

## Question Bank (K-Scheme)

Name of course: Electrical Estimation & Contracting

Unit Test: II

Subject code: 314325 (EEC)

Semester: IV

Program: EE

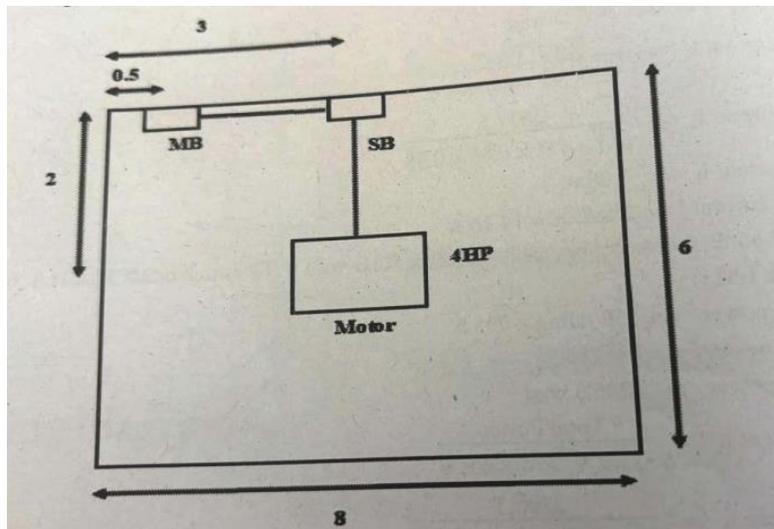
### Chapter 3: Industrial Installations

#### 2 Marks

1. Draw single line diagram connecting 3 Induction motors from a distribution board.
2. List the starters used for different motors.

#### 4 Marks

3. List the design considerations of Industrial Installation.
4. Draw the wiring diagram and single line diagram of 3 phase, 415v 5 HP induction motor.
5. Prepare the schedule of material for an industrial installation shown in fig.



6. Assume suitable data and make an approximate estimate of major equipment and machines in any medium scale industry.

### Chapter 4: Public Lighting Installation

#### 2Marks

7. State objectives of Public outdoor lighting.
8. State minimum 4 types of lamps used in public outdoor lighting.
9. What do you mean by flood lighting?
10. State 4 types of poles used in public lighting installation.

#### **4Marks**

11. Explain ON/OFF control equipment of street light installation.
12. Compare street lighting with indoor lighting.
13. State and explain the terms related to lighting installation as per NEC 2023.
14. State any eight objectives of road lighting.
15. Draw a neat well labeled diagram of steel tubular pole used in public lighting.
16. A street light scheme is to be executed using 12 number of poles with a span of 30m, the lights on poles are 4 feet tubes with outdoor fittings. Make an approximate estimate of this work.
17. Write short notes on any four components of high mast lighting.
18. List the procedure of estimation of street light Installation.
19. List the procedure of estimation of high - mast lighting Installation.

#### **Chapter 5: Distribution Lines**

#### **2Marks**

20. State and define the types of distribution system.
21. State the factors deciding the selection of power cables
22. State the function of insulators in transmission lines. Name the insulators used in different parts of HT power lines.
23. Name the type of cables used for different voltage levels in underground power distribution system.

#### **4Marks**

24. An overhead distribution line of 3 phase, 400 V is passing straight 300 m in a town along the road. Taking span of 50 m estimate the material required with approximate costing.
25. List the components of 11kv substation along with its function.
26. State the different methods of cable termination. Explain anyone in detail.
27. Draw a neat well labeled diagram of construction of cable used in distribution.
28. Compare overhead and underground system for distribution of power.
29. Prepare the list of material required for a 1Km long 11KV overhead line. The span between the poles is 100m.