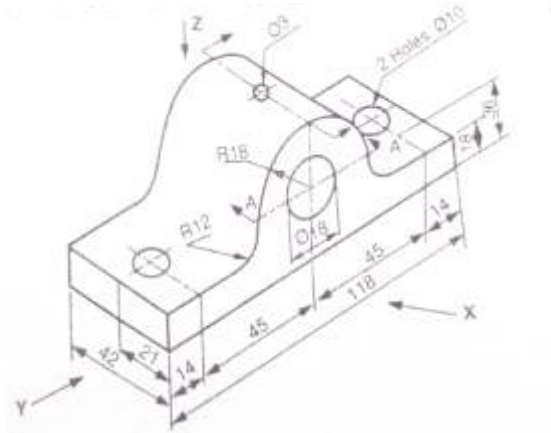
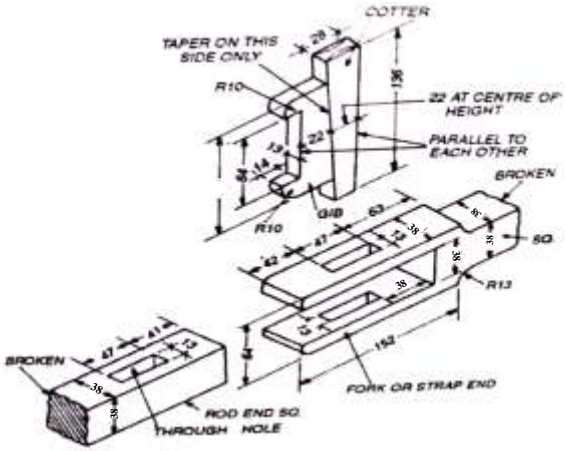


Q.25 A right circular cylinder of base diameter 60 mm and height 100 mm is resting on its base in H.P. with axis perpendicular to the H.P. and parallel to the V.P. The cylinder is cut at an angle 45° to H.P. at a distance 45 mm from the base. Draw the development of the lateral surface of the cylinder.

Q.26 The detail of Gib and Cotter joint are given below. Assemble the parts together and draw (a) Front view upper half in section (b) Side view (c) Top view. Adopt suitable scale, Use first angle projection system.



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1st Year / Advance Diploma in Tool and Die Making
Subject:- Engineering Drawing

Time : 4Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 The grade becomes_____ according to the figure placed in front of the letter B, 2B, 3B, 4B etc.
a) harder b) lighter
c) darker d) softer

Q.2 What does the drawing board size of B3 indicate as per B.I.S., in mm?
a) 1000 x 1500 b) 500 x 700
c) 350 x 500 d) 700 x 1000

Q.3 In the first angle projection, what is the sequence of the following list?
P) Observer
Q) Object
R) Plane
a) P-Q-R b) Q-P-R
c) R-P-Q d) P-R-Q

Q.4 What are the lines used at the first stage of free-hand sketching an object?
a) Thin construction lines
b) Dark lines
c) Dotted and dark lines
d) Thick lines

Q.5 As far as possible, the dimension should be given to which of the following lines?

a) Leader line b) Hidden line
c) Center line d) Outline

Q.6 What is the type of scale in which the representative fraction is 1:1?
a) Enlarged scale b) Reduced scale
c) Full size scale d) Graphical scale

Q.7 The lines parallel to isometric axes are called_____ lines.
a) parallel b) auxiliary
c) isometric d) oblique

Q.8 In_____development method, the surface is divided into parts of parallel lines to determine the surface.
a) Approximate development
b) Parallel line development
c) Triangulation method
d) Radial line development

Q.9 Which of the following joins two rotating shafts to each other?
a) Key b) Belt drive
c) Gear d) Coupling

Q.10 Cotter joint is used when the members are subjected to which type of stresses?
a) Axial tensile
b) Axial compressive
c) Axial tensile or compressive
d) None of the mentioned

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 What is the next size of 210 mm x 297mm in drawing papers?

Q.12 The actual length is 1 cm. The length is drawing is 30 cm. Find the representative fraction.

Q.13 Define fits.

Q.14 What is use of bill of material block?

Q.15 What is the purpose of development of surfaces?

Q.16 Define bolt.

Q.17 Write an example of temporary joint.

Q.18 Define detail drawing.

Q.19 On which plane, the top view of an object is shown?

Q.20 Describe shaft coupling.

SECTION-C

Note: Short answer type questions. Attempt any four questions out of six questions. (4x20=80)

Q.21 On a building plan, a line 20 cm long represents a distance of 10 m. Device a diagonal scale for the plan to read up to 12m, showing meters, decimeters and centimeters. Show on you scale the lengths 6.48 m & 11.14 m.

Q.22 a) Draw free hand sketch of Rag bolt.
b) Draw in proportionate free hand sketch; the top view and sectional front view of a single riveted lap joint; when the diameter of the rivet is 18mm.

Q.23 a) Write freehand the following, using single stroke vertical CAPITAL letters of 5mm (h) size
"ENGINEERING GRAPHICS IS THE LANGUAGE OF ENGINEERS"
b) Show types of fits with figure.

Q.24 Pictorial view of an object is shown in figure given below. Draw to a suitable scale the following views:
i) Full sectional Front view looking in the direction of arrow X.
ii) Full sectional side view looking in the direction of arrow Y.
iii) Full sectional top view looking in the direction of arrow Z.