PRESIDENCY UNIVERSITY
BENGALURU

SCHOOL OF INFORMATION SCIENCE
MID TERM EXAMINATION - APR 2023

Semester : Semester VI - 2020
Course Code : CSA3069
Course Name : Sem VI - CSA3069 - Rendering Techniques
Program : BCG

Date : 13-APR-2023
Time : 9.30AM - 11.00AM
Max Marks : 50
Weightage : 25%

Instructions:
(i) Read all questions carefully and answer accordingly.
(ii) Question paper consists of 3 parts.
(iii) Scientific and non-programmable calculator are permitted.
(iv) Do not write any information on the question paper other than Roll Number.

PART A

ANSWER ALL THE QUESTIONS   (5 X 2 = 10M)

1. Mention whether it is possible to represent a curved line using many small straight lines
                                                                        (CO1) [Knowledge]

2. In rendering pipeline, mention the initial action.
                                                                        (CO1) [Knowledge]

3. Mention whether it is important to have a local co-ordinate system?
                                                                        (CO1) [Knowledge]

4. Define shading.
                                                                        (CO2) [Knowledge]

5. Define ambient light.
                                                                        (CO2) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS   (4 X 5 = 20M)

6. Explain polygon representation.
                                                                        (CO1) [Comprehension]

7. Explain rasterization and its importance.
                                                                        (CO1) [Comprehension]

8. Explain digital compositing.

(CO2) [Comprehension]

9. Explain alpha values and give its major applications in image rendering.

(CO2) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS   (2 X 10 = 20M)

10. Explain how transforms are applied in rendering with reference to translation, scaling and rotation.

(CO1) [Application]

11. Define texture. With respect to texturing, explain UV mapping, texture mapping, shading and rendering?

(CO2) [Application]