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 the surge absorber? How do they differ from surge diverter?
Q.29 Write the major difference between PT and CVT.
Q.30 Differentiate between symmetrical and unsymmetrical faults
Q.31 Discuss Working function of Wave Trap & Purpose of line trap.
Q.32 Explain the difference between earth and neutral wire.
Q.33 Write a short note on protection of electrical system against under frequency.
Q.34 Explain the secondary of the current transformer should not be open.
Q.35 Mention the various applications of static relay.

SECTEION-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.

No. of Printed Pages : 4 125861
Roll No. .....

6th Sem / Branch : Power Station Engg.
Sub. : Electrical Protection

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 The fuse rating is 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

Q.5 Wave trap is used to trap waves of
a) Power frequencies
b) Higher frequencies entering generator or transformer units
c) Either of the above
d) None of the above

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

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 sully 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 Discuss the protection of electrical system against under voltage.

Q.22 Enlist the working schemes for generations.

Q.23 Explain with the help of a neat diagram the working of a thermal relay.

Q.24 what are the requirements of good lighting arrester?

Q.25 Explain the working of Buchholtz relay.