Reg. No. ☐☐☐☐☐☐☐☐☐

BCACAC 260

Credit Based Fourth Semester B.C.A. Degree Examination, April/May 2015
(New Syllabus) (2013-14 Batch Onwards)
COMPUTER GRAPHICS AND MULTIMEDIA

Time : 3 Hours

Max. Marks : 80

Note : *Answer any ten questions from Part A and one full question from each Unit in Part B.*

PART – A

(10×2=20)

1. a) What are horizontal and vertical retrace ?

   b) What are impact and non-impact printers ? Give example for each.

   c) What is the purpose of frame buffer ?

   d) Define translation and scaling.

   e) Write the purpose of homogeneous coordinate system.

   f) List any two character attributes.

   g) Define storyboarding.

   h) Why digital audio is called device independent ?

   i) What are palettes ? List any one common color palettes.

   j) What is 3-D animation ?

   k) What is morphing in animation ?

   l) What are chroma key technology in digital video editing ?

P.T.O.

PART – B

Unit – I

2. a) Explain the architecture of raster display system with neat diagram.   (4+4+7)
   b) Write a note on Graphics Software.
   c) Derive mid-point algorithm to draw a circle.

3. a) Explain Track ball, Joystick, Space ball.   (6+9)
   b) Derive mid-point algorithm to draw an ellipse.

Unit – II

4. a) Prove that successive rotations is additive.   (5+3+7)
   b) Explain the different Text attributes.
   c) Write and explain Cohen-Sutherland line clipping algorithm.

5. a) Explain window to viewport transformation with a suitable diagram.   (5+4+6)
   b) Explain the Pivot Point Rotation with an example.
   c) Discuss various Reflection transformations with suitable diagrams.

Unit – III

6. a) List and explain the various application of multimedia in various fields.   (5+5+5)
   b) Write a note on bitmaps.
   c) Write a note on MIDI audio.

7. a) Write a note on additive and subtractive colors.   (5+5+5)
   b) What are different methods for searching in hypermedia ?
   c) List and explain the various sound editing operations.

Unit – IV

8. a) List and explain different stages of a multimedia project.   (5+5+5)
   b) Write a note on Shooting Platforms.
   c) Write a note on MPEG.

9. a) List and explain different types of authoring tools for multimedia.   (5+5+5)
   b) Write a note on video compression (CODEC).
   c) Discuss intangible elements needed to make good multimedia.