

S.Y. B.Sc. (IT) : Sem. IV
Computer Graphics and Animation

Time : 2½ Hrs.]

Prelim Question Paper



[Marks : 75

Please check whether you have got the right question paper.

- N.B. :** (1) All questions are compulsory.
(2) Make suitable assumptions wherever necessary and state the assumptions made.
(3) Answers to the same question must be written together.
(4) Numbers to the right indicate marks.
(5) Draw neat labeled diagrams wherever necessary.
(6) Use of Non-programmable calculators is allowed.

1. Attempt any **THREE** of the following : [15]

- (a) Explain CRT ?
- (b) Explain Raster scan and difference between random and Raster scan?
- (c) Explain DDA algorithm?
- (d) Explain midpoint wide drawing algorithm?
- (e) Explain Cohen-Sutherland line Clipping?
- (f) Explain Sutherland Hodgman Polygon dipping?

2. Attempt any **THREE** of the following: [15]

- (a) Explain scaling transformation with help of a diagram?
- (b) Explain 2D Rotation about an Arbitrary point with a diagram?
- (c) Explain homogeneous coordinates?
- (d) Explain window to Newport transformation?
- (e) Find notes:
- (f) Explain different types of parallel projections?

3. Attempt any **THREE** of the following: [15]

- (a) Explain three dimensional viewing?
- (b) Explain view plane coordinates?
- (c) Explain Specifying an Arbitrary View.
- (d) Explain photometry?
- (e) Explain Colorimetry?
- (f) Explain camera model and viewing pyramid?

4. Attempt any **THREE** of the following: [15]

- (a) Explain Classification of Visible-Surface Detection Algorithm
- (b) Explain Back face dotation
- (c) Explain Binary space partitioning
- (d) Explain parametric equations of parabola
- (e) Explain Bezier curves
- (f) Explain B-spline curves

5. Attempt any **THREE** of the following: [15]

- (a) Explain animations and explain squash and stretch animation?
- (b) Explain deformation?
- (c) Explain character animation?
- (d) Explain physics based animation
- (e) Explain procedural based animation
- (f) Explain keyframes?

S.Y. B.Sc.IT Sem-IV: Paper Discussion Schedule

Date	Day	Timing	Centre
18 April, 2018	Wednesday	5.00 p.m. to 7.00 p.m.	Andheri
19 April, 2018	Thursday	9.00 a.m. to 11.00 a.m.	Dadar
19 April, 2018	Thursday	5.00 p.m. to 7.00 p.m.	Borivali
19 April, 2018	Thursday	9.00 a.m. to 11.00 a.m.	Thane
19 April, 2018	Thursday	4.00 p.m. to 6.00 p.m.	Nerul