

Question Bank (G-scheme)

Name of subject: Production Engg. & Robotics
Subject code: 17609

Unit Test: II
Course: ME6G

Semester: VI

Chapter 5: Work Study

Marks

1. Define method study. Explain the scope of method study. 3
2. What are the objectives of method study? 3
3. State the basic procedure of work study. 4
4. State any 8 principles of motion economy. 3
5. Construct two handed process chart for the assembly of Nut and Bolt with summary. 3
6. List down the principles of the motion economy related to work place design. 4
7. Define time study. 3
8. What are the general steps for conducting the time study? 4
9. A particular activity on the shop floor consist of three 4 elements. Calculate the standard time for the activity. The various allowances are given as percentage of the normal time. Calculate the standard time for each element.

Elements	A	b	C
Observed time (min)	1.0	1.5	2.0
Rating factor (%)	125	120	110
Allowances (%)	20	15	20

Chapter 6: Jigs and Fixtures

1. Write advantages of Jigs and Fixtures. 3
2. Differentiate between jig and fixtures. 4
3. Write down the different components of Jig / Fixtures. 4
4. State and explain the types of Milling fixture. 3
5. List the types of locators. 3
6. Write short note on Ejectors. 3
7. Explain 3-2-1 principle of location with suitable example. 4
8. State and explain the general principle of jig fixture design. 4

Chapter 7: Modern Trends in Production Engg.

1. Explain in short "JIT" system of production. State its merits. 3
2. Explain a Pull Type manufacturing System. 3
3. How 5 'S' can be used as a waste management technique? 4
4. Define: ERP. 3
5. What are the benefits of ERP. 4
6. Define KAIZEN. 3
7. Write a short note on Benefits of Kaizen. 4

Chapter 8: Robotics

1. Define robot and robotics. 3
2. Explain Degree of Freedom in robot. 3
3. Give Applications of robots. 3
4. Give classification of robot sensor. 3
5. What is Actuators? State its type. 3
6. Explain the hydraulic actuators used in robots. 4