## 4255

## BOARD DI PLOMA EXAMI NATI ON, (C-14) <br> MARCH / APRIL-2019 <br> DME -THI RD SEMESTER EXAMI NATION

 MACHINE DRAWING PRACTICETime: 3 hours Max. Marks: 60

## PART-A

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.
$2^{11 / 2}+2^{1 / 2}=5 \mathrm{M}$
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) $90^{\circ}$ elbow
(d) Reducer
(e) Gate valve

## PART-B

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.

$$
20+20=40 \mathrm{M}
$$


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


