

B.TECH. DEGREE EXAMINATIONS: DEC 2014

(Regulations 2009)

Third Semester

FASHION TECHNOLOGY

EEE255: Electrical and Electronics Engineering

Time: Three Hours

Maximum Marks: 100

Answer all the Questions

PART A (10 x 1 = 10 Marks)

1. One unit of electrical energy is
 - a) One Kilowatt
 - b) One Watt
 - c) One Ampere -hour
 - d) One Kilowatt-hour
2. Power factor of AC circuit is the cosine of angle between
 - a) V and I
 - b) X_L and X_C
 - c) V and R
 - d) R and X_C
3. DC motor developing high starting torque, is
 - a) Shunt motor
 - b) Series motor
 - c) Compound motor
 - d) Any DC motor
4. _____ is a digital actuator
 - a) Dc motor
 - b) Induction motor
 - c) Stepper motor
 - d) Starter
5. The role of spring in an analog deflecting type instrument is to provide
 - a) Braking torque
 - b) Controlling torque
 - c) Deflecting torque
 - d) Damping torque
6. _____ is an active transducer
 - a) Strain gauge
 - b) LVDT
 - c) Phototransistor
 - d) Thermocouple
7. Voltage drop during conduction in silicon PN diode, is
 - a) **10V**
 - b) **5V**
 - c) **2V**
 - d) **0.7V**

ii) Draw and explain the operation of a capacitive transducer (7)

(OR)

b) With neat diagram, explain the construction and operation of induction type energy meter

24. a) Explain the construction, operation and characteristics of JFET

(OR)

b) Explain the basic architecture of computer with block diagram

25. a) i) Compare the open loop and closed loop control systems (7)

ii) Explain an closed loop control system with example (7)

(OR)

b) Explain the position feedback control system with neat diagram
