

**PG (NEW) CBCS**  
**M.A. /M.Sc. Semester-IV Examination, 2020**  
**GEOGRAPHY**  
**PAPER: GEO 495 (PRACTICAL)**  
**(GEODESY AND GIS)**

**Full Marks: 40****Time: 4 Hours**

**Write the answer for each unit in separate sheet**

**UNIT-I**

**495.1: MAP TRANSFORMATION AND GEODESY**

Answer any one question of the following:

**20X1=20**

1. Draw the graticules of Mollweide's projection at 30<sup>0</sup> intervals, where the radius of the generating globe is 2.50 cm with its principle and properties. What are the principles of choosing of map projection? 15+5
2. Elaborately discuss co-ordinate system that generally used in map transformation.
3. Draw the graticules of Mercator's projection at 20<sup>0</sup>-degree interval on scale 1: 290 x 10<sup>6</sup> for whole globe with its principles, construction and uses. What is scale factor? 15+5
4. Write short note about WGS-84 and Everest spheroid. What is geoid? 20
5. Draw the graticules of Simple Conical projection with II standard parallels for the extension of 20<sup>0</sup> degree north to 80<sup>0</sup> north and 120<sup>0</sup>-degree east to 20<sup>0</sup>-degree west on scale 1: 160 x 10<sup>6</sup>. What is UTM grid system? 15+5
6. Write down the importance of map projection in GIS. What is spheroid? What are the types of distortion that occur during map transformation? 20

**UNIT-II**

**(GEO 495.2: GEOGRAPHIC INFORMATION SYSTEM)**

Answer any one question of the following:

**20x1=20**

1. How raster data structure different from vector data structure. 20
2. Give a structure of Web GIS and state two prospective and constrains of Web GIS. 20
3. Write a short note on GPS Segment. 20
4. Give a brief account of Watershed mapping using 3D GIS. 20
5. Write a short note on the components of GIS. 20
6. Describe the working principle of GNSS and GDPS. 20