23/11/13

Roll No. | | | | | | | | | | |

B.E / B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, NOV / DEC 2013

GEO INFORMATICS ENGINEERING

III Semester

GI 8303 Photogrammetry

(Regulation 2012)

Time: 3 Hours | Answer ALL Questions | Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. Distinguish between side lap and end lap.
2. What are the advantages of aerial photography over satellite remote sensing?
3. State the causes of Y parallax.
4. What is Scheimplug condition?
5. How does crab differs from drift?
6. The air base of a stereo pair of vertical photos is 1400 m and flying height above average ground is 2440 m. The camera has a focal length of 152.4 mm and a 23 cm format. What is the percentage end lap?
7. What is meant by Zeiss parallelogram?
8. State the classification of stereoscopic plotting instruments.
9. What are the advantages of analytical stereo plotters over optical projection stereo plotters?
10. Define 'Orthophoto'.

Part – B (5 x 16 = 80 marks)

11. (i) Explain the different methods of measuring photo coordinates. (10)
    (ii) Describe the construction of a metric camera. (6)

12. a) With sketches, explain the causes of X-parallax. How would you measure X-parallax using parallax bar?

    OR

    b) Explain the two types of coordinate systems normally practiced for tilted photographs.

13. a) Describe the contents of specifications for aerial photography.

    OR

    b) A project area is 20 km long in the east-west direction and 15 km wide in the north-south direction. It is to be covered with vertical aerial photographs having a scale of 1:12000. End lap and side lap are to be 60% and 30% respectively. A 152.4 mm focal length camera with a 23 cm square format is to be used. Prepare the flight map(not to scale) and compute the number of photographs necessary for the project,