

## University of Mumbai

Examinations Commencing from 23<sup>rd</sup> December 2020 to 6<sup>th</sup> January 2021 and from 7<sup>th</sup> January 2021  
to 20<sup>th</sup> January 2021

Program: **Computer Engg.**

Curriculum Scheme: Rev 2016

Examination: TE Semester V

Course Code: CSDLO5011 and Course Name: Multimedia System

Time: 2 hour

Max. Marks: 80

<b>Q1.</b>	<b>Choose the correct option for following questions. All the Questions are compulsory and carry equal marks</b>
1.	Multimedia is computer based interactive communications process that incorporates
Option A:	Text, Graphics
Option B:	Graphics, Sound
Option C:	Animation and video
Option D:	All of the above
2.	Which of the following methodology is used by Multimedia DBMS for the image retrieval?
Option A:	Free browsing
Option B:	Text-based keyword searching
Option C:	Content-based searches
Option D:	All of above
3.	Which one of the following is not a multimedia component?
Option A:	voice script
Option B:	graphics
Option C:	animation
Option D:	audio
4.	PCM is an acronym of
Option A:	Public Common Media
Option B:	Pulse Compression Modulation
Option C:	Public Communication Model
Option D:	Pulse Code Modulation
5.	Which of the following is not a video file extension?
Option A:	MP4
Option B:	JPG
Option C:	AVI and MOV
Option D:	FLV
6.	A continuous image is digitized at _____ points.
Option A:	random
Option B:	vertex
Option C:	contour
Option D:	sampling

7.	Perceptible sound intensity range is
Option A:	0~120dB
Option B:	0~10dB
Option C:	0~20dB
Option D:	0~220dB
8.	In Real Time Interactive Audio Video, Jitter is introduced in real-time data by delay between
Option A:	Frames
Option B:	Layers
Option C:	Pixels
Option D:	Packets
9.	What does AIFF stand for?
Option A:	Audio Interchange File Format
Option B:	Audio Interchange File Folder
Option C:	ASCII Interchange File Format
Option D:	Audio Internet File Format
10.	In case of real-life movie compression if alternative frames are used instead of consecutive frames for motion estimation
Option A:	Compression ratio will decrease but quality will increase
Option B:	Compression ratio will decrease and the quality will also decrease
Option C:	Compression ratio will remain will be stable
Option D:	Compression ratio will increase
11.	If I develop a mobile game to play Tic Tac Toe for kids, comparatively better suited version of MPEG suggested by you will be
Option A:	MPEG-7
Option B:	MPEG-4
Option C:	MPEG -1
Option D:	MPEG-2
12.	Which of the following purposes is supported by MPEG-2?
Option A:	both field prediction and frame prediction.
Option B:	Option only field prediction
Option C:	only frame prediction
Option D:	neither field prediction nor frame prediction2
13.	Among the following image processing techniques the fast, precise and flexible is
Option A:	Optical
Option B:	Digital
Option C:	Electronic
Option D:	Photographic

14.	Suggest one of the following techniques that can be applied if I store a real movie of 2hrs duration on a remote server and want to deliver it to a client across the network
Option A:	Download
Option B:	Streaming
Option C:	Upload
Option D:	Leaking
15.	In the scenario given below more jitter will be caused,
Option A:	If a car racing game with two participants is played on the network with bandwidth 2mbps
Option B:	If a car racing game with two participants is played on the network with bandwidth 5mbps
Option C:	If a car racing game with two participants is played on the network with bandwidth 1mbps
Option D:	There will no jitter in any case
16.	If I want to send a movie of three hours duration on the internet from the server to the client RTSP can be best combined with
Option A:	TCP
Option B:	UDP
Option C:	DCCP
Option D:	FCP
17.	Which if the following cannot be a feature of Authoring Tools
Option A:	Editing and organizing features
Option B:	Programming features
Option C:	Interactivity features
Option D:	Communication between terminals feature
18.	If a national security personal wants to send a confidential video and a secret message to his head office he must use
Option A:	Video encryption
Option B:	Steganography
Option C:	Steganography and Video encryption both
Option D:	Digitization
19.	Progressive download is most useful for _____
Option A:	short video clips
Option B:	long video clips
Option C:	extremely long and high quality videos
Option D:	advanced video clips
20.	Image tampering includes
Option A:	Object removing
Option B:	Decomposition
Option C:	Recycling
Option D:	Engineering

<b>Q2</b>	<b>Solve any Two Questions out of Three</b>	<b>10 marks each</b>
A	Explain JPG compression technique in detail with example.	
B	What is a job of header in a file? Give the header details of the BMP file formats.	
C	Explain Huffman Coding technique with example to convert a string of characters to code and decode it back.	

<b>Q3.</b>	<b>Solve any Two Questions out of Three</b>	<b>10 marks each</b>
A	What is steganography? What are different methods? Discuss LSB steganography method and its merits and demerits.	
B	What is an authoring system? Why is it needed? Explain the different design issues faced.	
C	Write a short note on Digital signature.	