

Assignment Questions

Sub: Testing & Maintenance of Electrical machine

Chapter-1

Installation, Commissioning & Testing of machine

- ① What do you mean by inspection on arrival of machine? why it is necessary? 15
- ② What is Handling of machine? 2
- ③ What is drying out of machine? 2
- ④ Why earthing is necessary? 2
- ⑤ Write the use of
① Megger
② Earth Tester.
- ⑥ What are the necessary instructions to be given before installation. 2
- ⑦ Levelling of machine is essential. Why? 2
- ⑧ Why starter is necessary in dc motor? 2
- ⑨ Write the functions of (a) 110-volt coil
(b) overload release coil
- ⑩ Write two purposes of Earthing 2
- ⑪ What is fuse? why it is used? what are the types of fuse
- ⑫ State the use of
① Circuit breaker
② Relay.

(13) Describe Indian Electricity rules prescribed for domestic installation. 5

(14) State the Indian electricity rules relating to transmission & distribution lines. 5

(15) In the content of Indian Electricity rules, write short notes on the following.

(a) periodic inspection the testing of 5

(b) precaution against failure of supply 5

(16) Explain generalised procedure of installation of electrical machine. 10

(17) Why starters are used in dc machine? Explain a point starter construction & working principle. 10

(18) Why starters are used in AC machines? Explain various starter used for 3- ϕ induction motor. 10

(19) ~~Explain~~ What are electrical & mechanical checks before giving the supply to electrical machine. 10

Assignment Questions / probable questions

Chapter-2 Installations, Commissioning and Testing of transformer.

- ① What is ~~power~~ a transformer? Explain various parts of power transformer with their function. 10
- ② What is the difference between power transformer & distribution transformers 5
- ③ Give the elementary idea regarding dispatch, inspection, storage & handling of transformer. 10
- ④ Explain the procedure of filling the oil in a transformer tank. 10
- ⑤ Explain procedure of drying out of 3- ϕ power transformer. 10
- ⑥ What is the function of (a) conservator 2
(b) breather 2
(c) Buchholz relay 2
- ⑦ What are the properties of insulating oil used in transformer 15
- ⑧ Explain the points to be considered in the selection of site & location of power transformer. 10

9) What do you mean by commissioning of machine? [2]

10) Explain the testing of transformer oil [5]

11) Write down the steps for commissioning fitting of all accessories of transformer. [10]

12) Explain charging of breather with fresh silica gel [5]

13) How the bushings of transformer is to be cleaned? [5]

14) State the various steps in commissioning of power transformer [10]

15) Explain maintenance of bushings? [5]

16) Explain the filtering process of transformer oil.

QuestionChapter-4 Maintenance

- ① What is maintenance? Why maintenance of equipment is necessary? 15
- ② What are the different types of maintenance? Discuss briefly. 15
- ③ Explain the Advantages of preventive maintenance 10
- ④ Classify preventive maintenance. 15
- ⑤ What is breakdown maintenance? What are its main cause? 15
- ⑥ Explain various factors taken into consideration during preparation of schedule for maintenance. 10
- ⑦ Explain the following tools with sketches. 10
 - (a) Screw driver
 - (b) Hammer
 - (c) Bench vice
- ⑧ Write the various precautions in handling the tools. 10
- ⑨ Explain maintenance schedule of transformer. 10
- ⑩ Write maintenance schedule of motor. 10

(11) List the commonly used instruments for maintenance.

(12) Why periodic inspection is necessary