

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech. Summer 2021 – 22 Examination

Semester: 8**Subject Code: 203106451****Subject Name: Electrical Installation maintenance & Testing****Date: 28/03/2022****Time: 10:30 am to 01:00 pm****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Objective Type Questions - (Fill in the blanks, one word answer, MCQ-not more than Five in case of MCQ) (All are compulsory) (Each of one mark) **(15)**

1. Which of the following to be done before commissioning?
 a) Fitting of accessories b) Filling of oil c) Both a & b d) None of above
2. The surge resistance of cable is closed to?
 a) 1 ohm b) 25 ohm c) 10 ohm d) 100 ohm
3. Which of the following insulation is used in cables?
 a) Varnished cambric b) High dielectric strength c) high mechanical strength d) all of these
4. The insulating material for cable should have?
 a) low cost b) Filling of oil c) Both a & b d) None
5. The size of the conductor of power cables depends on?
 a) Types of insulation b) current c) voltage d) power factor
6. Full form of ELCB _____
7. lightning arrestors are used for _____
8. Full form of MOCB _____
9. Working principal of Induction Motor _____
10. Isolator is used for _____
11. 4 pole , 50 HZ 1 phase induction motor Find the speed of motor
12. List out equipment used in substation.
13. Why capacitor bank is used?
14. What is the use of Current Transformer
15. What is the efficiency of ideal Transformer?

Q.2 Answer the following questions. (Attempt any three) **(15)**

- A) List out Different types of tests carried on Transformer. Explain Insulation resistance test.
- B) Explain Trouble shooting of synchronous machine.
- C) List down the characteristic of Transformer oil.
- D) Explain Test on Lightning Arrester.

Q.3 A) Explain the Trouble shooting of Circuit breaker. **(07)**
 B) Explain the installation step for Synchronous Machine. **(08)**

OR

- B) Explain the open circuit test (OCC) and short circuit test (SCC) of Synchronous Machine. **(08)**

Q.4 A) Explain Impulse testing **(07)**

OR

- A) Explain the polarity test of Transformer. **(07)**
 B) Explain the working of Induction Motor and type of routine test on Induction motor **(08)**