

**2024/TDC (CBCS)/EVEN/SEM/
BVOCGEC-601T/403**

TDC (CBCS) Even Semester Exam., 2024

**Bachelor of Vocational Course
(Information Technology)**

(4th 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 five questions, Choosing one
from each Unit**

UNIT—I

1. (a) Describe the different characteristics of data stream. 10
- (b) Define the following : 4
 - (i) Frequency
 - (ii) Sampling rate

(2)

2. (a) What is multimedia? Briefly explain the following : 8
- (i) Perception medium
 - (ii) Representation medium
 - (iii) Presentation medium
- (b) Define the following :
- (i) Synchronous transmission mode 3
 - (ii) Asynchronous transmission mode 3

UNIT—II

3. (a) Briefly explain digital image representation. 8
- (b) Write a short note on the following : 6
- (i) Captured image format
 - (ii) Stored image format
4. Define image recognition. Explain the different steps of image recognition. 14

UNIT—III

5. (a) What is data compression? Briefly explain steps of data compression in multimedia system. 10
- (b) Briefly explain communication architecture. 4

(3)

6. (a) Write a short note on the following : 6
- (i) Source coding
 - (ii) Entropy coding
- (b) Define MPEG. Explain the process of MPEG audio encoding. 8

UNIT—IV

7. (a) Define resource management. Briefly explain different phases of resource management. 8
- (b) Explain the EDF scheduling algorithm. 6
8. (a) Define multimedia operating system with example. 4
- (b) Write short notes on the following : 10
- (i) ARTS
 - (ii) YARTOS

UNIT—V

9. Write notes on the following : $7 \times 2 = 14$
- (a) Live synchronization
 - (b) Synthetic synchronization

(4)

- 10.** (a) What do you mean by synchronization?
Briefly explain basic synchronization
issues. 8
- (b) Distinguish between intra-object and
inter-object synchronization. 6

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