

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VIII • EXAMINATION – SUMMER 2014

Subject Code: 181602**Date: 31-05-2014****Subject Name: Data Compression****Time: 10:30 am TO 01:00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What is compression? Compare Lossy and Lossless compression. **07**
(b) Differentiate modeling and coding. **07**
- Q.2** (a) Explain LZ77 (sliding window) method with example. **07**
(b) Write a short note: PNG **07**
- OR**
- (b) Explain LZ78 method with example. **07**
- Q.3** (a) Describe sahnnon-fano algorithm with illustrative example. **07**
(b) Explain the huffman algorithm with example. **07**
- OR**
- Q.3** (a) What is the height of huffman tree? Explain it. **07**
(b) Write a short note: facsimile compression **07**
- Q.4** (a) What is JPEG? Explain it. **07**
(b) Explain finite automata method of image compression. **07**
- OR**
- Q.4** (a) What is WSQ fingerprint compression? Explain it. **07**
(b) Explain fourier image compression in detail. **07**
- Q.5** (a) What is DCT? Explain it. **07**
(b) Write a short note: speech compression **07**
- OR**
- Q.5** (a) Explain ADPCM audio compression in detail. **07**
(b) Write a short note: human auditory system **07**
