6 SEM TDC GGR M 1

2 0 1 9

(May)

GEOGRAPHY

(Major)

Course : 601

(Map Projection and Cartographic Methods)

Full Marks : 48

Pass Marks : 19/14

Time : 2 hours

The figures in the margin indicate full marks
for the questions

1. Answer the following as directed : 1×6=6

(a) No projections can provide true shape to areas of wide dimensions.

(Write True *or* False)

(b) In all the ____ projections, direction from the centre to any point is correct.

(Fill in the blank)

(Turn Over)

(c) Alidade is used in _____ surveying.

(Fill in the blank)

(d) The line of collimation is also called the line of sight.

(Write True or False)

(e) A set of coordinates stored in the GPS as locations are called _____.

(Fill in the blank)

(f) What is the full form of FCC?

2. Write short notes on the following (within **100** words each) : 4×3=12

(a) Mercator's Projection

(b) Open and closed traverse survey

(c) Digital cartography

UNIT—I

(Map Projection)

3. Describe the history of the development of map projections mentioning the important contributions of different scholars. 10

Or

What is map projection? What map projection will you select to show the vast grasslands of the world? Justify your selection. Derive the formula to draw the projection of your choice. Mention its properties and limitations. 1+1+1+5+2=10

UNIT—II

(Cartography)

4. In running a closed traverse survey given below, the length and bearing of the line *DA* could not be measured due to the presence of some obstructions between *A* and *D*. Calculate the length and bearing of the line *DA* : 5+5=10

Line	Length (in meter)	Bearing
AB	38	215°30'
BC	55	164°45'
CD	85	35°0'
DA	—	—

Or

What is reciprocal levelling? Find out *(a)* the difference of level between *P* and *Q* and *(b)* the true reduced level (RL) of *Q* from the following notes referred to reciprocal levelling taken with one level : 2+4+4=10

Field book

Instrumental station	Staff reading on (in meter)		Remarks
	P	Q	
P	1·824	2·748	RL of *P* =
Q	0·928	1·606	126·386 meter

UNIT—III

(Modern Cartographic Method)

5. What is GIS? What are the components of GIS? Mention the application of GIS in geographical studies.   1+6+3=10

Or

What is remote sensing platform? What are the different forms of remote sensing platforms? Discuss in detail.   4+6=10

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