Total No. of Printed Page-4

6 SEM TDC GGR M 1

2014

(May)

GEOGRAPHY

(Major)

Course: 601

(Map Projection and Cartographic Methods)

Full Marks: 48
Pass Marks: 19

Time: 2 hours

The figures in the margin indicate full marks for the questions

- 1. Answer/Choose the correct option from the following: 1×6=6
 - (a) Name the line of constant bearing that joins two places on the globe.
 - (b) Convert 10 stadia into miles.
 - (c) Alidade is used in plane table/prismatic compass/dumpy level survey.
 - (d) Name the level line above from the sea level to draw a profile.

- (e) What is the range of wavelength for visible regions?
- (f) LISS-III is a sensor/an artificial satellite.
- **2.** Write short notes on the following: $4\times3=12$
 - (a) Ptolemy's contribution to cartography
 - (b) Geodetic survey
 - (c) Concept of GPS

UNIT-I

(Map Projection)

3. What is Map Projection? Give a detailed classification of map projection. 3+7=10

Or

Choose a map projection to show the northern hemisphere and its adjacent areas and state the reason for your choice. Construct a graticule for the projection with R. F. 1: 125,000,000 and interval of 15°. Write its properties. 1+1+6+2=10

UNIT-II

(Cartographic Methods)

4. Define surveying and levelling. Discuss the principles of surveying. 2+2+6=10

Or

In a closed traverse surveying by prismatic compass, following field data have been found:

Line	Fore bearing	Back bearing
AB (53 km)	68°	248°
BC (51 km)	154°	334°
CD (43 km)	216°	36°
DE (45 km)	285°	105°
EA (34 km)	351°	271°

(a) Draw the closed traverse.

- 3
- (b) Calculate included angles of the traverse.
- 5
- (c) Prove the sum of included angles geometrically.

UNIT-III

(Modern Cartographic Methods)

5. What are the different platforms of the remote sensing? Discuss the role of geostationary satellite used in various purposes.

3+7=10

Or

Write short notes on any *two* of the following: $5\times2=10$

- (a) Concept of GIS
- (b) Aerial photographs
- (c) Stationary orbit
