

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2014 COURSE)
B.Tech.Sem - VIII PRODUCTION :SUMMER- 2022
SUBJECT : PROCESS PLANNING & TOOL DESIGN

Day : Tuesday
Date : 14-06-2022

S-13491-2022

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Use of non-programmable **CALCULATOR** is allowed.
 - 4) Assume suitable data if necessary.
-

- Q.1** What are the functions of Process engineering? **(10)**
OR
What are the auxiliary methods for visualizing the part print?
- Q.2** Define the following terms, **(10)**
a) Roundness
b) Concentricity
How these geometrical features are measured?
OR
What is the purpose of tolerance chart? Explain briefly the following terms,
a) Working conditions
b) Intermediate resultant
c) Balance dimension
- Q.3** Define dimensional control. When a good dimensional control said to exist? **(10)**
How is it obtained?
OR
What is basic process operation? What major factor usually prevents basic process operations being performed in a fabrication plant?
- Q.4** What is forced replacement? To what conditions can the need for making **(10)**
the decision for a new machine be attributed?
OR
Define tooling. Compare commercial and special tooling.
- Q.5** What is generally gained by combining operations? What are disadvantages **(10)**
of combining operations?
OR
Discuss the economic factors concerning the use of available equipment as against the purchase of new equipment.
- Q.6** Prepare the detailed process plan for the component shown in figure 1. **(10)**
Process plan should consists of process sheet, operation description sheets containing suitable cutting speed and feed rates and process pictures.
(machining time calculations are not required)
OR
Prepare the detailed process plan for the component shown in figure 2.
Process plan should consists of process sheet, operation description sheets containing suitable cutting speed and feed rates and process pictures.
(machining time calculations are not required)

P.T.O.

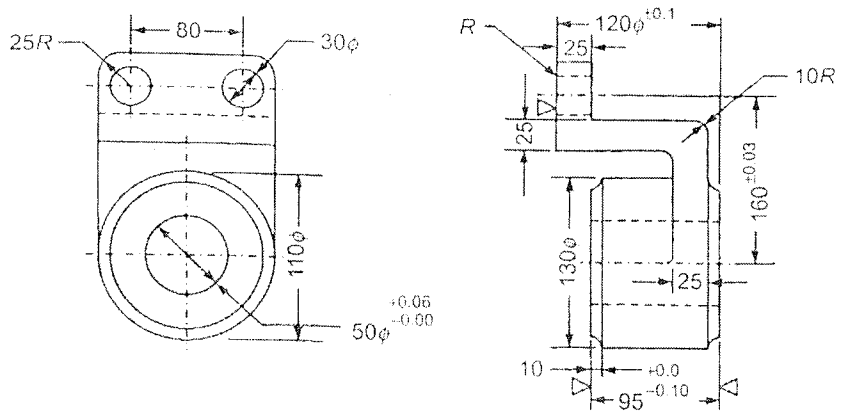


Fig. 1

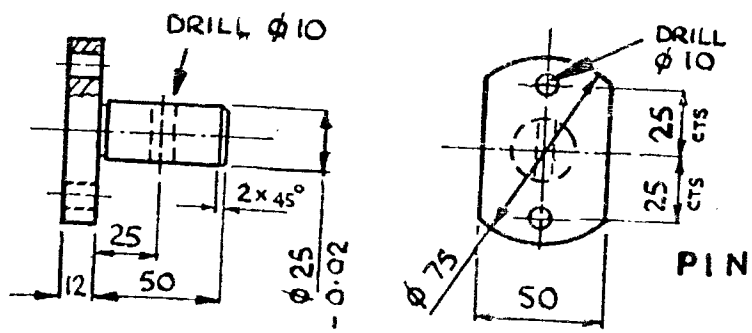


Fig. 2.

* * * * *