UPES

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2017

Program: **B. Tech. GIE**   Semester –

Subject (Course): **Digital Photogrammetry**   Max. Marks : 100
Course Code   : GSEG 311   Duration: 3 Hrs
No. of page/s: 2

Section –A

Answer all Questions   (5X4 = 20)

1. Write with notation modified collinearity equation for space borne stereo imagery   [4]

2. List the input data required for orthophoto generation using aerial photographs (Hardcopy/Digital)   [4]

3. Explain with illustration the parallax in stereo photogrammetry   [4]

4. Write short note on purposes of aerotriangulation in photogrammetry   [4]

5. List the steps of Digital Photogrammetric analysis work flow   [4]

Section –B

Answer all Questions   (4x10 = 40)

6. Derive collinearity equation used in photogrammetry based on principle of similar triangles principle   [10]

7. Write in details the various requirements of stereoscopic photographs   [10]

<div align="center">or</div>

Write short note on pseudo-stereoscopic view methods of aerial photograph

8. Derive object height measuring mathematical relationship with diagram using parallax difference method

[10]

9. Discuss with diagram semi analytical method of aerotriangulation   [10]

<u>**Section –C**</u>
Answer all Questions   **(2X20 = 40)**

10. Discuss in details inputs, outputs and major steps followed for rigorous methods of space resection and intersection in Digital satellite photogrammetry   [20]

OR

Discuss in details various steps of space resection by collinearity.   [20]

11. Discuss in details digital differential rectification method used in digital orthorectification. 20