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**6<sup>th</sup> Sem / Elect**

**Subject:- Electrical Power II/Power-II**

Time : 3Hrs.

M.M. : 100

**SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 The fuse rating expressed in terms of  
a) Current                      b) Voltage  
c) VAR                          d) KVA
- Q.2 In potential transformer, the number of primary turns is always  
a) less than the number of secondary turns  
b) Zero  
c) more than the number of secondary turns  
d) equals the number of secondary turns
- Q.3 The torque produced in induction type relay (shaded pole structure) is  
a) inversely proportional to the current  
b) inversely proportional to the square of the current  
c) proportional to the current  
d) proportional to the square of the current
- Q.4 A thyrite lightning arrester has  
a) Inverse resistance characteristics  
b) a gap  
c) efficient earthing  
d) a combination of inverse resistance characteristics and gap

(1) 180963/170963/120963  
/030963

- Q.5 Domestic consumers are charged as per \_\_\_\_  
a) Flat demand Tariff    b) Block rate Tariff  
c) Flat rate Tariff        d) off peak Tariff
- Q.6 Surge absorbers are used for protection against  
a) High-voltage low frequency oscillations  
b) Low-voltage low frequency oscillations  
c) low -voltage high frequency oscillations  
d) High -voltage high frequency oscillations
- Q.7 Distance relays are Generally  
a) Reactance type        b) MHO type  
c) Impedance type       d) All of above
- Q.8 The relay used for feeder protection is :  
a) Undervoltage relay    b) Translay relay  
c) Thermal relay         d) Buchholtz relay
- Q.9 The Buchholz relay is used for the protection of transformer against  
a) external faults        b) internal faults  
c) Both (a) & (b)        d) None of the above
- Q.10 Over voltage protection is recommended for  
a) hydro-electric generators  
b) steam turbine generators  
c) gas turbine generators  
d) all of the above

(2) 180963/170963/120963  
/030963

### SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Time graded protection is a scheme of \_\_\_\_\_ Protection. (Overcurrent /Overvoltage)
- Q.12 Define Earthing .
- Q.13 A surge diverter is connected between \_\_\_\_\_ (Two Lines /Line& ground)
- Q.14 Reactors are connected in \_\_\_\_\_ with equipment (series/parallel)
- Q.15 HRC stands for \_\_\_\_\_
- Q.16 Equal Fault current due to \_\_\_\_\_ faults. (symmetrical/unsymmetrical)
- Q.17 In India, frequency of single phase supply is \_\_\_\_\_ Hz.
- Q.18 Define fault.
- Q.19 The fusing factor is always greater than \_\_\_\_\_.
- Q.20 A lightning arrestor is connected between \_\_\_\_\_ and \_\_\_\_\_.

### SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Explain briefly the causes of over voltage.
- Q.22 Enlist the working schemes for generators.
- Q.23 Explain with the help of a neat diagram the working of a thermal relay.
- Q.24 What are the requirements of a good lightning arrester ?

(3) 180963/170963/120963  
/030963

- Q.25 Explain the working of Buchholtz relay.
- Q.26 Explain the impedance protection scheme.
- Q.27 Explain with the help of neat diagram the working of a thermal relay .
- Q.28 What is a surge absorber ? How do they differ from surge diverter ? .
- Q.29 explain in brief the construction and working of SF6 circuit breaker .
- Q.30 Differentiate between symmetrical and unsymmetrical faults.
- Q.31 Discuss how the resistance of arc is increased .
- Q.32 Explain the difference between earth and neutral wire.
- Q.33 Write a short note on Minimum oil circuit breaker.
- Q.34 Explain in brief different types of Tariffs .
- Q.35 Mention the various applications of static relay .

### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 What is the role of a feeder in a power system. Discuss various methods of protection of a feeder.
- Q.37 Describe in detail the Merz Price system of protection for generators
- Q.38 Explain various methods of earthing with neat diagram.

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(4) 180963/170963/120963  
/030963