

University of Mumbai

Examination June 2021

Examinations Commencing from 1st June 2021

Program: **Information Technology**

Curriculum Scheme: Rev2016

Examination: TE Semester VI

Course Code: ITDLO6024 and Course Name: Multimedia System

Time: 2 hour

Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	While enlarging the image,_____image will blur while _____image will not blur.
Option A:	vector,bitmap
Option B:	bitmap,gif
Option C:	bitmap,vector
Option D:	bitmap, jpeg
2.	What is the extension at the image file used by digital cameras and supports upto 24-bit colors?
Option A:	.bmp
Option B:	.jpeg
Option C:	.gif
Option D:	.tif
3.	If I want to use Google meet as a tool for my online class. Which of the following will be best supported Multimedia System Architecture for the same?
Option A:	Workstation Architecture
Option B:	IMA Architecture
Option C:	Network Architecture
Option D:	Internet Architecture
4.	_____ correlation between adjacent frames in a sequence of images in video applications.
Option A:	Spatial redundancy
Option B:	Spectral redundancy
Option C:	Temporal redundancy
Option D:	Coding redundancy
5.	_____ in JPEG aims at reducing the total number of bits in the compressed image.
Option A:	Zig-zag ordering
Option B:	run-length encoding
Option C:	Quantization
Option D:	Entropy coding
6.	WAVE sound file format bit stream encoding is the _____

Option A:	PCM
Option B:	DM
Option C:	PWM
Option D:	DPCM
7.	if I want to edit my childhood photograph, first I have to convert it into the digital format. What would be the best suitable device for the same?
Option A:	Camera
Option B:	scanner
Option C:	printer
Option D:	Electric pen
8.	A structure of linked elements through which the user can navigate, interactive multimedia becomes
Option A:	Hypermedia
Option B:	Hypertext
Option C:	inter media
Option D:	digital media
9.	-----provide the framework for organizing and editing the elements of a multimedia project
Option A:	Distributed multimedia applications
Option B:	Multimedia database
Option C:	Multimedia authoring tools
Option D:	Multimedia architecture
10.	Which of the following is not the feature of multimedia authoring tools?
Option A:	Editing and organizing features
Option B:	Interactivity features
Option C:	Performance tuning and play back features
Option D:	Communication feature
11.	Which one of the following authoring system are designed for single user and generally for single streams?
Option A:	Timeline based authoring
Option B:	Dedicated authoring systems
Option C:	Programmable authoring systems
Option D:	Telephone authoring systems
12.	The process of delivering multimedia data such as audio or video from a streaming service provider to an end user is called
Option A:	Streaming media
Option B:	Broadcasting
Option C:	Video conferencing
Option D:	Telecasting
13.	Which of the following step is not involved in the design process of multimedia?
Option A:	Identification of the requirements of the system
Option B:	Identifying the design issues
Option C:	Communication with the users

Option D:	Implementation
14.	The medium in which the stored document which has been distributed over the distribution medium is converted to facilitate viewing or reading by the end user is called
Option A:	Transmission medium
Option B:	Presentation medium
Option C:	Representation medium
Option D:	Information exchange medium
15.	Which one of the following is not the property of multimedia database management system?
Option A:	Persistence of data
Option B:	Security of data
Option C:	Consistent view of data
Option D:	Structure of data
16.	Which image files are a lossy format?
Option A:	GIF
Option B:	MPEG
Option C:	JPEG
Option D:	PNG
17.	Image data usually changes slowly across an image, that is the reason JPEG Encoding performs DCT on ____ image blocks
Option A:	4 x4
Option B:	8x8
Option C:	16x16
Option D:	32x32
18.	Which one of the following is not the design issue of multimedia authoring?
Option A:	Display resolution
Option B:	User interfaces
Option C:	Network interfaces
Option D:	Storage formats
19.	Which of the following component is not involved in a typical distributed application environment?
Option A:	Application software
Option B:	User interface and service agent
Option C:	Component service agent
Option D:	System software
20.	The primary role of middleware in distributed workgroup computing is
Option A:	To link the front end clients to the distributed systems
Option B:	To link the multiple clients with each other
Option C:	To link backend database to front end clients
Option D:	To link the database to the server

Q2	Solve any Four out of Six	5 marks each
A	Describe multimedia database.	
B	Compare CCITT group 3 one D and CCITT group 3 two D.	
C	What are the different types of redundancies in image?	
D	Compare RTF and TIFF.	
E	Explain virtual reality in details.	
F	What are design issues face to design the authoring system.	

Q3.	Solve any Two Questions out of Three	10 marks each
A	<p>A networking company uses a compression technique to encode the message before transmitting over the network. Suppose the message contains the following characters with their frequency: a:7 b:16 c:19 d:45 e:13 f:6 Note that each character in input message takes 1 byte. If the compression technique used is Huffman Coding, how many bits will be saved in the message?</p>	
B	Write a short note on Distributed Multimedia System.	
C	Explain JPEG encryption in details.	