

- Q.32 Write a short note on incentives for indirect labour. (CO-4)
- Q.33 Differentiate PERT and CPM. (CO-7)
- Q.34 Define store and give its types. (CO-9)
- Q.35 Explain the different layout and structures of store. (CO-9)

Section-D

- Note:** Long answer questions. Attempt any two question out of three Questions. (2x10=20)
- Q.36 Write short notes on (CO-3)
- a) Relationship between of work study and work measurement.
 - b) Human aspect of work study.
- Q.37 Define the concept of standard time. Explain clearly the steps involved in arriving at standard time, starting with observed time. (CO-5)
- Q.38 Describe the objectives and components of production planning and production control. Write the advantages of planning and production control also. (CO-8)
 (Note Course outcome (CO) mentioned in the question paper is for official purpose only.)

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6th Sem / Mech. (T & D)
Sub : Industrial Engineering

Time : 3 Hrs.

M.M. : 100

SECTION-A

- Note:** Multiple Choice Questions. All Questions are compulsory. (10x1=10)
- Q.1 Productivity is the ratio of (CO-1)
- a) Output & input
 - b) Input & output
 - c) Production & output
 - d) None of these
- Q.2 Work study is widely known as (CO-2)
- a) Productivity development
 - b) Time and motion study method
 - c) Analytical estimating
 - d) Material handling study
- Q.3 Basic tool is work study is (CO-3)
- a) Graph paper
 - b) Process chart
 - c) Planning chart
 - d) Stop watch
- Q.4 The symbol 'O' stands for (CO-3)
- a) Operation
 - b) Transport
 - c) delay/temporary storage
 - d) Permanent storage
- Q.5 Percent idle time for men or machines is found by (CO-3)

- Q.6 Micro motion study involves following number of fundamental hand motions. (CO-5)

a) 8 b) 12
c) 16 d) 20

Q.7 The time value of standard data is (CO-5)

a) 0.1 s b) 1s
c) 1-2s d) 3-4s

Q.8 ABC analysis deals with (CO-6)

a) Analysis of process chart
b) Flow of material
c) Ordering schedule of job
d) Controlling inventory costs money

Q.9 Total Float = _____. (CO-7)

a) LST-EST b) LFT-EFT
c) Both A & B c) None of these

Q.10 _____ are used to represent activity in a network diagram. (CO-9)

a) Circles b) Squares
c) Rectangles d) Arrows

Section-B

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

- Q.11 Define productivity. (CO-1)
Q.12 What is a flow process chart. (CO-2)

- Q.13 What is a multiple activity chart? (CO-3)

Q.14 Define ergonomics. (CO-3)

Q.15 Define standard time. (CO-3)

Q.16 Define batch production. (CO-8)

Q.17 Define wage. (CO-4)

Q.18 Explain the term ‘Follow-up’. (CO-6)

Q.19 Define routing. (CO-7)

Q.20 Define inventory. (CO-9)

Section-C

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

- Q.21 How the productivity is measured? Explain.(CO-1)

Q.22 Explain the methods of improving productivity.
(CO-2)

Q.23 Write a short note on role of work study in
improving productivity. (CO-3)

Q.24 Explain the scope of work-study. (CO-2)

Q.25 Draw a men type flow process chart. (CO-3)

Q.26 Explain the procedure of method study. (CO-3)

Q.27 Write the objective the Therbligs. (CO-5)

Q.28 Explain the principles of motion economy.(CO-5)

Q.29 Explain the objective of work measurement.(CO-6)

Q.30 Write the uses of standard data. (CO-5)

Q.31 Enlist the essential requirements of a good wage
system. (CO-4)