


Name:	 UPES UNIVERSITY WITH A PURPOSE
Enrolment No:	

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

Course: Virtual Reality
Program: B.Tech. CS G&G
Course Code: CSEG 497

Semester: VII
Time 03 hrs.
Max. Marks: 100

Instructions: Answer precisely.

SECTION A

S. No.	Question	Marks	CO
Q 1	Can VR be a substitute for real life experiences? Justify your answer.	4	CO1
Q 2	What will happen by increasing the field of view by bringing the VR screen closer to the eye?	4	CO4
Q 3	Where is VR today? Give your opinion.	4	CO1
Q 4	Draw the ray diagram for the scenario when object is placed at a distance s from the convex lense and $s > f$.	4	CO2
Q 5	Write short note on rasterization.	4	CO3

SECTION B

Q 6	Discuss the social implications of VR to the life of the user.	10	CO3
Q 7	Describe how the use of VR and simulation technology benefits the medical & educational industry.	10	CO1
Q 8	List & explain different types of Optical aberrations.	10	CO2
Q 9	How raytracing can be beneficial for a programmer in the given scenario: a. During the development of the first person shooter game like CS go b. During the development of 2D platform like Mario which involves jumping OR What according to you are the basic recommendations to VR application developer while creating a virtual world?	10	CO4

SECTION-C

Q 10	What are the different factors needs to be addressed while creating a VR application? List different types of receptors that human sense organs have. OR Experiencing discomfort as a side effect of using VR systems has been the largest threat to widespread adoption of the technology over the past decades. What are the different side effects of VR system (hardware+software) and their common symptoms?	20	CO1
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Q 11	Explain in details: a. Monocular depth cues vs. stereo depth cues b. Perception of colors	20	CO3,4
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