



MRD – 02

B.C.A. (Semester – VI) Examination, April 2019
MULTIMEDIA TECHNOLOGY

Duration : 2 Hours

Max. Marks : 50

Instructions : 1) **All questions are compulsory.**

2) **Figures to the right indicate full marks.**

3) **Draw diagrams wherever necessary.**

1. A) Define the following : (1×5=5)
- a) Animation
 - b) Aliasing w.r.t. signal processing
 - c) Codec
 - d) Aspect ratio
 - e) Infrasonic.
- B) State whether **each** of the following statements is **true** or **false**. (1×5=5)
- a) MPEG is the file format standard and compression specifications for video and audio data.
 - b) When using graphics software, a native file format means that the image properties/attributes are retained and can easily be edited.
 - c) Discrete refers to media involving space dimension only.
 - d) Acoustics is the branch of physics that studies sound.
 - e) VGA stands for Video Graphic Array.
2. Answer the following :
- a) State an advantage and a disadvantage of MIDI over digital audio. 2
 - b) John Rambo was listening to the AM Radio for top secret information on the enemy. John only had 10 MB of internet downloads left in the month. Could John listen to the full transmission if the sample size was 22,050 Hz at 8 bit for 5 minutes on stereo ? 3
 - c) Explain the graphics interchange format w.r.t. its versions and its usage over the internet. 5

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3. Answer the following :
- a) What is the need for compression of multimedia data ? 2
 - b) Briefly explain the purpose and use of vector graphics. 3
 - c) Compare and contrast between print media and electronic media. 5
4. Answer the following :
- a) List any two features of .BMP file. 2
 - b) What is the concept of 'Video on demand' in Multimedia ? 3
 - c) Explain I, B, P and D frame pictures related to MPEG encoding. 5
5. Answer the following :
- a) What is a Band-Pass Filter ? 2
 - b) Briefly explain the 'Time-based' multimedia authoring tools. 3
 - c) Explain the application of multimedia in Advertisement and Medicine. 5