

B.Tech IV Year I Semester (R13) Supplementary Examinations June 2017

COMPUTER GRAPHICS & MULTIMEDIA

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Define computer aided design.
 - (b) List the video display devices.
 - (c) Briefly write about scan converting lines.
 - (d) What is 2D transformation?
 - (e) Write the examples of 3D viewing.
 - (f) Define Bezier surfaces.
 - (g) What are the functions of two variables?
 - (h) Write about illumination methods.
 - (i) What are the uses of multimedia?
 - (j) Explain audio file formats.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 Explain the role of computer graphics in visualization and image processing.
- OR**
- 3 Describe raster scan systems and random scan systems.

UNIT – II

- 4 Write and explain polygon filling algorithm using scan line method.
- OR**
- 5 Summarize matrix representation of 3D transformations.

UNIT – III

- 6 Explain about Hermite curves and B-spline surfaces.
- OR**
- 7 Discuss rendering techniques for line drawings.

UNIT – IV

- 8 Describe techniques for efficient visible surface algorithms.
- OR**
- 9 Discuss the Z-buffer algorithm in detail.

UNIT – V

- 10 Demonstrate MIDI versus digital audio.
- OR**
- 11 Explain about multimedia system sounds.
