



Reg.No. _____

End Semester Examination – Nov/Dec - 2016

Code : **12EE254** Semester : **2016-17 ODD**
Sub. Name : **Fundamentals of Electrical safety** Duration : **3 hrs**
Max. marks : **100**

Q. No.	Questions	Marks
PART-A(10X1=10 MARKS)		
1.	Mention the dangers of Exposed conductive part	(1)
2.	Name the equipment outfitted only with the basic insulation and no bonding.	(1)
3.	Give the function of Neutral- Protective Conductor	(1)
4.	Differentiate between Conductor and Insulator	(1)
5.	Resistivity of glass is _____	(1)
6.	Mention the effects of Arc Flash.	(1)
7.	Discuss about Burns.	(1)
8.	What do you think about ARC Blast?	(1)
9.	What is meant by Power factor penalty ?	(1)
10.	Identify the Electric Bill Component.	(1)

PART B(5 X 3= 15 MARKS)		
11	Draw TN-C-S Grounding system.	(3)
12	How can you protect against Direct Contact of electrical equipment?	(3)
13	Can you provide an example of Inhalation Injuries?	(3)
14	How many ways can you recognize Job site hazards?	(3)
15	Classify the terms Estimated rate and Actual rate.	(3)

PART C(5 X 15= 75 MARKS)			
16.	a.	Identify the Physiological response that happens due to Electrical currents and Explain them.	(15)
	b.		
	c.		
	d.		
	e.		
(OR)			
17.	a.	Describe in detail about the impact of electric shock on our muscular system and heart.	(15)
	b.		
	c.		
	d.		
	e.		
18.	a.	How to ensure safety due to Static charges impact?	(15)
	b.		
	c.		
	d.		
	e.		
(OR)			
19.	a.	Find the power dissipated in a 27 Ω resistor if the current is 0.135 A ?	(8)

	b.	State the relationship of Ohms law.	(7)
	c.		
	d.		
	e.		
20.	a.	Explain the Indoor and outdoor Safety Precautions.	(15)
	b.		
	c.		
	d.		
	e.		
(OR)			
21.	a.	Discuss about Recreational safety and Preventive measures	(15)
	b.		
	c.		
	d.		
	e.		
22.	a.	Explain the Determination of Safe approach and Distance determining ARC Hazard.	(15)
	b.		
	c.		
	d.		
	e.		
(OR)			
23.	a.	Explain the Fundamentals Of Electrical hazards	
	b.		(15)
	c.		
	d.		
	e.		
24.	a.	Discuss about Rate Classes and Rate Schedule	(15)
	b.		
	c.		
	d.		
	e.		
(OR)			
25.	a.	Complete the Architecture of smart meter with neat sketch.	(15)
	b.		
	c.		
	d.		
	e.		

ALL THE BEST