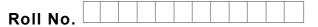


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Total No. of Pages : 02

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B.Tech.(EE) (2012 Onwards E-I) (Sem.-6) INSTRUMENTATION IN POWER SYSTEM Subject Code : BTEE-605C

M.Code: 71154

Time: 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

- 1. Answer briefly :
 - a. What do you mean by reactive power? Explain.
 - b. What do you mean by transient response? Explain.
 - c. What is digital modulation? Explain.
 - d. Why instrumentation is power system is required? Explain.
 - e. List the advantages of pulse modulation.
 - f. Compare AM and FM.
 - g. Why error detection and correction is required? Explain.
 - h. What do you mean by signal formation? Explain.
 - i. Explain the significance of control centre in SCADA.
 - j. List the various errors that occur in telemetry system.



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SECTION-B

- 2. Discuss the measurement of electrical quantities in power system.
- 3. Explain the working of a AM transmitter.
- 4. Discuss the concept of remote control and remote signalling.
- 5. Explain the function of SCADA system. Also discuss the significance of RTU.
- 6. Discuss the applications of SCADA system to Indian power systems.

SECTION-C

- 7. Explain in detail the instrumentation used in hydroelectric power plant and nuclear power plant instrumentation.
- 8. Discuss the significance of telemetry. Explain in detail the digital telemetry methods.
- 9. Write notes on the following :
 - a. Communication between control centres in SCADA n. WWW.FitstR
 - b. Instrument transformer

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.