

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.
