

This question paper contains **2** printed pages]

**BJ—27—2016**

**FACULTY OF COMPUTER STUDIES**

**B.Sc. (C.S.) (Second Year) (Third Semester) EXAMINATION**

**OCTOBER/NOVEMBER, 2016**

**(Revised Course)**

**COMPUTER GRAPHICS**

**Paper S3.5**

**(Friday, 25-11-2016)**

**Time : 2.00 p.m. to 5.00 p.m.**

*Time—3 Hours*

*Maximum Marks—80*

*N.B. :— (i) All questions are compulsory.*

*(ii) Figures to the right indicate full marks.*

*(iii) From Q. No. 2 to 4 solve either (a) and (b) or (c) and (d).*

*(iv) Draw neat and labelled diagrams wherever necessary.*

*(v) Assume suitable data if necessary.*

1. Attempt the following : 20

(a) Discuss matrix representation.

(b) Explain free storage allocation.

(c) Discuss windowing functions in short.

(d) Explain electrostatic output device.

2. (a) Discuss laser printer in detail. 8

(b) Discuss mid-point subdivision algorithm. 7

*Or*

(c) Explain ground rule for graphics s/w design. 8

(d) Explain simple visibility algorithm. 7

3. (a) Discuss implementation of instance transformation. 8

(b) What are segments ? Discuss segment naming schemes. 7

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*Or*

- (c) Explain polygon clipping algorithm. 8
- (d) Explain various graphics file formats. 7
- 4. (a) Discuss two dimensional transformation. 8
- (b) Explain reflection in detail. 7
- Or*
- (c) Discuss geometric modeling in detail. 8
- (d) Describe in brief digital differential algorithm. 7
- 5. Write short notes on (any *three*) : 15
- (a) American standard video
- (b) Shear
- (c) Display file structure
- (d) Functional domains
- (e) The display code generator.

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