



UF-6263

B. E. - II (Sem. III) (Mech.) Examination

May / June - 2012

Machine Drawing

Time : 3 Hours]

[Total Marks : 100

Instructions :

नीचे दशांशों में निशानीवाणी विगतो उत्तरवाडी पर अवश्य लखवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
B. E. - 2 (SEM. 3) (MECH.)

Name of the Subject :
MACHINE DRAWING

Subject Code No. : 6 2 6 3 Section No. (1, 2,.....): NIL

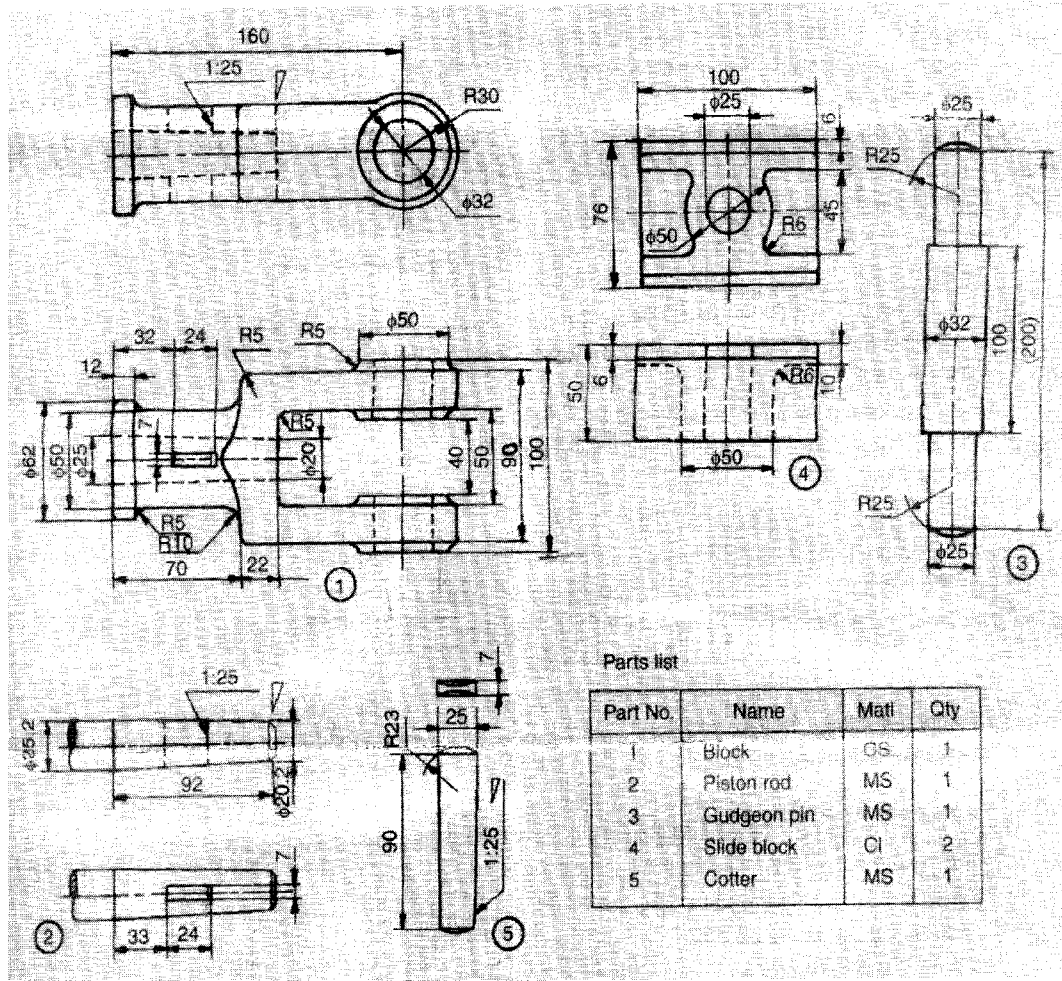
Seat No. :

Student's Signature

- (2) No marks for dimensions.
(3) Figures to the right indicate full marks.
(4) Draw the various parts in proportion.
(5) For all questions sketch the figures free hand and proportionately.
- 1 (a) Answer the following : (any five) 10
- (i) Give the classification of screw threads.
(ii) Sketch the Tapper sunk key.
(iii) Draw 6-spline shaft.
(iv) Draw symbols for welded joints as recommended by the B.I.S.
(a) Square and
(b) Double bevel butt
(v) The combination of square and 'V' threads is made in _____ thread which is used in the screw of _____.
(vi) Draw the nipple pipe joint and bend of pipe.
(vii) Differentiate between temporary and permanent fastener.
- (b) Sketch Wiles Nut. 3
(c) Make a neat sketch of Lifting eye bolt. 7

- 2 (a) Sketch two views of double riveted Chain Lap joint. 7
 (b) Sketch proportionately : “The sectional front view of Socket and Spigot joint”. 8
- OR**
- (a) Sketch the strap joint with Gib and Cotter 7
 proportionately.
 (b) Draw a neat sketch of: 8
 (i) T-type pipe and
 (ii) Loop type pipe joint”.
- 3 (a) Sketch proportionately : “Gland and stuffing box expansion joint.” 10
- OR**
- (a) Sketch proportionately : 10
 (i) Union pipe joint and
 (ii) wiped joint of pipe
 (b) Draw any three weld joint symbols 3
- OR**
- (b) What are the advantages of welding over riveting ? 2
- 4 (a) Answer the following : (any five) 10
 (i) What is the function of cylinder cover in piston cylinder assembly ?
 (ii) Why usually in pulleys curved arms are preferred to straight arms ?
 (iii) What is the use of crank shaft in IC engine ?
 (iv) What is the function of bearing ?
 (v) What is the use of pulley ? Name any three types of pulley.
 (vi) What is the function of a cross head in a steam engine ? Where it is used and why ?
- (b) Draw two views of the J-type hanger for a line-shaft bearing. 10
- OR**
- (b) Draw the two views of U-type hanger. 10
- 5 (a) Show by means of two sketch of foot step bearing. 8
 (b) Sketch proportionately split muff coupling (two views). 7
- OR**
- (a) Sketch neatly two views of speed cone pulley and method of fixing a pulley. 8
 (b) Sketch proportionately Half Lap coupling (two views) 7

- 6 Fig shows the details of Steam Engine Cross Head. 15
 Draw the Front and Top views of the assembly of Cross head.



All Dimensions are in mm
 Fig. Steam Engine Crosshead