

19/11/13

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

GI 9402 Digital Photogrammetry
(Regulation 2008)

Time: 3 Hours

Answer ALL Questions

Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. List four systems of representing colours in Aerial Photography.
2. Write two characteristics of a median filter.
3. What is called "step and stare" data acquisition?
4. Write two reasons for which compression of images are necessary.
5. What is a point or object of interest in DP processing?
6. What is an epipolar plane?
7. List four scanners that are currently used for photogrammetric scanning.
8. How does an anaglyphic glass work?
9. What is a crest?
10. Describe regular and irregular sampling for DEM.

Part – B (5 x 16 = 80 marks)

11. Discuss in detail the issues in DSM generation from DEM and the methods, tools, techniques and technologies to generate reliable DSM product.
 12. a) i) Make an elaborate notes on types and functioning of scanners used for DP (8)
ii) What are the quality parameters to be calibrated for a commercial photogrammetric scanner? (8)
(OR)
b) Discuss the image enhancement and edge enhancement methods followed to prepare aerial images that has impacts on geometric and radiometric quality of aerial images.
 13. a) What are the functions and technological requirements including system peripherals for photogrammetric restitution? Report in detail.
(OR)
b) Why is orthorectification performed? Describe two methods of ortho rectification with illustration and compare them.
 14. a) Discuss three important ways of representing the elevation data with their structures.
(OR)
b) What are the various types of image matching methods? Discuss the merits and demerits of each of them.
 15. a) How is the accuracy of elevation data generated with DP workstations ascertained
(OR)
b) Make a discussion of use of GPS, LiDAR and RADAR sensors in large scale mapping.
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