# TELANGANA UNIVERSITY S.S.R. DEGREE COLLEGE, NIZAMABAD (C.C:5029) I SEMESTER INTERNAL ASSESSMENT I EXAMINATIONS FUNDAMENTALS OF INFORMATION TECHNOLOGY QUESTION BANK

<ul><li>I. Choose the correct Answers.</li><li>1. Data compression means to the</li><li>(a) Increase (b) Decre</li></ul>		(d) None of the above	[b]
Which is a type of data compres     (a) Resolution		(d) Caching	[b]
3. How many types of video composition (a) 2 (b) 3	ressions exist? (c) 4	(d) 6	[a]
4. Which image files are lossy form (a) GIF (b) MPEG		(d) PNG	[c]
5. Which files creates a perfect rep (a) Shockwave (b) Nx Vi		ages? (d) Caching	[c]
6. A smaller version of an image is (a) Clipart (b) Bitma		(d) Thumbnail	[d]
7. A typical CD-R disc can hold app (a) 200 MB (b) 700 N	•	(d) Thumbnail	[b]
8. Interactive training that is delive (a) ABT (b) BCT	ered via CD ROM is known a (c) CBT	s? (d) DBT	[c]
9. If frames are displayed on scree (a) Signals (b) Motion	= = =	oression of? (d) Bits	[b]
10. Moving picture experts group (a) Frames (b) Imag		? (d) Video	[d]
11. Joint photograhic experts grou (a) Music (b) Pictu		s? (d) Frames	[c]
12. In audio and video compressio (a) Frames (b) Packe		o small grids called? (d) Mega pixels	[c]
13. In video compression an indep (a) B-frame (b) C-fra		ated to any other frame is? (d) P-frame	[c]
14. MP3 productions three data ra (a) 128 Kbps (b) 164 k	•	(d) 320 Kbp	[b]
<ul><li>15. MMS stands for ?</li><li>(a) Multimedia System</li><li>(c) Multimedia Messaging System</li></ul>	(b) Multimedi (d) Multimedi	a Messaging Services a Services	[b]

<ul><li>16. GIF stands for ?</li><li>(a) Graphic Information F</li><li>(c) Graphic Information F</li></ul>		(b) Graphic Interchan (d) Graphic Interchan	_	[b]
<ul><li>17. MPEG stands for ?</li><li>(a) Motion Picture Express Group</li><li>(c) Motion Picture Export Group</li></ul>		(b) Motion Picture Expert Group (d) None of these		[b]
18. JPEG stands for? (a) Joint Photographic Ex (c) Joint Processor Exper	· ·	(b) Joint Photo Expert (d) Joint Photographic		[a]
19. MP3 is in which of th (a) MPEG1	e following MPEG stan (b) MPEG2	dards? (c) MPEG3	(d) MPEG21	[b]
20. Which image files are (a) GIFB	e a lossy format? (b) MPEGC	(c) JPEG	(d) PNG	[c]
21. In Real Time Interacti (a) Receivers and Sender (c) Pixels to Packets		rencing requires two w (b) Packets to Frames (d) Frames to Pixels	ay communications between.	[a]
22. Jitter is introduced in (a) Frames	real-time data by dela (b) Layers	ay between (c) Pixels	(d) Packets	[d]
23. To prevent jitter, we (a) Frame Time	can time-stamp packe (b) Playback Time	ts and separate arrival (c) Pixels Time	time from the (d) Packet Time	[b]
24. A simple session usin (a) Transmission	g SIP, consists of estab (b) System	olishing, communicating (c) Streaming	g, and (d) Terminating	[d]
25. Images included in m (a) Clipart	any software titles are (b) Popups	called (c) .jpg files	(d) .tiff files	[a]
26. A good example of hy	ypermedia is (b) Levell video disc	- (c) Audiotape	(d) Videotape	[a]
27. Establishing a session (a) Protocols	n in Session Initiation P (b) System	rotocol (SIP), requires (c) Handshake	a three-way (d) Ports	[c]
28 are typical (a) Photographs	examples of static ima	nges. (c) Jokes	(d) Messages	[a]
29. Virtual Reality is usef (a) Imitation	<del>-</del> ·	ilight (c) Simulators	(d) None	[c]
30. A technique to blend (a) Modeling	_	o form a new image is (c) Animating	(d) Warping	[b]

- II. Fill in the blanks.
- 1. Lossy compressions provide some loss of quality.
- 2. JPEG is a file format for graphics image
- 3. Audio MP3 is an extension of a file.
- 4. Cipher is a combination of an encryption and a decryption algorithm.
- 5. MPEG-2 was designed for high-quality DVD with a data rate of 3 to 6 Mbps
- 6. In Audio and Video Compression, voice is sampled at 8000 samples per second with 8 bits per sample
- 7. A compressed audio/video file can be downloaded as text file
- 8. MPEG-1 was designed for a CD
- 9. Block size in block preparation step of JPEG compression is 8 X 8
- 10. A compressed audio/video file can be downloaded as text file
- 11. The first phase of JPEG is <u>DCT transformation</u>
- 12. Random access is not allowed in live streaming
- 13. Lossy and lossless are classifications of compression algorithms
- 14. The technology used in optical disks is <u>laser Beam</u>
- 15. A optical disk consists of a circular disk, which is coated with a thin metal that is highly reflective.
- 16. Moving Picture Experts Group (MPEG) is used to compress video
- 17. Multiple users can simultaneously receive the same data streams without duplication of data across the internet is <u>multicast</u>
- 18. <u>Planning</u> is the first stage of building a multimedia project.
- 19. <u>Flash</u> is a time-based multimedia authoring system from Macromedia often used for building web pages.
- 20. Gantt chart is a planning chart that depicts tasks along a time line.
- 21. <u>Acrobat Reader</u> is the application for viewing Acrobat PDF files.
- 22. Multimedia programs are interactive
- III. Short Answer Questions:
- 1. What is compression?
- A: Compression refers to reducing the original file size.
- 2. Why is it necessary to compress files?
- A: Video and audio files consume more disk space compared to document files. While sending the files as attachments in an email, the email may not send the file, as the size is more that it takes. Compressed files with less disk space can be sent as attachments in an email. Compressed files reduce time to attach, upload and download files...
  - 3. What are major steps for JPEG compression?
- A: The major steps that are involved in JPEG compression are: Discrete Cosine Transformation, Quantization, Zigzag Scan, DPCM on DC component, RLE on AC Components and Entropy Coding.
  - 4. What do you mean by lossless source coding?
- A: Lossless source coding is one of the data compression standards. IT allows the decompression assures the exact copy of the original data. Images, audio and video files use lossless source compression standard. It is suitable for compressing text files and it produces fixed length symbols.
  - 5. Explain about MPEG-2.
- A: MPEG-2 is one of the international standards for compressing video signals. Videos can be compressed prior to transmission or storage. The approximate compression ratio is 50:1 of the digital size. MPEG-2 standard is widely implemented in digital TV transmission with 200 million decoders. MPEG-2 standard exploits the redundancies in the original signal.

# 6. What is Hypermedia?

A: The linking of media for easy access is called Hypermedia. The media may be of any type such as text, audio, video etc. A hypermedia document contains a text and any other sub objects such as images, sound, full-motion video etc.

### 7. What is a BLOB?

A: BLOB means Binary Large Object. Relational Database has adopted a data type commonly known as BLOB. It is used for objects such as images or other binary data types.

## 8. Explain user workstation?

A: User workstation can serve as the input node for voice or video input. It can also serve as the output node for text, graphics, image, audio/voice or video.

### 9. What is Multimedia Conferencing?

A: Multimedia conferencing is to interact with people across the world. It uses certain tools like cameras, computers and internet. Adobe Connect is one of the tool to broadcast the events interactively to the web. The interactive conferencing includes certain gadgets like audio speakers, LCD projectors..

### 10. What is Image Processing?

A: Image Processing refers to processing a digital image using a digital computer. An image processing system will alter the contents of the image.