3507

C09–M–407

3507

BOARD DIPLOMA EXAMINATION, (C–09)

OCT/NOV—2017

DME—FOURTH SEMESTER EXAMINATION

PRODUCTION DRAWING

Time : 3 hours] [*Total Marks* : 60

PART—A 5×4=20

Instructions : (1) Answer **all** questions.

(2) Each question carries **five** marks.

1. Calculate the values of clearance/interference, hole tolerance and shaft tolerance for a basic size of 40 mm, and also determine the type of fit for the tolerances indicated as H 8/u 7.

2. Draw the conventional sysmbols for the following : 1×5=5

   (a) Knurling

   (b) Bearing

   (c) Splined shaft

   (d) Spur gear

   (e) Semielliptical leaf spring

3. Draw the symbols for the following : 1×5=5

   (a) Flatness

   (b) Cylindricity

   (c) Angularity

   (d) Profile of any surface

   (e) Run-out

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4. Write the surface foughness values for the following :   1×5=5

   (a) Hot rolling

   (b) Filing

   (c) Honing

   (d) Sand casting

   (e) Drilling

## PART—B   40

Instructions : (1) Answer *any* **one** question.

                (2) Priority should be given to the accuracy, neatness and dimensioning.

                (3) Choose suitable scale.

5. Study the given assembly drawing of universal coupling :

   (a) Draw the component drawings for all parts.

   (b) Indicate geometrical tolerances wherever needed for all parts.

   (c) Indicate the recommended surface roughness values of all parts.

   (d) Mention the type of fits between mating parts 1-2 and 1-3.

   (e) Prepare the process sheet for centre block.   20+5+5+2+8=40

Universal Coupling

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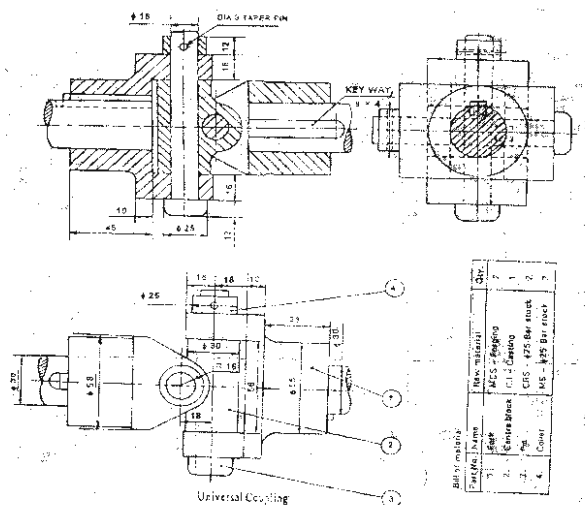
6. Study the given assembly drawing of drill jig.

(a) Draw the component drawings (Part No. 1, 2, 3, 7 and 8), selecting suitable tolerances and fits.

(b) Prepare the process sheet for 'drill bush'.

(c) Write the material list for all the parts.

(d) Indicate the surface values on components.   25+5+5+5=40

DRILL JIG

Part NO	NAME	Qty
1	BASE PLATE.	1
2	STEM .	1
3	JIG PLATE	1
4	HEAD SCREW	1
5	STUD	1
6	NUT	1
7	DRILL BUSH.	6
8	LATCH WASHER	1
9	SCREW	1

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