Total number of printed pages-3

6 SEM TDC GGR M1

2021

(August/September)

GEOGRAPHY

(Major)

Course: 601

(Map Projection and Cartographic Methods)

Full Marks: 24

Pass Marks: 08

Time: $2/1\frac{1}{2}$ hours

The figures in the margin indicate full marks for the questions.

Answer any three questions of the following.

1. Which map projection would you select for a map of South America to show population distribution? Justify your selection. Derive the formula to draw the graticule of the said projection with given Extension (12°N to 55°S & 35°W to 81°W) R F (1:250,000,000) and interval (15°).

1+2+5=8

2. Give your views why Mercator's Projection is specially used for navigation purposes. Derive the formula to draw graticule of the said projection with given RF 1:250,000,000) and interval (15°).

3+5=8

- 3. What is Plane Table Surveying? Write *two* advantages and disadvantages each of Plane Table Survey. Prepare a hypothetical plan to conduct Plane Table Survey for an area of 10 square metre considering two instrument stations, say "A" and "B" and at least six different objects by Intersection Method.

 1+2+5=8
- 4. In a Prismatic Compass Survey following field data have been collected. On the basis of such field information, calculate the included angles of the traverse. Prove your result. Write one advantage and disadvantage each of Prismatic Compass Survey.

 5+2+1=8

Line	Fore Bearing (FB)	Back Bearing (BB)
AB	150°30′	330°30′
ВС	80°45′	260°45′
CD	350°15′	170°15′
DE	280°30′	100°30′
EA	212°50′	32°50′

- 5. In explaining the functions of GIS highlight the forms of spatial data and non-spatial data in your own words.
- 6. Explain in your own words how GPS can suitably be used in different fields of study and mention its *two* advantages and disadvantages each. 6+2=8