Name: **Enrolment No:**	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: Digital Photogrammetry **Semester: V**
Program: B. Tech. GIE **Time 03 hrs.**
Course Code: PEGI 3001 **Max. Marks: 100**

Instructions:

S. No.		Marks	CO
	SECTION A		
Q 1	Write short notes on accommodation and convergence in binocular vision of stereo photographs	**4**	**CO1**
Q 2	List disadvantages of lens or pocket stereoscope.	**4**	**CO1**
Q 3	With illustrations explain various stereo satellite acquisition systems.	**4**	**CO2**
Q 4	Give a brief account on software requirements for digital photogrammetry.	**4**	**CO4**
Q 5	Write brief note with illustration on role of pass point in aero-triangulation.	**4**	**CO3**
	SECTION B		
Q 6	With diagram, explain the computation of scale of tilted photograph.	**10**	**CO1**
Q 7	Write the parallax equations used in stereo-photogrammetry. With diagram, write the steps of deriving parallax equations.	**10**	**CO3**
Q 8	What is collinearity condition in photogrammetry? With illustration derive collinearity equation based on similar triangles principle.	**10**	**CO3**
Q 9	Write in details concept and method of absolute orientation.	**10**	**CO4**
	OR		
	Discuss in details methods of establishment of ground control points in photogrammetric analysis		**CO5**
	SECTION-C		
Q 10	Define digital orthophoto / orthoimage and write briefly various steps of digital orthophoto / orthoimage generation. Discuss in details bundle adjustment method of aero-triangulation in photogrammetry	**10 + 10**	**CO6**
Q 11	Discuss in details various steps of cross correlation hierarchical method of image matching	**20**	**CO5**
	OR		
	Discuss in details modified collinearity equations used for space borne stereo imagery		**CO6**