

CS/BCA(N)/ODD/SEM-3/BCAN-303/2019-20



**MAULANA ABUL KALAM AZAD UNIVERSITY OF
TECHNOLOGY, WEST BENGAL**

Paper Code : BCAN-303

PUID : 03497 (To be mentioned in the main answer script)

COMPUTER GRAPHICS

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own
words as far as practicable.*

GROUP - A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the
following : $10 \times 1 = 10$

i) Personal computer become powerful during the late

- | | |
|---------|----------|
| a) 1960 | b) 1970 |
| c) 1980 | d) 1950. |

ii) Display card are

- | | |
|-------------------|-------------------|
| a) VGA | b) EGA |
| c) both (a) & (b) | d) none of these. |

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- iii) The RGB model displays percentage of the visible band as compared to CMYK.
- a) lesser
 - b) larger
 - c) medium
 - d) none of these.
- iv) RGB true colour model has color depth
- a) 24 bit
 - b) 32 bit
 - c) 64 bit
 - d) none of these.
- v) DUST means
- a) direct view storage tube
 - b) domain view storage tube
 - c) direct view store tube.
 - d) none of these.
- vi) The second grid in DUST is called
- a) phosphor
 - b) storage mesh
 - c) collector
 - d) none of these.
- vii) Computer graphics is used in many DTP software as
- a) Photoshop
 - b) Paint brush
 - c) both (a) and (b)
 - d) none of these.
- viii) The standardization is needed
- a) to make application programs more portable
 - b) to increase their utility
 - c) to allow them to use in different application environment
 - d) all of these

- ix) Graphics data is computed by processor in form of
- a) electrical signals b) analog signals
 - c) digital signals d) none of these.
- x) Non impact use of various techniques combines three colour pigment to produce a range of colour patterns
- a) Cyan, magenta and yellow
 - b) Cyan, white and black
 - c) Cyan, white and yellow
 - d) Black, magenta and yellow.
- xi) The division of the computer screen into rows and columns that define the no. of pixels to display a picture is called
- a) persistence
 - b) resolution
 - c) encapsulated post script
 - d) none of these.
- xii) LCD is a device of type
- a) emissive b) non emissive
 - c) gas discharge d) none of these.

GROUP - B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. What is a random scan system ?
3. Explain how raster scan is different from random scan ?
4. What is reflection ?
5. Differentiate between interpolation spline and approximation spline.
6. Define Projection.

GROUP - C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. Discuss (i) direct view storage tubes and (ii) liquid crystal displays. $8 + 7$
8. Discuss in details any one line drawing algorithm.
9. Describe in detail about the DDA scan conversion algorithm.
10. Explain Ellipse generating Algorithm.
11. What is the purpose of shading ? Explain in detail any one shading model. $3 + 12$