## 4255

# BOARD DIPLOMA EXAMINATION, (C-14) MARCH /APRIL-2019 DME -THIRD SEMESTER EXAMINATION

### MACHINE DRAWING PRACTICE

Time: 3 hours Max. Marks: 60

#### **PART-A**

4x5 = 20M

Instructions: 1) Answer all questions and each question carries 5 marks.2) All dimensions are to be in given in mm.

- 1. Draw a M20 hexagonal bolt with a nut and washer in position.
- 2. Draw the following with their proportions (diameter of shaft=20mm)
  - (a) Flat saddle key
  - (b) Single headed feather key.

 $2\frac{1}{2} + 2\frac{1}{2} = 5M$ 

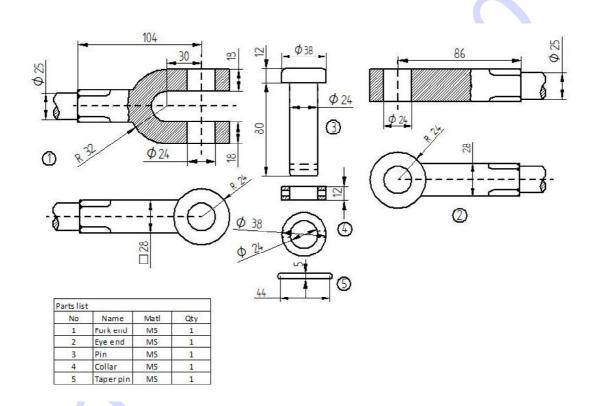
- 3. Draw the following Weld symbols
  - (a) Single V butt weld
  - (b) Flat single-V butt weld
  - (c) Back weld
  - (d) Concave weld
  - (e) Plug weld
- 4. Draw the following pipe fitting symbols (single line)
  - (a) Union
  - (b) Tee
  - (c) 90° elbow
  - (d) Reducer
  - (e) Gate valve

#### **PART-B**

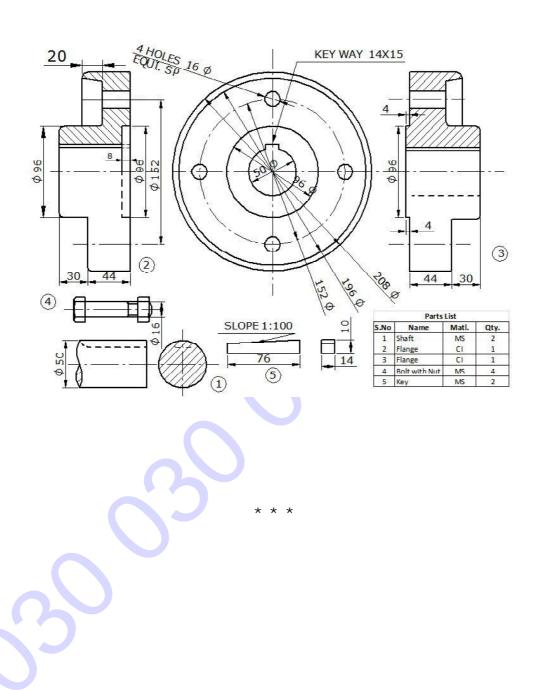
1x40 = 40M

*Instructions*: i) Answer any **one** question and each carries **Forty** marks.

- ii) All dimensions are given in mm and choose suitable scale.
- iii) Assume missing dimensions suitably.
- 5. Draw the front and top view of the knuckle joint in assembly, the details of which are given below. 20+20=40M



6. Draw the front and side view of the Protected flanged coupling in assembly, the details of which are given below. 20+20=40M



3