

CS/B.TECH/IT/ODD SEM/SEM-7/IT-702/2016-17



**MAULANA ABUL KALAM AZAD UNIVERSITY OF
TECHNOLOGY, WEST BENGAL**

Paper Code : IT-702

MULTIMEDIA

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own
words as far as practicable.*

GROUP – A

(Multiple Choice Type Questions)

I. Choose the correct alternatives for the following :

10 × 1 = 10

- i) Key frames are responsible for
- a) change in the course of action
 - b) change in the course of planning
 - c) change in direction
 - d) change in the course of producing.

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- ii) SGML stands for
- a) Standard Generalized Markup Language
 - b) Structured General Markup Language
 - c) Standard Graphics Mapping Language
 - d) Standard General Markup Link.
- iii) The process of planning your multimedia presentation is known as a
- a) design
 - b) story board
 - c) development
 - d) layout.
- iv) DPI stands for
- a) Display per Inch
 - b) Display point intersection
 - c) Dots per inch
 - d) Dots per intersection.
- v) MMC means
- a) Multimedia Marketing Council
 - b) Multiple Media Content
 - c) Multimedia Managing Console
 - d) Multimedia Marketing Content.

- vi) Animations are of two types. They are
 - a) Static and Dynamic
 - b) Slow and Motion
 - c) Cell and Path
 - d) None of these.
- vii) CBT means
 - a) Computer Based Training
 - b) Computer Based Tutorial
 - c) Computer Based Teaching
 - d) All of these.
- viii) In order to interpret XML documents one should
 - a) Use standardized tags
 - b) Have a document type definition which defines the tags
 - c) Define the tags separately
 - d) Specify tag file name.
- ix) HTML tags define
 - a) The data types of elements of document
 - b) Presentation of specified elements of a document
 - c) The contents of the document
 - d) The structure of the document.

- x) XML uses
 - a) user defined tags
 - b) pre-defined tags
 - c) both predefined and user-defined tags
 - d) extended tags used in HTML and makes them powerful.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following : $3 \times 5 = 15$

2. What will be the minimum sampling rate, when an audio file is recorded without audio aliasing with the highest frequency on 10kHz ?
3. Explain the importance of data compression in multimedia.
4. What are the different types of text ? What is Unicode ?
5. What do you mean by CCD ? Why is it used ?
6. What is Luma-Chroma Principle ?

2 + 3

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. a) How do you prepare data for representation and analysis ? How do you develop a multimedia application ? Write down the steps. $2 + 2 + 3$
- b) What are redundancies in images ? How can you categorise them ? What are the elements of multimedia system ? $2 + 2$
- c) How can you include animation as a building block of multimedia system ? $2 + 2$
8. a) Why are access methods important in multi-media system ? 5
- b) What is *k-d* tree ? What are the usages of *k-d* tree in multimedia database ? $2 + 2$
- c) How does multimedia data differ from conventional data ? How does internet support distributed multimedia traffic ? $2 + 4$

9. a) Draw the hierarchical data structure in MPEG-1. 4
- b) State the constrained parameter of MPEG-1 standard. 5
- c) What do you know about I-picture and P-picture ? $2 + 2 + 2$
10. a) Distinguish between produced video data and observed video data. What do you mean by virtual reality ? $2 + 3$
- b) Draw the block diagram for perceptual coding in audio. What is the basic objective of MPEG-1 standards ? $3 + 3$
- c) State the needs of multi-resolution image analysis. How do coders assign code-word ? $2 + 2$
11. a) How do you prepare data for representation and analysis ? How do you develop a multimedia application ? Write down the steps. $2 + 3$
- b) What are redundancies in images ? How can you categorise them ? $2 + 2$

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- c) What is multimodality ? What is postscript font ?
Differentiate between extended character set and
unicode. 2 + 2 + 2

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