| | Utech |
|---------------------------|-----------------------------|
| Name : | <u>A</u> |
| Roll No. : | An Annual Of Survey England |
| Invigilator's Signature : | |

CS/B.Tech/EEE/SEM-7/IT-711/2012-13

2012 MULTIMEDIA SYSTEM

Time Allotted : 3 Hours

Full Marks: 70

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

GROUP – A (Multiple Choice Type Questions)

- 1. Choose the correct alternatives for any *ten* of the following : $10 \times 1 = 10$
 - i) NTSC is a
 - a) Digital video standard
 - b) Analog video standard
 - c) Audio file standard
 - d) Text video standard.

ii) What is the aspect ratio of computer monitor ?

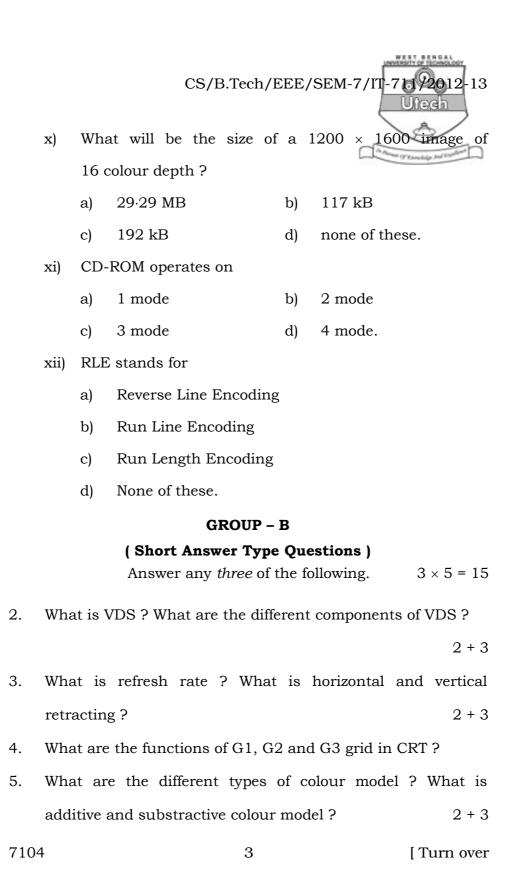
| | a) | 4:3 | b) | 6:4 |
|------|-----------------------------------|------|----|----------------|
| | c) | 16:9 | d) | none of these. |
| iii) | The video adapter cable has pins. | | | |
| | a) | 15 | b) | 14 |
| | c) | 16 | d) | 17 |

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[Turn over



- iv) After conversion from digital to analog, the signal is passed through a filter.
 - a) Low-pass
 - b) High-pass.
- v) Morphing means
 - a) changing position b) changing shapes
 - c) changing colours d) scaling up or down.
- vi) SGML stands for
 - a) Synchronous Mark-up Language
 - b) Signal Mark-up Language
 - c) Standard Generalized Mark-up Language
 - d) none of these
- vii) MIDI is a/an
 - a) protocol b) cable
 - c) instrument d) none of these.
- viii) PAL is a/an
 - a) digital video standard
 - b) analog video standard
 - c) text file standard
 - d) audio file standard.
- ix) Raster scanning starts from corner of the screen.
 - a) top left b) top right
 - c) bottom right d) bottom left.



GROUP – C



(Long Answer Type Questions

Answer any *three* of the following. $3 \times 15 = 45$

- 6. What are the different application areas of multimedia ? What is the need of digital representation of data ? What is sampling ? What is quantization ? What is Nyquist criteria for sampling the analog data ? 6+3+2+2+2
- 7. What do you mean by resolution, aspect ratio and colur depth ? Describe briefly RGB colour model. How is it related to CMYK colour model ? What is the value of *K* ? Write down about three different image file formats. 3 + 4 + 4 + 1 + 3
- 8. What do you mean by codec ? What do you mean by intraframe and interframe compressions ?
 What do you mean by I-frame, B-frame and P-frame in context of video compression ? Explain JPEG compression standard.
- 9. Write short notes on any *three* of the following : 3×5
 - a) SGML
 - b) HTML
 - c) Monochrome CRT
 - d) Raster and vector scan
 - e) MIDI.

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