C

Question Paper Code: 55803

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2022

Fifth Semester

Computer Science and Engineering

15UIT503 -GRAPHICS AND MULTIMEDIA

(Common to Information Technology)

(Regulation 2015)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. The translation distances (dx, dy) is called as   CO1- R

    (a) Translation vector   (b) Shift vector   (c) Both a and b   (d) Neither a nor b

2. The most basic transformation that are applied in three-dimensional planes are   CO2- R

    (a) Translation   (b) Scaling   (c) Rotation   (d) All of these

3. The color code "000" is for   CO3- R

    (a) White   (b) Black   (c) Blue   (d) Green

4. MIDI stands for   CO4- R

    (a) Musical Instrument Digital Interface   (b) Musical Instrument Design Interface

    (c) Musical Instrument Digital Instruction   (d) MP3 Instrument Digital Interface

5. A video consists of a sequence of   CO5- R
    (a) Frames   (b) Signals   (c) Packets   (d) Slots

PART – B (5 x 3= 15Marks)

6. Write down the shear transformation matrix.   CO1 R

7. Differentiate between interpolation spline and approximation spline.   CO2 R

8. How will you convert from YIQ to RGB color model?   CO3 R

9. Write short notes on medium and traditional data streams. CO4 R

10. Define the term multimedia communication. State the basic form of representing different media. CO5 R

PART – C (5 x 16= 80 Marks)

11. (a) Explain in detail on two dimensional geometric transformations with suitable examples. CO1- U (16)

Or

(b) Illustrate in detail the cohen sutherland line clipping algorithm with suitable examples. CO1- U (16)

12. (a) With suitable examples, explain all 3D transformations. CO2- U (16)

Or

(b) Discuss the various surface detection methods in detail. CO2- U (16)

13. (a) Write informative notes on RGB and HSV color models. CO3- U (16)

Or

(b) Elaborate in detail about the various shading models with relevant sketch. CO3- U (16)

14. (a) Elucidate MIDI Messages and devices in detail. CO4- U (16)

Or

(b) Describe in detail JPEG compression technique with neat diagrams. CO4- U (16)

15. (a) Discuss optical storage systems providing informative points. CO5- U (16)

Or

(b) Elaborate video conferencing with suitable architecture diagram. CO5- U (16)

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