

(i) Printed Pages : 4]

Roll No.

(ii) Questions : 9]

Sub. Code :

0	9	4	8
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Exam. Code :

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**Bachelor of Computer Applications
5th Semester Examination**

1127

**PRINCIPLES OF COMPUTER GRAPHICS AND
MULTIMEDIA TECHNOLOGY**

Paper : BCA-502

Time : 3 Hours]

[Max. Marks : 90

Note :- Attempt *five* questions in all by selecting *one* question from each Section. Entire Q. No. **9** is compulsory.

Section-A

1. (a) Define Computer Graphics. How it has brought revolution in the field of Education and Training ?

(b) What is Computer Aided Design ? What advantages does it offer over manual design ?

What are its limitations ?

9,9

NA-414

(1)

Turn Over



2. (a) Define and describe Raster Scan Monitors. How do they work ? Also explain how are they different from Random Scan Monitors ?
- (b) List out and explain the working principles of commonly used Input and Output devices for Graphics. 9,9

Section-B

3. (a) What do you understand by AutoCAD ? Explain its anatomy and various features.
- (b) What are the different drawing primitives of AutoCAD ? Explain the usage of any *five*. 9,9
4. (a) Name the primitives available in C language for setting character and text attributes. Also describe the purpose and syntax of them.
- (b) Write a menu driven program in C language to draw Line, Rectangle, Circle and Ellipse. 9,9

Section-C

5. (a) What is Multimedia ? What are the elements of a Multimedia System ? Also explain the various barriers that arise in its growth.

(b) Describe several widely available platforms which offer support for Multimedia Applications. 9,9

6. (a) Describe the various stages of Multimedia Application Development and the development tools used at each stage.

(b) Describe the various categories of Multimedia Development tools. Explain the rationale behind using them. 9,9

Section-D

7. (a) Differentiate between lossy and lossless Compression. Explain any lossless compression algorithm with example.

(b) Name and describe various Audio and Video file formats. 9,9

8. (a) Which selection tools are available in Photoshop ? How are they used ? Explain them briefly with examples of scenarios in which they should be preferred.

(b) Describe the commonly used features of Macromedia Director to create a multimedia movie. 9,9

Compulsory Question

9. Entire question is compulsory. Write short answers.

- (a) What do you understand by resolution of a monitor ? How will it affect picture quality ?
- (b) What is Morphing ?
- (c) What is the purpose of initgraph() function ?
- (d) Explain *two* main features of Photoscape.
- (e) Which kinds of files compress better - GIF, JPEG or PNG ? Justify your answer.
- (f) What do you mean by MIDI interface ?
- (g) What is Sampling ?
- (h) What is Tweening ?
- (i) Name different color models used in Photoshop.

9×2=18