



# SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY  
(DEEMED TO BE UNIVERSITY)

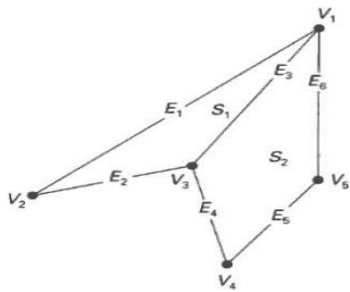
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## Continuous Assessment Examination 2 (Oct. 2021)

|                    |   |                   |              |
|--------------------|---|-------------------|--------------|
| <b>Program</b>     | : B.E/B.Tech – CSE/IT                           | <b>Max. Marks</b> | : 30         |
| <b>Course</b>      | : Computer Graphics and Multimedia Applications | <b>Time</b>       | : 1 Hour     |
| <b>Course code</b> | : SCSA1503                                      | <b>Sem</b>        | : V          |
| <b>Batch</b>       | : 2019-2023                                     | <b>Date</b>       | : 25-10-2021 |

**Part-A** **Answer ALL the questions** (5×2=10)

| Q.No | Questions  | CO    |
|------|--|-------|
| 1.   | What is Boundary Representation in 3D graphics?  | CO(3) |
| 2.   |  <p>Infer the contents of a Vertex Table</p> | CO(3) |
| 3.   | List any two types of curves with equation defining them   | CO(3) |
| 4.   | Compare Object-Space method with Image-Space method  | CO(4) |
| 5.   | List the various types of light sources with example   | CO(4) |

**Part-B** **Answer ALL the questions** (2×10=20)

| Q.No | Questions   | CO    |
|------|---|-------|
| 6.   | a) Given a 3D object with coordinate points A(0, 3, 1), B(3, 3, 2), C(3, 0,0), D(0, 0, 0). Adapt the translation with the distance 1 towards X axis, 1 towards Y axis and 2 towards Z axis and obtain the new coordinates of the object.<br>b) Compare Parallel projection with Perspective projection and list its pros and cons | CO(3) |
| (OR) |   |       |
| 7.   | a) Given a 3D triangle with coordinate points A(3, 4, 1), B(6, 4, 2), C(5, 6, 3). Apply the reflection on the XY plane and find out the new coordinates of the object.  | CO(3) |

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|  | b) Explain fractals and self similarity concept and recommend its applications |  |
|--|--|--|

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|-----------|---|--------------|
| <b>8.</b> | Explain any four of the Visible Surface Detection methods in detail with suitable diagram | <b>CO(4)</b> |
|-----------|---|--------------|

**(OR)**

|           |   |              |
|-----------|---|--------------|
| <b>9.</b> | Discuss the various color models with their functionalities | <b>CO(4)</b> |
|-----------|---|--------------|