

Student Exam No:- _____

GANPAT UNIVERSITY
B.TECH SEM-VIII (ELECTRICAL)
REGULAR EXAMINATION MAY-JUNE-2016
2EE801: COMMISSIONING, TESTING & MAINTENANCE OF ELECTRICAL
EQUIPMENT

Time: 3 Hours

Total Marks:-70

- Instructions:** - 1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Answer each section in separate answer book.

SECTION-I

- Que.-1** (A) What is the need of drying out? Enlist the different methods for drying out the induction motor and explain any one. [06]
(B) Discuss the points to be considered for reception, storage, pre-installation checks & foundation of a synchronous machine. [06]

OR

- Que.-1** (A) Explain installation and commissioning of DG set. [06]
(B) Explain standard operating duty cycles for industrial rotating machines with waveforms. [06]

- Que.-2** (A) What is thermography? Discuss the advantages & disadvantages of infrared thermography. How does thermography help in substation maintenance? [05]
(B) Discuss the need of DC supply in substation and explain maintenance of battery bank. [06]

OR

- Que.-2** (A) What is the significance of using Capacitor Voltage Transformer (CVT)? Explain the construction of a CVT with schematic diagram. [05]
(B) Discuss 'Installation and precommissioning checks of outdoor circuit breaker'. [06]

- Que.-3** Attempt any three: [12]
(A) Explain the meaning of first and second numerals used in the Ingress Protection (IP) code & Cooling System code (IC) of induction motor with examples.
(B) Discuss 'electrical troubleshooting approach'.
(C) Explain installation, commissioning and interlocking of isolator.
(D) Explain polarisation Index and its significance.

SECTION-II

- Que.-4 (A) Write down the Trouble shooting chart of a transformer. [06]
(B) What are the functions should be taken during commissioning of transformer at site. [06]

OR

- Que.-4 (A) List out the various tests on transformer. Explain temp. Rise test for the same. [06]
(B) What are the properties of good transformer oil? Discuss any three test to check the properties of oil. [06]

- Que.-5 (A) With reference to power line, explain (i) Right of way (ii) Bird guards (iii) Anti climbing device (iv) Guarding. [05]
(B) Explain significance and method of partial discharge test of cable. [06]

OR

- Que.-5 (A) Discuss the maintenance of overhead transmission line. [05]
(B) In cable, How the nature (type) of the fault is determined with the help of megger? [06]

Que.-6 Attempt any three:

- (A) Tabulate the maintenance schedule of D.C Machine. [12]
(B) What are the problems generated if misalignment in DC Machine? Explain any one method for alignment.
(C) Discuss the continuity test and insulation test for field winding of DC Machine.
(D) Write a short note on "SOIL RESISTIVITY MEASUREMENT".

END OF PAPER