

No. of Printed Pages : 4 180963/170963/
Roll No. 120963/30963

**6th Sem / Branch : Electrical Engineering
Sub.: Electrical Power II/Power II**

Time : 3Hrs. M.M. : 100

SECTION-A

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

- Q.1 Which of the following faults occurs most frequently?
a) 3 Phase fault b) LLG fault
c) LL fault d) Lg fault
- Q.2 The Voltage that appears across the breaker contact after the circuit breaker is opened is called
a) Arc Voltage b) Restriking voltage
c) Recovery Voltage d) Surge Voltage
- Q.3 Which of the following metals cannot be used as a fuse wire?
a) Copper b) Iron
c) Silver d) Lead-tin alloy
- Q.4 The rating of fuse wire is always expressed in
a) Volts b) Amperes
c) Ampere volts d) Ampere hours
- Q.5 Which of the following properties must be used for the fuse material used in the Wire.
a) Low melting point b) High melting point
c) Low Conductivity d) High Resistivity

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- Q.6 The most severe fault on the power system is
a) 3 phase fault b) LLG Fault
c) LL Fault d) LG Fault
- Q.7 Reactors are connected with the system.
a) In series b) IN parallel
c) In series-Parallel d) Non of the above
- Q.8 Tariff is best defined as :
a) The duty imposed on exporting electrical equipment
b) The rate at which electricity is supplied to the consumer
c) A set of rules explaining the pros and cons of using a specific rating of alternators
d) None of the above
- Q.9 Which one of the following is an objective of tariff:
a) Recovery of cost on production of power
b) Recovery of capital investment
c) Profit gain
d) All of these
- Q.10 Which of the following is correct statement about simple tariff:
a) Has no discrimination of consumers
b) Charges more to commercial users
c) Encourages use of electricity
d) Is most commonly used tariff method

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SECTION-B

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

- Q.11 What is fault level?
- Q.12 What is fusing current?
- Q.13 Define pick-up current.
- Q.14 What is the limitation of fault current?
- Q.15 Write the full form of E.L.C.B.
- Q.16 What is breaking capacity?
- Q.17 What are the various methods of arc extinction in circuit breakers?
- Q.18 What are the different types of oil circuit breaker?
- Q.19 What are the various methods for finding out faults in underground cables?
- Q.20 What is open circuit fault?

SECTION-C

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

- Q.21 Define the following:
 - a) Symmetrical fault
 - b) Percentage reactance
 - c) Base KVA
 - d) Circuit KVA
 - e) Unsymmetrical fault
- Q.22 What are the merits and demerits of oil circuit breaker over air blast circuit breaker?
- Q.23 What are the basic methods of arc extinction in air blast circuit breaker?
- Q.24 What are the essential features of a protective gear?

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- Q.25 Write down the methods of reducing earth resistance?
- Q.26 What are the protection schemes for Transformers?
- Q.27 What are the harmful effects of lightning?
- Q.28 Write a short note on earthing screen?
- Q.29 What is a rod gap arrester? Explain with diagram how it works?
- Q.30 What are the desirable characteristics of tariff?
- Q.31 State the various factors involved in fixing a tariff.
- Q.32 Write short notes on Lighting phenomenon and its effects on transmission lines.
- Q.33 What are the drawbacks of differential protection of transformer? How these are overcome?
- Q.34 What do you mean by plug setting of an over-current relay?
- Q.35 What do you mean by maintenance of oil circuit breaker?

SECTION-D

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

- Q.36 Explain construction and working of Sulphur hexafluoride circuit breaker.
- Q.37 Describe construction and operation of H.R.C. cartridge fuse. What are its advantages and disadvantages?
- Q.38 Give construction and operation of balanced earth fault protection.

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