

<b>Name:</b>	 <b>UPES</b> UNIVERSITY WITH A PURPOSE
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, December 2020**

<b>Course: Computer Graphics and Animation</b>	<b>Semester: V</b>
<b>Program: BCA</b>	<b>Time : 03 hrs.</b>
<b>Course Code: CSBC 3002</b>	<b>Max. Marks: 100</b>

**Instructions:**

**SECTION A**

S. No.		Marks	
Q 1	Calculate the file size File size of an 8bit RGB (10 by 10) image, Pixel dimension = 10*10, Bit depth = 8bit, # of Channel = 3 (for Red, Blue, Green).	<b>5</b>	<b>CO1</b>
Q2	Why is every Creative Commons license important?	<b>5</b>	<b>CO2</b>
Q3	Write shortcuts for the following in Blender 3D a) hotkey to scale or resize the object in all directions b) hotkey to translate the object in x, y, and z-axis c) to select and de-select objects d) to enable tool shelf e) Enable proportional editing	<b>5</b>	<b>CO3</b>
Q4	Write use of following tools in GIMP a) Dodge and Burn b) Smudge tool	<b>5</b>	<b>CO4</b>
Q5	Are There any risk Having Movie box on Your Devices? How To Stay Safe Using Movie Box?	<b>5</b>	<b>CO5</b>
Q6	Differentiate Additive and Subtractive Color Models.	<b>5</b>	<b>CO2</b>

**SECTION B**

Q 7	Discuss the techniques for drawing images in CRTs.	<b>10</b>	<b>CO1</b>
Q 8	Give an account of user interface design process along with the design principles.	<b>10</b>	<b>CO2</b>
Q 9	Write use and steps of application for the following tools: a) Loop cut tool b) Bevel tool	<b>10</b>	<b>CO3</b>
Q 10	Write steps to color a black and white image using GIMP.	<b>10</b>	<b>CO4</b>
<b>OR</b>			
Q10	What is the purpose of creating layers when working with images in GIMP? Explain with an example.		
Q11	In Blender, 3D a monkey object is to be added to the scene and then duplicates are to be created for the added monkey object. Which modifier will you use to duplicate the object? Write steps to perform the addition and duplication.	<b>10</b>	<b>CO3</b>

**SECTION-C**

Q12	Discuss the conceptual model that describes what steps a graphics system needs to perform to render a 3D scene to a 2D screen.	<b>20</b>	<b>CO1</b>
	OR		
Q12	“Typography is significant in User Interface (UI) Design and User experience (UX)”. Justify the statement giving suitable examples.		