| <b>Total No. of Questions</b> | 3: | <b>6</b> ] |  |
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| SEAT No. | : |  |
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## P308 [Total No. of Pages : 2 APR.-16/BE/Insem.-48

## B.E. E&TC

## **AUDIO VIDEO ENGINEERING (Elective-III(c))**

|       | (Semester - II) (2012 Pattern) |  |  |  |  |  |  |
|-------|--------------------------------|--|--|--|--|--|--|
| Time  | e:11                           | Hour] [Max. Marks : 30   |  |  |  |  |  |
| Insti | ructio                         | ons to the candidates:-  |  |  |  |  |  |
|       | 1)                             | Answer questions 1 or 2, 3 or 4, 5 or 6.   |  |  |  |  |  |
|       | 2)                             | Neat diagrams must be drawn wherever necessary.  |  |  |  |  |  |
|       | 3)                             | Figures to the right indicate full Marks.  |  |  |  |  |  |
|       | 4)                             | Use of calculator is allowed.  |  |  |  |  |  |
|       | <i>5)</i>                      | Assume suitable data if necessary.   |  |  |  |  |  |
| Q1)   | a)                             | Compare PAL, NTSC and SECAM colour TV systems. [6]   |  |  |  |  |  |
|       | b)                             | Discuss, why (G-Y) signal is not transmitted in colour TV transmission? [4]                    |  |  |  |  |  |
|       |                                | OR   |  |  |  |  |  |
| Q2)   | a)                             | Draw the block diagram of TV Pattern Generator. Discuss the various Patterns used. [6]         |  |  |  |  |  |
|       | b)                             | Explain the Chromaticity diagram. [4]  |  |  |  |  |  |
| Q3)   | a)                             | Discuss MPEG-2 compression standard with suitable block diagram.[5]                            |  |  |  |  |  |
|       | b)                             | Compare LED, LCD and Plasma display devices. [5]   |  |  |  |  |  |
|       |                                | OR   |  |  |  |  |  |
| Q4)   | a)                             | State the advantages of digital TV over analog TV. [2]   |  |  |  |  |  |
|       | b)                             | Draw a neat block diagram of Digital TV receiver & briefly explain function of each block. [6] |  |  |  |  |  |
|       | c)                             | Explain the format of MAC signal used for transmission of colour TV signals. [2]               |  |  |  |  |  |

*P.T.O.* 

- Q5) a) Draw a neat block diagarm of HDTV transmitter and explain the function of each block.[5]
  - b) Explain CCTV systems and its applications. [5]

## OR

- Q6) a) Discuss the digital broadcasting set-up of international cricket match and explain the role of various types of cameras, microphones involved in recording the match.[5]
  - a) Explain DTH TV. What is the need for Set-top-box? [5]

