

Roll no.										
----------	--	--	--	--	--	--	--	--	--	--

B.E / B.Tech (Full Time) DEGREE ARREAR EXAMINATIONS, APRIL / MAY 2014

Geoinformatics Engineering

THIRD SEMESTER

GI8303 Photogrammetry

(Regulation 2012)

Time: 3 Hours

Answer ALL Questions

Max. Marks 100

Part A (10 X 2 = 20)

1. What are vertical and nearly vertical photographs?
2. In any photograph, the scale varies. Prove it with illustration
3. Why are fiducial marks and center necessary?
4. What is the relationship between the contour interval and the measurement accuracy?
5. How is point defined in analog and digital photo?
6. Describe the purpose of interior orientation?
7. What is a Zeiss Parallelogram?
8. What is the significance of B/H ratio?
9. List four measuring equipments used for photogrammetric operations?
10. What is the area covered by an aerial photograph taken at a height of 12,000' above the average ground with a camera having a focal length of 6" and a 9" x 9" format?

Part B (5 X 16 = 80)

11. What is the conceptual basis of the Collinearity equations? Derive the same.
12. a) What are the different types of distortions that are usually present in photogrammetric imagery? Explain with sketches

(OR)

- b) What are the different techniques for stereo 3-D viewing? What are the requirements for each method

13. a) Classify the manifestations and the causes of various lens aberrations?

(OR)

b) What are the causes of radial lens distortion? List two of its characteristics. Use sketches to illustrate your answer.

14. a) Explain with sketches the steps for developing a color negative film?

(OR)

b) Describe the working principle of mono and stereo comparators. What are the advantages and disadvantages of mono and stereo-comparators?

15. What is the advantage of constructing object space from block adjustment (i.e., adjustment based on multiple overlapping images) as opposed to stereo-processing (i.e., adjustment based on two overlapping images)? Give explanation for two methods also.

(OR)

b) Outline the procedure of block adjustment of independent models.