S.B. Roll	No
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# WORKSHOP TECHNOLOGY-II 4<sup>th</sup> Exam./Mech/Auto/5310/June'2015

Duration: 3 Hrs M. Marks: 75

Note: Section-A is compulsory.

### Section-A

## **Q.1** Fill in the blanks. $10 \times 1 = 10$

- (a) Coolant and lubricants .....the tool life.
- (b) The fixture does not .....the tool.
- (c) When a broach is made in one piece it is called a ......
- (d) The cutting action of a slotter occurs on the .....stroke.
- (e) Reaming is a .....operation.
- (f) .....is the operation of cutting an internal thread in a drilled hole.
- (g) Turret lathe is .....type lathe.
- (h) Angle plates, collets and mandrels are ......of lathe.
- (i) The .....stroke in a shaper is called idle stoke.
- (j) The planer is especially adopted to .....work piece.

#### State True OR False :-

 $5 \times 1 = 5$ 

- (a) Pull broaches are longer than the push broaches.
- (b) The Clapper box in a shaper helps to perform the return stroke.
- (c) Cutting fluid should have high viscosity.
- (d) Diamond is the hardest of all the cutting tool materials.
- (e) Jigs are heavier than fixtures.

#### Section-B

## Q.2 Attempt any five question.

 $5 \times 6 = 30$ 

- I. What do you understand by tool signature?
- II. Write the various methods for taper turning. Explain one of them.
- III. Explain the principle of drilling.
- IV. Explain difference between cutting fluid and lubricant.
- V. Classify different types of boring machines.
- VI. Write the working principle of a planer.
- VII. What are the advantages of jigs and fixtures?

#### Section-C

## Q.3 Attempt any three questions.

3 x 10 = 30

- What are the most commonly used systems of lubrication of machine tools?
  Explain two of them.
- II. Differentiate between a capstan and Turret lathe.
- III. Describe jig boring machine and its operation?
- IV. Draw the block diagram of horizontal shaper and write about its important parts in detail.
- V. Explain pull broach and push broach with neat sketch.