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G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI – 628 502.**UG DEGREE END SEMESTER EXAMINATIONS - APRIL 2025.**

(For those admitted in June 2021 and later)

PROGRAMME AND BRANCH: B.Sc., COMPUTER SCIENCE

| SEM | CATEGORY | COMPONENT | COURSE CODE | COURSE TITLE |
|-----|------------|---------------|-------------|-------------------|
| IV | PART - III | CORE ELECTIVE | U21CS4E2B | COMPUTER GRAPHICS |

Date & Session: 23.04.2025/FN**Time: 3 hours****Maximum: 75 Marks**

| Course Outcome | Bloom's K-level | Q. No. | SECTION – A (10 X 1 = 10 Marks) Answer <u>ALL</u> Questions. |
|----------------|-----------------|--------|--|
| CO1 | K1 | 1. | _____ bits are needed to specify an RGB colour for a pixel. a)8 b)16 c)24 d)32 |
| CO1 | K2 | 2. | Circles, ellipses, and other curves attributes will appear thinnest where the slope has a magnitude of _____. a)1 b)2 c)3 d)4 |
| CO2 | K1 | 3. | A World coordinate area selected for display is called as. a) graphics b) viewport c) Line d) window |
| CO2 | K2 | 4. | Which transformation will alter the size of the object? a) Clipping b) Translation c) Scaling d) Rotation |
| CO3 | K1 | 5. | The _____ standard is a new universal character coding scheme for written characters and text. a) chat b) Unicode c) colour d) barcode |
| CO3 | K2 | 6. | The expansion of OCR stands for. a) Optical Character Recognition b) Object Code Recognition c) Optical Code Recognition d) Object Code Reading |
| CO4 | K1 | 7. | The storage medium consists of a coating of a magnetic material on a thin plastic strip is called. a) phonograph cylinder b) Magnetic tape c) gramophone record d) cartridge |
| CO4 | K2 | 8. | _____ is a standard to transmit and store music, originally designed for digital music synthesizers. a) MUDI b) MIDI c)Audio d)TV |
| CO5 | K1 | 9. | Which one of the following is a format of video recording. a) MP3 b) VERA c) MIDI d) AVI |
| CO5 | K2 | 10. | Motion video is also conceptually similar to _____. a) audio b) Music c) still d) animation |

| Course Outcome | Bloom's K-level | Q. No. | <p align="center">SECTION – B (5 X 5 = 25 Marks) Answer <u>ALL</u> Questions choosing either (a) or (b)</p> |
|----------------|-----------------|--------|--|
| CO1 | K3 | 11a. | Outline the attributes of the line with a diagram. (OR) |
| CO1 | K3 | 11b. | Illustrate the properties of circle. |
| CO2 | K3 | 12a. | Explain the 2D basic transformation. (OR) |
| CO2 | K3 | 12b. | Describe the window-to-viewport coordinate transformation. |
| CO3 | K4 | 13a. | Classify the types of text. (OR) |
| CO3 | K4 | 13b. | Write about the various types of scanners. |
| CO4 | K4 | 14a. | Compare between the WAV and AIFF file formats. (OR) |
| CO4 | K4 | 14b. | Give your opinion on using the microphone. |
| CO5 | K5 | 15a. | Provide a comprehensive note on the existing video file formats. (OR) |
| CO5 | K5 | 15b. | Consider the video signal formats. |

| Course Outcome | Bloom's K-level | Q. No | <p align="center">SECTION – C (5 X 8 = 40 Marks) Answer <u>ALL</u> Questions choosing either (a) or (b)</p> |
|----------------|-----------------|-------|--|
| CO1 | K3 | 16a. | Describe Bresenham's Line drawing algorithm with a diagram. (OR) |
| CO1 | K3 | 16b. | Illustrate the concept of Color and Grayscale levels. |
| CO2 | K4 | 17a. | Discuss Cohen's Sutherland line clipping algorithm in detail. (OR) |
| CO2 | K4 | 17b. | Analyse the steps to use the shear and reflection transformation. |
| CO3 | K4 | 18a. | Illustrate the methods to insert text in a document. (OR) |
| CO3 | K4 | 18b. | Differentiate the various file formats. |
| CO4 | K5 | 19a. | Analyze sound card and audio file formats in detail. (OR) |
| CO4 | K5 | 19b. | Discuss the concept of MIDI specification. |
| CO5 | K5 | 20a. | Discuss the three standards for Television Broadcasting. (OR) |
| CO5 | K5 | 20b. | Assess the various video editing software used for professional content creators. |