

8E5008

Roll No. : _____

Total Printed Pages : 2

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B. Tech. (Sem. VIII) (Back) Examination, April/May-2012
Information Tech
8IT3 Data Compression Techniques

Time : 3 Hours]

[Total Marks : 80
[Min. Passing Marks : 24

Attempt any five questions, selecting one question from each unit. All questions carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.

Use of following supporting material is permitted during examination.
(Mentioned in form No. 205)

1. _____ Nil _____ 2. _____ Nil _____

UNIT - I

- 1 (a) What do you understand by lossless techniques ? Explain giving suitable examples. 8
- (b) Write the merits of compression techniques ? 8

OR

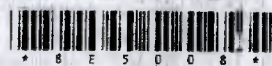
- 1 (a) What do you understand by lossy techniques ? Explain giving suitable examples. 8
- (b) Write demerits of data compression techniques. 8

UNIT - II

- 2 (a) Explain T.4 and T.6 recommendation for facimile encoding. 8
- (b) Explain LZ78 in detail. 8

OR

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[Contd...

- 2 (a) What is Burrows wheeler algorithm ? 8
- (b) What is JPEG-LS ? Write down its algorithm. 8

UNIT - III

- 3 (a) Explain uniform and non-uniform quantization. 8
- (b) Explain vector quantization in detail. 8

OR

- 3 (a) Explain forward adaptive approach and backward adaptive approach. 8
- (b) Explain LBG algorithm of vector quantization. 8

UNIT - IV

- 4 (a) Design the CVSD decoder block diagram. 8
- (b) What do you mean by G.726 ? 8

OR

- 4 (a) Explain image coding in detail. 8
- (b) What do you understand by speech coding ? Explain in detail with suitable example. 8

UNIT - V

- 5 (a) Write the application of G.722. 8
- (b) What are the compression of MPEG schema ? 8

OR

- 5 (a) Discuss the role of OMF in sub-band coding. 8
- (b) Explain the designing of filter banks. 8

