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Question Paper Code: 53S05

M.E. DEGREE EXAMINATION, MAY 2018

Elective

Communication Systems

15PCM505 - DATA COMPRESSION

(Regulation 2015)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART - A (5 x 20 = 100 Marks)

1. (a) (i) Explain Physical Models.	CO1- U	(10)
(ii) Explain Markov Model.	CO1- U	(10)

Or

(b) Explain in detail about scalar and vector quantization theory.	CO1- U	(20)

2. (a) Define Arithmetic Coding. Encode and Decode "BACBA" with arithmetic coding. (P (A)=0.5,P(B)=0.3,P(C)=0.2).	CO2-App	(20)

Or

(b) Construct a Huffman code tree for the character string "AAAABBCD"	CO2- App	(20)

3. (a) Explain MPEG-1 with audio coding and block diagram.	CO3- U	(20)

Or

(b) Explain in detail about Basic sub band coding.	CO3-U	(20)

4. (a) Explain JPEG image compression technique.	CO4- U	(20)

Or

(b) Explain in detail about Transform coding.	CO4- U	(20)

5. (a) Explain in detail about Motion estimation and compensation CO5-Ana (20)
   techniques.

Or

   (b) Explain in detail about MPEG-4 and MPEG-7. CO5-Ana (20)

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