



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 symbols 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

4. Write the surface foughness values for the following : $1 \times 5 = 5$

- (a) Hot rolling
- (b) Filing
- (c) Honing
- (d) Sand casting
- (e) Drilling

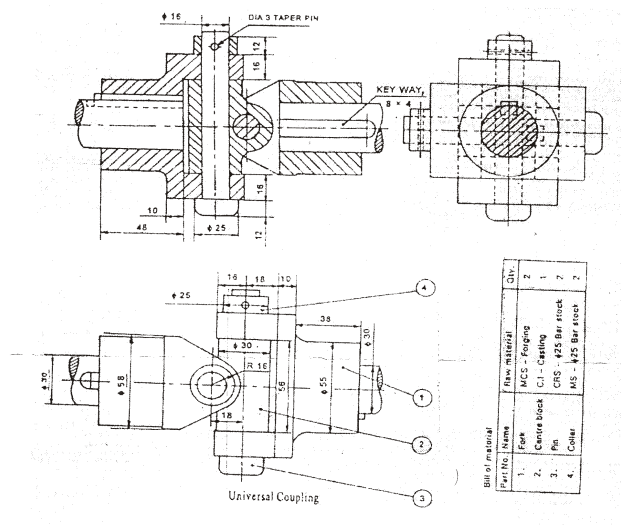
PART—B

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. $20+5+5+2+8=40$



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

