

**B.Sc. Semester -II Examination, 2023-24**

**Subject : Geography**

**Course ID : 21914**

**Course Code: S/GEO/204/SEC-2P**

**Course Title: GIS and GNSS**

**Time: 3 Hours**

**Full Marks :40**

*The figures in the right-hand margin it indicate marks.  
Candidates are required to give answers in their own words as  
far as practicable  
Answer all questions*

**Set - II**

1. Section – A: Objective type

2x5 = 10

- ✓ a) What is geo-referencing?
- ✓ b) What do GLONASS and QZSS stand for?
- ✓ c) What are the source of error in GNSS Signals?
- ✓ d) What are the functions of control segment of GPS?
- ✓ e) Mention the chief features of GPS Waypoint?

2. Section – B

- ✓ a) Rectify the given topographical map with at least four GCPs in appropriate software What is RMS error? 8+2 = 10

[Turn Over]

b) Run a traverse survey with a handheld GPS/GNSS receiver and collect 4 waypoints from the field. Plot the waypoints on a suitable scale, using MS Excel.

6+4 = 10

3. Laboratory Note Book and Viva-Voce.

5+5 = 10

Question No. 2.b.

Write the steps for the collection of Waypoints from a handheld GPS. Using the given data (Table 1), plot the traverse by using Microsoft Excel. 5+5=10

Table 1

TYPE	IDENT	LAT	LONG
WAYPOINT	1	23.23948670	87.05832029
WAYPOINT	2	23.23958821	87.05747799
WAYPOINT	3	23.23190100	87.05488614
WAYPOINT	4	23.23178164	87.05751303
WAYPOINT	5	23.23370956	87.06024628
WAYPOINT	6	23.23410200	87.06082606
WAYPOINT	7	23.23462604	87.06361807
WAYPOINT	8	23.23558711	87.06396441
WAYPOINT	9	23.23948670	87.05832029