

TE - II | Design of Jigs & Fixture / PROD

04.12.14

Q.P. Code : 14930

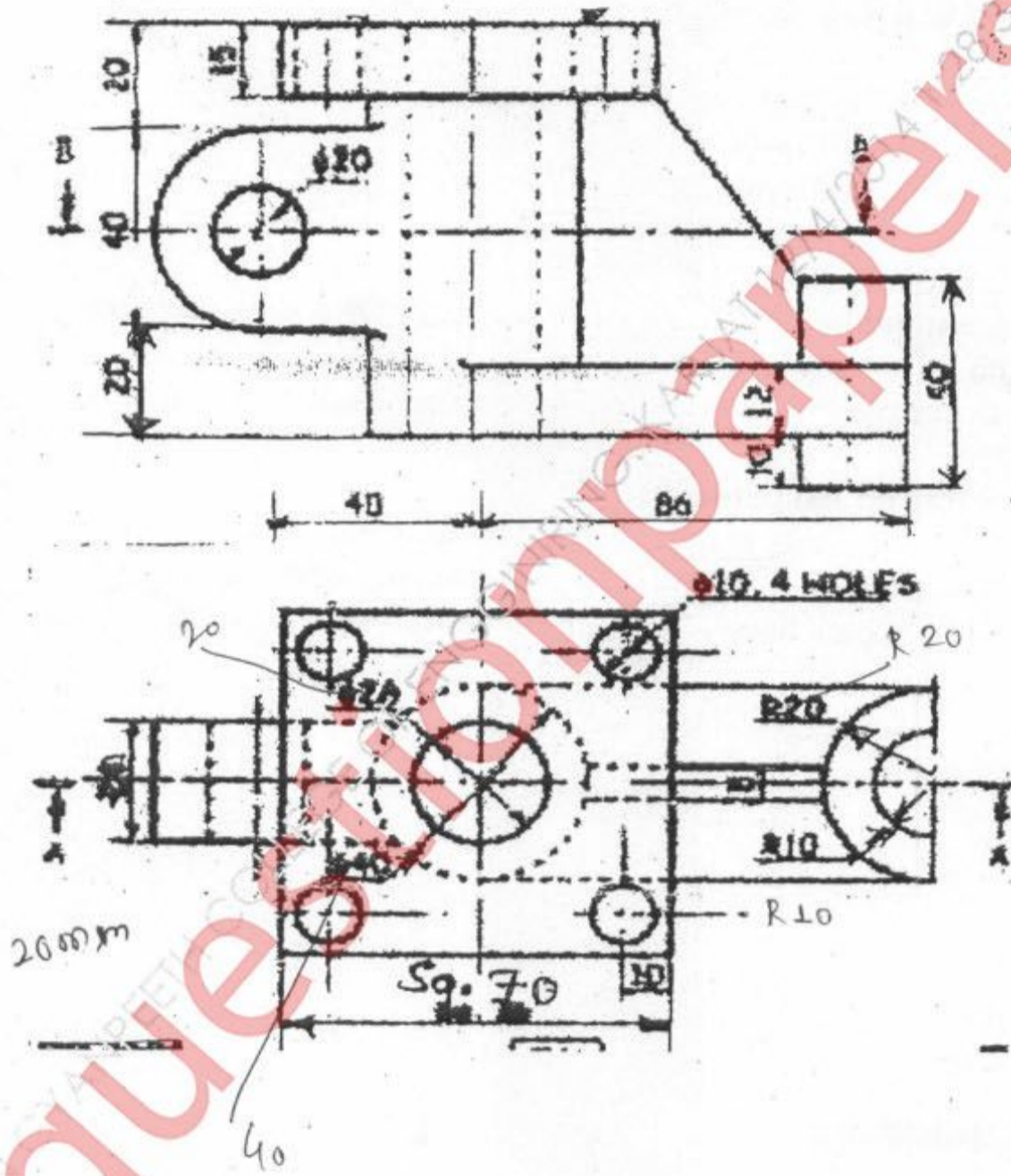


(3 Hours)

[ Total Marks : 80

- N.B. : (1) Question No.1 is Compulsory.  
(2) Solve any **three** from question Nos. 2 to 6.  
(3) Support your answers with **neat** sketches.

1. (a) Design and draw a drill jig to drill 4 holes of  $\phi 10$ , for the given figure. Draw 20 minimum two views of jig and indicate important dimensions.



2. Explain any **three** of the following :-

- (a) Box drill jig
- (b) Principle of clamping
- (c) Centralizers
- (d) Equalizer

20

3. Differentiate following :-

- (a) Jigs and Fixture
- (b) Allen screws and Dowels
- (c) Plate jig and post jig

20

4. Write short note with the help of suitable diagrams :-

- (a) Construction of Typical Milling Fixture
- (b) Construction of Turning fixture

20

5. (a) What is jamming ?

Discuss different methods of preventing jamming with neat sketches.

(b) Draw a sketch of indexing jig.

How it may differ constructionally from indexing fixture ?

10

10

6. (a) Write a short note on indexing.

(b) State following statements are **true** or **false** (Give reasons)

- (i) Diamond pins are provided to prevent jamming.
- (ii) Dowels are used for clamping components.

10

10