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**MCAH 303**

**Third Semester M.C.A. Degree Examination, December 2018**  
**COMPUTER GRAPHICS AND MULTIMEDIA**

Time : 3 Hours

Max. Marks : 70

**Note :** Answer *any five* questions. *All* questions carry *equal* marks.

1. a) Give the applications of Computer Graphics. 7  
b) Explain the working principle of CRT display. 7
2. a) Explain DDA line drawing algorithm. 7  
b) Explain about different half toning techniques popularly used. What are their relative advantages ? 7
3. a) Write down and explain midpoint circle drawing algorithm. 7  
b) Compare and contrast between RGB and CMY colour models. 7
4. a) Explain different methods of character generation. 7  
b) Discuss the different antialiasing techniques. 7
5. a) Explain even-odd rule for finding inside-outside point of a Polygon. 7  
b) Prove the following : 7
  - i) Two successive scaling operations are multiplicative.
  - ii) Two successive translation operations are additive.
6. a) Show that shear transformation may be expressed in terms of rotation and scaling. 7  
b) How rotation about arbitrary point is done in 3-D ? Explain with an example. 7
7. a) Discuss transformation from world to viewing coordinates in 3D viewing. 7  
b) Write a note on Sutherland-Hodgeman polygon clipping. 7
8. a) Explain briefly the classification of multimedia. 7  
b) Write a note on multimedia software. 7