



B.E DEGREE EXAMINATIONS: APRIL/MAY 2016

(Regulation 2009)

Eighth Semester

ELECTRICAL AND ELECTRONICS ENGINEERING

EEE343: Electrical Safety and Energy Management

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Safety-related work practices involve:
 - a) The use of ground fault circuit interrupters
 - b) Verifying power is off before doing repairs
 - c) Keeping proper distance from overhead power lines
 - d) All of the above
2. Sag depends on the following
 - a) Length of the span
 - b) Weight of conductor
 - c) Horizontal tension in the conductor
 - d) All of the above
3. The conductor used for equipment earthing
 - a) Bare Conductor
 - b) Insulated conductor
 - c) Any one
 - d) A and B
4. Which of the following are classified as unsafe acts:
 - a) Altering a 3-prong plug to fit a 2-prong outlet
 - b) Using a GFCI
 - c) Working too close to overhead power lines
 - d) A and C
5. Birds land on high voltage power lines, Why don't they get shocked?
 - a) The wires they land on are insulated
 - b) They are not touching ground so there is no potential difference across their bodies
 - c) Birds have large resistance
 - d) All of above
6. ACSR conductor means
 - a) Aluminium copper steel resistive.
 - b) Aluminium conductor steel reinforced.
 - c) All conductor steel reinforced.
 - d) Average copper steel rod.
7. Foam type fire extinguisher is used for
 - a) Oil Fire
 - b) Gas Fire

b) Draw with neat sketch and explain the electrical layout for 230KV/110KV substation.

23. a) Explain the different methods of artificial respiration.
Explain the safety aspects during commissioning.

(OR)

b) Explain classification of electrical installation for equipment.

24. a) List and explain the various types of fire extinguishers.

(OR)

b) Explain the different classifications of fires. Explain the causes of initiation of fire.

25. a) Explain in detail the methodology for conducting a detailed energy audit.

(OR)

b) What are the various ways to conserve energy in our houses and what measures are taken to conserve energy in Pulp and paper industry?
