

**People's Education Society's**  
**Dr.Ambedkar College of Commerce & Economics, Wadala, Mumbai – 400 031**  
**S.Y.B.Sc. (IT) Fourth Semester Examination, April 2016**  
**Sub: Multimedia**

**Date: 16/04/2016**

**Marks: 75**

**Time: 2 ½ hrs.**

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**Q 1. Attempt Any Two Of the following**

- A) State and explain Structure of multimedia Database?
- B) What are the applications of multimedia?
- C) Explain communications devices?

**Q 2. Attempt Any Two Of the following**

- A) What is Signal? Explain analog signal with its advantages and disadvantages?
- B) Explain wave and its properties?
- C) Explain Modulation, Demodulation with various types of Digital Modulation techniques?

**Q 3. Attempt Any Two Of the following**

- A) What is Nyquist theorem and explain with all 3 possible frequencies?
- B) Explain audio or sound & characteristics of sound?
- C) Explain sync function, video and characteristics streams?

**Q 4. Attempt Any two Of the following**

- A) Explain Compression and its types?
- B) Solve example using Lampel ziv Welch algorithm also to generate Encoded String?

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- C) Explain scan methods and also explain video types?

**Q 5. Attempt Any Two Of the following**

- A) solve following Example using Huffman Coding :

Character	A	B	C	D	E	F
Frequency	12	2	7	13	14	85

- B) What is the design structure of presentation?
- C) Explain phases of Multimedia user interface presentation?

**Q 6). Attempt Any Two Of the following**

- A) Write short note on multimedia presentation effect & technical design issues?
- B) Explain quantization error & signal to noise ratio?
- C) Solve example using Lempel ziv Welch algorithm also to generate Encoded String?

ABABCBABAB

**Q 7). Attempt Any Three Of the following**

- A) Explain with block diagram Analog to Digital converter?
- B) Write a short note on LCD & plasma display?
- C) Explain masking principles and also explain 5 audio file formats?
- D) Explain Shannon Fano with Encoding String "HELLO"?
- E) Write a short note on Multimedia Authoring?