2022/TDC (CBCS)/EVEN/SEM/
BVOCGEC–601T/373

TDC (CBCS) Even Semester Exam., 2022

B.VOC (Information Technology)

(6th Semester)

Course No. : BVOCGEC–601T

(Multimedia)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer *any* **five** questions

1. (a) Explain the following concepts :   4+4=8

   (i) Time-dependent sound concatenation

   (ii) Frequency-dependent sound concatenation

   (b) Write short notes on the following : 3+3=6

   (i) Synchronous transmission mode

   (ii) Asynchronous transmission mode

(*Turn Over*)

(2)

2. *(a)* Describe the different characteristics of traditional data stream. 10

   (b) Define frequency. What is sampling rate? 2+2=4

3. What is image recognition? Explain the different steps of image recognition. 14

4. *(a)* Discuss digital image representation in brief. 6

   (b) Write short notes on the following : 4+4=8
   (i) Captured image format
   (ii) Stored image format

5. *(a)* What is data compression? Briefly explain the steps of data compression in multimedia system. 10

   (b) What is communication architecture? Explain briefly. 4

6. Discuss JPEG image compression process. 14

7. *(a)* What do you mean by multimedia operating system? Explain traditional real-time scheduling. 3+5=8

   (b) Define *(i)* ARTS and *(ii)* YARTOS. 3+3=6

(3)

8. *(a)* What is resource management? Explain different phases of resource management. 8

   (b) Explain the earliest deadline first (EDF) scheduling algorithm. 6

9. *(a)* What is synchronization? Explain basic synchronization issues. 8

   (b) Distinguish between intra-object and inter-object synchronizations. 6

10. Write short notes on the following : 7+7=14

    (a) Live synchronization

    (b) Synthetic synchronization

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