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**Question Paper Code: 99410**

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2022

Elective

Electronics and Communication Engineering

19UEC910– Multimedia Compression & Communication

(Regulation 2019)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. The delay that occur during the playback of a stream is called CO1-U  
(a) stream delay      (b) playback delay      (c) jitter      (d) event delay
2. Which image files are a lossy format? CO1-U  
(a) GIF      (b) MPEG      (c) JPEG      (d) PNG
3. Moving Picture Experts Group (MPEG-2), was designed for high- CO1-U  
quality DVD with a data rate of \_\_\_\_\_  
(a) 3 to 6 Mbps      (b) 4 to 6 Mbps      (c) 5 to 6 Mbps      (d) 6 to 7 Mbps
4. Maximum round trip delay for telephony as per ITU Recommendation G.114 CO1- U  
is  
(a) 100 ms      (b) 200 ms      (c) 300 ms      (d) 400 ms
5. \_\_\_\_\_ provides information about the multimedia file to be streamed over CO1- U  
HTTP.  
(a) Media file      (b) Meta file      (c) Mobile file      (d) Message file

PART – B (5 x 3= 15 Marks)

6. Explain the hardware used in multimedia CO1- U
7. Define entropy. How entropy is related for the performance measure of CO1- U  
statistical encoding?
8. Distinguish between LPC and CELP. CO1- U
9. Apply the functions of RAS signaling in H.323 related to bandwidth. CO3- App

10. Discuss the different steps that are followed by the RTSP protocol for playing multimedia content on a client machine? CO1- U

PART – C (5 x 16= 80 Marks)

11. (a) Explain the color principles & Raster-scan principles of Digitized pictures. CO1- U (16)
- Or
- (b) Explain in detail about hardware and software multimedia components. CO1- U (16)
12. (a) Analyze the importance of arithmetic encoding algorithms and encode the string with the probabilities of the character “went\$”. The probabilities are: e=0.3, n=0.3, t=0.2, w=0.1, \$=0.1 CO4- Ana (16)
- Or
- (b) Analyze the importance of arithmetic encoding algorithms and encode the string with the probabilities of the character “went\$”. The probabilities are: e=0.3, n=0.3, t=0.2, w=0.1, \$=0.1 CO2- App (16)
13. (a) Explain in detail about different coding techniques for audio compression. CO1- U (16)
- Or
- (b) Explain in detail about different MPEG coding techniques for video compression CO1- U (16)
14. (a) Illustrate in detail about SS7 architecture with suitable explanation. CO4- Ana (16)
- Or
- (b) Discuss the need and features of Quality of Service. CO1- U (16)
15. (a) Discuss on different real time interactive applications with necessary diagrams. CO1- U (16)
- Or
- (b) With neat diagram explain any one of the multimedia networking applications CO1- U (16)