

DEGREE: B.E/ B.TECH(FULL TIME) AREAR EXAMINATION APRIL/ MAY 2014  
BRANCH: GEOINFORMATICS  
SEMESTER: 3  
CODE No. / SUBJECT : GI 9203 PHOTOGRAMMTERY - I

Time : 3 hrs.

Max. : 100 marks

**ANSWER ALL QUESTIONS**

**PART A**

**10 X 2 = 20**

1. Classify the photographs?
2. What is lens resolving power?.
3. What are stereo comparators?
4. List four intrinsic parameters of a camera.
5. What is a floating mark?
6. Illustrate the working principle of a mirror stereoscope?
7. What are crab and drift?
8. When is prepointing preferred?
9. What is gamma correction?
10. What is a dichotomous key for interpretation of photographs?

**PART B**

**5 X 16 = 80**

11. i) What are the stereo comparators and how are coordinates measured using these?  
ii) Derive parallax equation.
12. a) Make an elaborate note on photo printing process followed for making aerial photos..  
(OR)  
b) Derive the relationship between the ground and photographic coordinate system using conformal transformation.
13. a) How is parallax measured using a parallax bar? Explain with neat picture and step by step procedure.  
(OR)  
b) What is orthorectification? Describe various methods followed..

14. a) A project area of size 10 km by 6.5 km in east-west and north-south directions respectively is to be covered with 1: 8,000 scale in photograph with sidelap of 30% and end lap of 60% . A camera with 152.4 mm focal length camera is to be used. Prepare a flight plan and compute the total no. of photographs. Find out the area covered by the neat model and prepare a template of neat models.

(OR)

b)What are the factors that affect the flight planning components of an aerial mission?

15. a) At the bottom of a valley, the scale of a vertical photograph is 1:8000. The focal length of the lens used to capture the photograph is 6". A road intersection on the same photograph is 495" above the valley floor and 3.99" from the principal point. What is the relief displacement of the road intersection with respect to the bottom of the valley?

(OR)

b) Explain with examples the basic elements of photo interpretation.

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