Roll No. | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (EE) PT (Sem.–7)

POWER SYSTEM-II (Switch Gear & Protection)

Subject Code : BTEE-602

M.Code : 74091

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

Write briefly:

1) What do you mean by a static relay?

2) What are the duties performed by a Circuit breaker?

3) What is meant by back up protection?

4) Define the term "fusing factor" related to fuse.

5) What are the functions of a protective relay?

6) What are the uses of a Buchholz's relay?

7) What do you understand by RRRV?

8) Mention any two applications of differential relays.

9) What do you understand by pick up value of a relay?

10) What are the advantages of air blast circuit breakers over oil circuit breakers?

SECTION-B

11) Discuss various types of faults in Alternators. Explain Loss of excitation protection in Generators.

12) Describe the operation of a HRC cartridge fuse.

13) Classify various types of substations. Compare indoor and outdoor types of substations.

14) Explain briefly following terms related to CBs with the help of some diagram :

   a) Arc voltage

   b) Restriking voltage

15) Discuss the Time graded protection of feeders.

SECTION-C

16) Write a note on following :

   a) Negative sequence relay

   b) Carrier current protection of lines.

17) With the help of a neat sketch, describe the working of vacuum circuit breakers.

18) Write a note on following :

   a) Reactance Relays

   b) Ground wires

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.