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BOARD DIPLOMA EXAMINATION
MARCH/APRIL - 2019
DIPLOMA IN ELECTRONICS AND COMMUNICATION ENGINEERING
ELECTRONIC MEASUREMENTS & CONSUMER GADGETS
FOURTH SEMESTER EXAMINATION

Time: 3 Hours **Total Marks: 80**

PART - A (3m x 10 = 30m)

Note 1:Answer all questions and each question carries 3 marks

2:Answers should be brief and straight to the point and shall not exceed 5 simple sentences

1. List the characteristics of ideal ammeter.
2. List the advantages of digital instruments over analogue instruments
3. Explain the procedure for measurement of a) voltage (DC & AC) using CRO
4. List the conditions for flicker free waveforms
5. Explain the importance of shielding in RF generators
6. Explain the need of plotters
7. List the features of Digital 5.1 Surround Sound
8. State the principle of optical recording
9. Define hue, luminance and saturation
10. Explain formation of picture

PART - B (10m x 5 = 50m)

Note 1:Answer any five questions and each carries 10 marks

2:The answers should be comprehensive and the criteria for valuation is the content but not the length of the answer

11. Define a shunt and explain the principle of extending the range of DC ammeter
12. Explain the operation of UJT triggered sweep generator with circuit diagram
13. a) Draw block diagram of general purpose CRO

    b) Explain the necessity of time base signal in horizontal section of CRO
14. (a) Draw the block diagram of function generator. 4M

    (b) Explain the working of logic probe 6M

15. Explain how noise is reduced using DOLBY system and List the features of Dolby

16. a) Explain the working of ribbon microphones with diagram

    b) Explain the principle of operation of PMMC Loudspeaker

17. Draw the block diagram of a Colour TV transmitter and explain the function of each block

18. Explain in detail about the need of
    (a) Satellite for TV board casting over wide area
    (b) List the merits of DTH system

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