

Board of Technical Education
2nd Mid Term Examination - 2017-18

Sub. Code - Electrical Machine - Ist

Code - EE-206

Max. Marks - 15

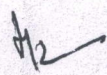
Time - 1 Hr

Date - 16.1.18

Note - Attempt Any Three Questions Carry
Equal marks

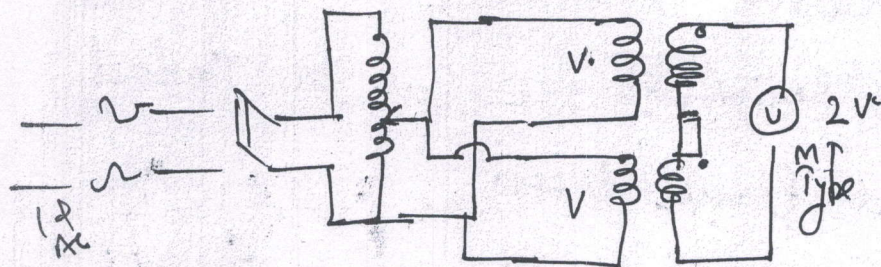
- Q-1 Why we use Buchholz Relay where it is fitted.
- Q-2 Why and How we do polarity Test of Transformer
- Q-3 Why we connect wdg in series opposition for Back to Back Test of Transformer
- Q-4 What are the Advantages of short circuit Test.
- Q-5 What are the Advantages of Open circuit Test.

5x3 = 15


Examiner
G. P. C. Alva

Ans 1 Fault conditions are normal occurs in power system. Where T/F plays a crucial role for external fault various protection system provided but for internal fault buchholz relay has its importance fitted between tank and conservator. Buchholz Relay consist two crucial filled with mercury. In case of internal fault gas generated exerts pressure. then mercury either trips relay C.B. by shorting a conducting path or simply triggers alarm

Ans - 2



To Connect T/F in parallel or to Test it by Sumner's Test T/F polarity Test done

according to circuit diagram. Make Necessary arrangement as per circuit diagram check o/p Voltmeter circuit. If it gives o/p double the 2/p polarity is same otherwise Read zero Means polarity is reversed

Ans - 3

If we don't connect secondary of similar transformer than superposition theorem will no longer work and open ct Test- Results will not accurate

Ans 4

- ① short ckt Test ~~it~~ doesn't give Idea about Iron losses in T/F
- ② There is a possibility of T/F failure if input voltage not regulated properly
- ③ Don't give Idea about Magnetization current-
- ④ Doesnot indicate Core losses
- ⑤ Any Rating of T/F Can be Tested

Ans 5

- ① It gives full load Iron losses as these are constant losses and depends upon Rated Voltage and operating frequency
- ② Any Rating of T/F Can be Tested
- ③ low Power losses