Reg. No. : | | | | | | | | | | |

Question Paper Code: 59042

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Elective

Electronics and Communication Engineering

15UEC910 - MULTIMEDIA COMPRESSION AND COMMUNICATION

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. Identify a multimedia component

   (a) Speaker (b) Modem (c) Video Camera (d) UPS

2. GIF stands for

   (a) Graphics Interchange format (b) General Inter Format
   (c) Graphics Information Format (d) None of these

3. Speech Coding is an application of

   (a) Data encryption (b) Data encoding
   (c) Data compression (d) Data formatting

4. Choose the correct VOIP provider

   (a) SKYPE (b) MATLAB (c) MOTOROLA (d) NOKIA

5. SIP stands for

   (a) Session Including Protocol (b) Session Initiation Protocol
   (c) System In Package (d) Service Initiation Procedure

PART - B (5 x 3 = 15 Marks)

6. Define multimedia.

7. List out the method in source encoding.

8. Define pitch, period and loudness.

9. Discuss the features of SS7 and its applications.

10. Define is bandwidth provisioning.

PART - C (5 x 16 = 80 Marks)

11. (a) (i) Define the media types. (4)

(ii) Describe the form of representation of media type that is used when all are integrated together and give your reason. (12)

Or

(b) Discuss the interactive applications over the internet and entertainment applications of multimedia. (16)

12. (a) Give detailed note on the following image format

(i) GIF (8)

(ii) TIFF (8)

Or

(b) Explain JPEG encoding process in detail. (8)

13. (a) Describe with the aid of a schematic diagram, the operation of a basic DPCM signal encoder and decoder. Include in your explanation the source of errors that can arise. (16)

Or

(b) (i) Identify the perception parameters and associated vocal tract excitation parameters that are used. (8)

(ii) List the terms relating to speech coders and explain. (8)

14. (a) (i) Discuss the terminology and concept behind VOIP. (10)

(ii) Explain the basics of IP transport in detail. (6)

Or

(b) Explain the H.323/ SIP network architecture along with protocol stack with neat diagram. (16)

15. (a) (i) Explain the various scheduling mechanisms. (8)

(ii) What are the policing mechanisms used in multimedia networking? (8)

Or

(b) Explain intserv model and per-flow reservation of resources. (16)