

Jul.-23-0217

IT-603 (Multimedia Technology)

B.Tech. 6th (CBCS)

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt five questions in all. Question 9 in section E is compulsory. Rest attempt one question each from sections A, B, C and D.

SECTION - A

- 1/ Why is multimedia considered a key component of modern communication and entertainment? Discuss the evolution of multimedia technology and its impact on various fields such as education, advertising, and journalism. (10)
2. What is multimedia system? Describe the framework for multimedia system in detail with suitable diagram. (10)

SECTION - B

3. Why is Dreamweaver a popular choice among web designers? What are some of its key features, and how do they assist in the web design process? (10)
- 4/ (a) What is need of Adaptive Huffman coding? Explain it with suitable example. (5)
- (b) Compare the BMP and TIFF file formats. (5)

SECTION - C

5. (a) How do web browsers handle multimedia content, such as audio and video, and what are some common formats and protocols used for multimedia delivery over the web? (5)

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- (b) What are some best practices for optimizing multimedia content for web delivery, and what are some common issues that can arise when delivering multimedia content over the web? (5)
6. Discuss the emerging technologies and trends in multimedia applications. Also, explain the potential risks and benefits of these emerging technologies and trends, and how can we best prepare for their impact? (10)

SECTION - D

7. (a) Describe intelligent VR software systems and desktop virtual reality. (5)
- (b) Explain virtual operating system briefly. (5)
- 8/ (a) What are some common features and functionalities of multimedia conferencing applications, such as video and audio conferencing? (5)
- (b) What are some common challenges that can arise during multimedia conferencing, and how can they be addressed to improve the quality and effectiveness of remote collaboration? (5)

SECTION - E (Compulsory)

- 9 (i) Explain speech recognition and generation briefly. (5)
- (ii) What is DVI technology? Explain briefly. (5)
- (iii) What are the different authoring tools in the multimedia projects? (5)
- (iv) What do you mean by transmission of digital sound? (5)
- (v) Give a brief idea about anti-aliasing. (5)
- (vi) What are the types of file formats used in multimedia systems? (5)
- (vii) Explain descriptors used in MPEG - 7. (5)
- (viii) What do you mean by synchronization accuracy? (5)
- (ix) Write short note on digital broadcasting. (5)
- (x) Write short note on WWW. (5)

(10×2=20)