

Roll No. 

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (CSE) (2012 to 2017) (Sem.-5)

**COMPUTER GRAPHICS**

Subject Code : BTCS-504

M.Code : 70537

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A**

**Answer briefly :**

- 1) What is resolution in computer graphics?
- 2) Explain Raster Scan System.
- 3) Discuss matrix representation.
- 4) What is reflection transformation?
- 5) What is the role of computer graphics in virtual reality?
- 6) What is the concept of a vanishing point?
- 7) Write about windows and view port.
- 8) What is text clipping?
- 9) Discuss Ellipse generating algorithms.
- 10) Write a short note on Gourard Shading.

### SECTION-B

- 11) Explain about different line drawing algorithms.
- 12) Write various area filling techniques. Explain any one in detail.
- 13) What is parallel projection and different types?
- 14) What are the advantages of Painter Algorithm in Computer Graphics?
- 15) Derive transformation matrix for 2-D viewing transformation.

### SECTION-C

- 16) Give the syntax of drawing a circle in computer graphics using various algorithms.
- 17) What is z buffer technique? Discuss use of z buffer algorithm for hidden surface removal.
- 18) a. Give the introduction of ray tracing technique for generating an image by tracing the path.  
b. Write the uses of anti aliasing software technique in Computer Graphics.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**