Total No. of Questions : 8]

SEAT No. :

P3621

[Total No. of Pages : 2

[4959] - 1107
B.E. (Electronics)
Advanced Measurement Systems
(Semester - I) (2012 Pattern) (Elective - I)

Time :2½ Hours] *[Max. Marks :70*

Instructions to the candidates:-

1) ***Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.***
2) ***Figures to right indicate full marks.***
3) ***Assume suitable data if necessary.***

Q1) a) State and explain electrical validation and debug with MSO Series Oscilloscope. **[8]**

b) Draw & Explain the architecture and operation of Spectrum Analyzer. **[6]**

c) What are the signal integrity testing challenges and possible solutions? **[6]**

OR

Q2) a) Draw the architecture and explain in detail logic analyzer. State applications. **[6]**

b) What are the different interfacing techniques? Explain interfacing of graphic LCD display. **[8]**

c) Explain embedded communication using CAN **[6]**

Q3) a) Draw & Explain direct reading barrater bridges. **[8]**

b) Explain single line cavity coupling system for wavelength measurement. **[8]**

OR

Q4) a) Explain measurement of attenuation and free space attenuation. **[8]**

b) Explain detection & measurement of microwave power. **[8]**

Q5) a) Explain test system development using virtual instrumentation. **[8]**

b) Explain the application of TDM and PSK in instrumentation. **[8]**

OR

P.T.O.

Q6) a) Explain Lab View based Data acquisition system design. **[8]**

b) Explain fundamental test set up for advanced radar systems. **[8]**

Q7) a) Explain GSM Modem for AT Commands. **[6]**

b) Explain Analog Multiplexer in detail. **[6]**

c) Explain automation in digital instruments. **[6]**

OR

Q8) Write short note on any three **[18]**

a) Microwave Enclosures.

b) Sample and Hold.

c) Measurement of VSWR,

d) Universal Counter.

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