Q.28 Discuss briefly about tower accessories.
Q.29 How we can reduce the earth resistance?
Q.30 How shielding is different from screening of sub station?
Q.31 Explain the layout of HT distribution system.
Q.32 Discuss the maintenance schedule for power transformer.
Q.33 Discuss the phenomenon of arc formation in circuit breaker.
Q.34 Draw and explain the components of a MCB.
Q.35 Explain how we can protect transmission lines and substation against over voltages?

SECTION-D

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

Q.36 Explain with diagram, the construction and working of Minimum oil circuit breaker. Also mention its advantages.
Q.37 Describe the general construction of an underground cable with a neat and clean diagram.
Q.38 Write short note on following
a) Shielding of sub station
b) Yearly maintenance schedule of substation

Roll No. .....

6th Sem / Branch : Power Station Engg.
Sub. : Transmission and Distribution of Electrical Power/ Elect. Power Station

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 What is the full form of ELCB?
a) Electric leakage circuit breaker
b) Electric leakage current breaker
c) Electrical leakage circuit breaker
d) Electric line circuit breaker

Q.2 Majority of distribution substations are of _____ type
a) Indoor b) Pole mounted
c) Floating d) Submerged

Q.3 A circuit breaker normally operates _____
a) When the power is to be supplied
b) When the line is to be tested
c) When the switch is to be put on
d) Whenever fault occurs in the line

Q.4 Which of the following type of insulator is used in EHV?
a) Pin type insulator

b) Disc type insulator
c) Real insulator
d) Egg insulator

Q.5 The corona effect occurred maximum during _____ season.
a) Summer heat b) Winter
c) Dry weather d) Humid weather

Q.6 Making capacity is represented in _____
a) KW b) MVA
c) VAR d) None of the above

Q.7 What is the function of surge diverter?
a) To divert excess voltages from surge to earth
b) To divert the lightning effects
c) To divert the excessive heating from appliances
d) All of the above

Q.8 The ratio of average load to the maximum load is called_____
a) Peak factor b) Load factor
c) Inverse factor d) Power factor

Q.9 Murray loop test can be used for location of _____
a) Line faults b) Neutral
c) Earth faults d) All of the above

Q.10 What is/are the disadvantages of low power factor?
a) Large copper losses
b) Large KVA rating required
c) Greater conductor size required
d) All of the above

SECTION-B

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

Q.11 What is sag?
Q.12 What is a sub-station?
Q.13 Define the term earthing.
Q.14 What is the full form of ACB?
Q.15 Define bundle conductor.
Q.16 Expand MCB.
Q.17 Mention any two underground faults.
Q.18 What is line do ground fault?
Q.19 What is the use of SVC?
Q.20 Whether pin type insulator is suitable at high voltage?

SECTION-C

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

Q.21 What are the limitations of underground transmission lines?
Q.22 Explain the usage of murray loop testing.
Q.23 What are the advantages and disadvantages of overhead transmission lines?
Q.24 Distinguish between feeder and distributor.
Q.25 Discuss the methods for improving the power factor.
Q.26 Define corona. what factors affects the corona?
Q.27 Distinguish between indoor and outdoor substation.