marks)**

All questions in this section are compulsory. Each question carries one mark.

1. What do you understand by Hierarchical Database?
2. What is a Digital Elevation Model (DEM)?
3. Define Mercator projection.
4. Differentiate between DBMS and RDBMS?
5. What is meant by Overlaying in GIS?
6. What is Thematic mapping?
7. Define Metadata.
8. Define Positional Accuracy.
9. Differentiate between Raster and Vector data.
10. Define Topology.

**SECTION -B (ESSAY TYPE QUESTIONS)****(5x5=25 Marks)**

11. Define GIS. Describe various components of GIS with suitable examples.
12. Describe Conical and Cylindrical Projections. What are the advantages and disadvantages of both?
13. What is a database? Describe different types of databases with suitable examples.
14. What is Spatial data model? Describe different types of data models used in GIS with their advantages and disadvantages.
15. Describe different methods of data capturing in GIS and the associated errors.
16. Describe different data quality parameters and accuracies required in creating GIS database.
17. What is a Spatial Data Infrastructure (SDI)? Explain various SDIs being developed at Global and National level.
18. Describe logical, boolean and arithmetical operations and functions in used in data analysis.

-----End of Paper-----