Question 1. A scaled down Isometric View, a **full size** End Elevation and a Plan of a Wooden Toy Train are given. In the space indicated:

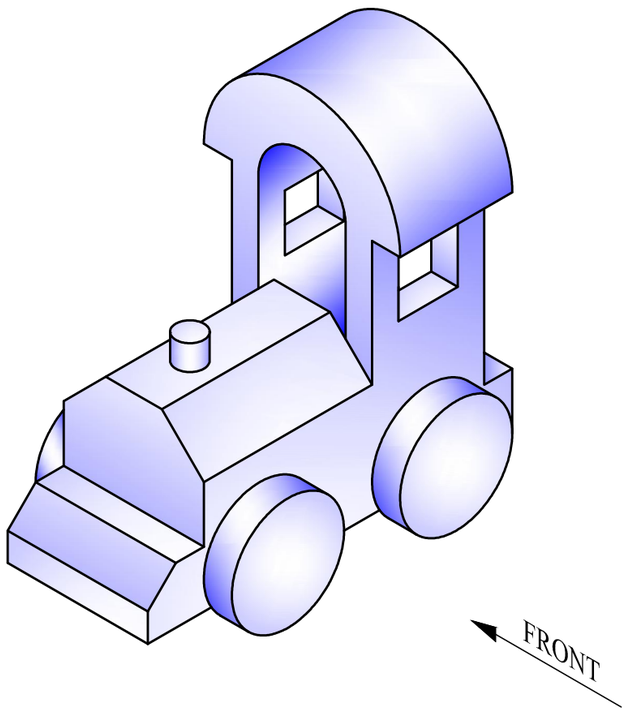
a) project the Front Elevation

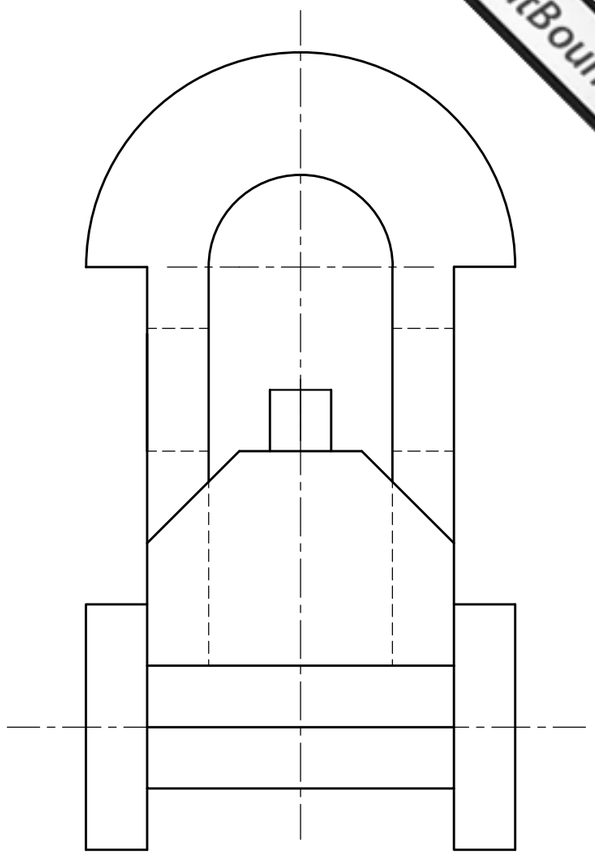
b) print the scale used for the orthographic views

c) draw the symbol of the projection used

Note: Show all hidden details.

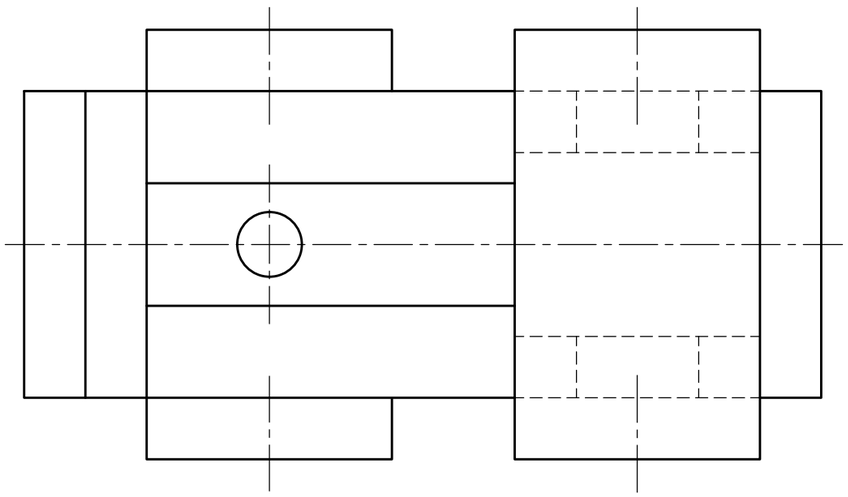
18 marks





END ELEVATION

FRONT ELEVATION



PLAN

SCALE .....

Projection Symbol _._._._._._._

Sheet 1 of 4

Track 2 _ FORM 3 (3rd Year) _ 2012

GRAPHICAL COMMUNICATI

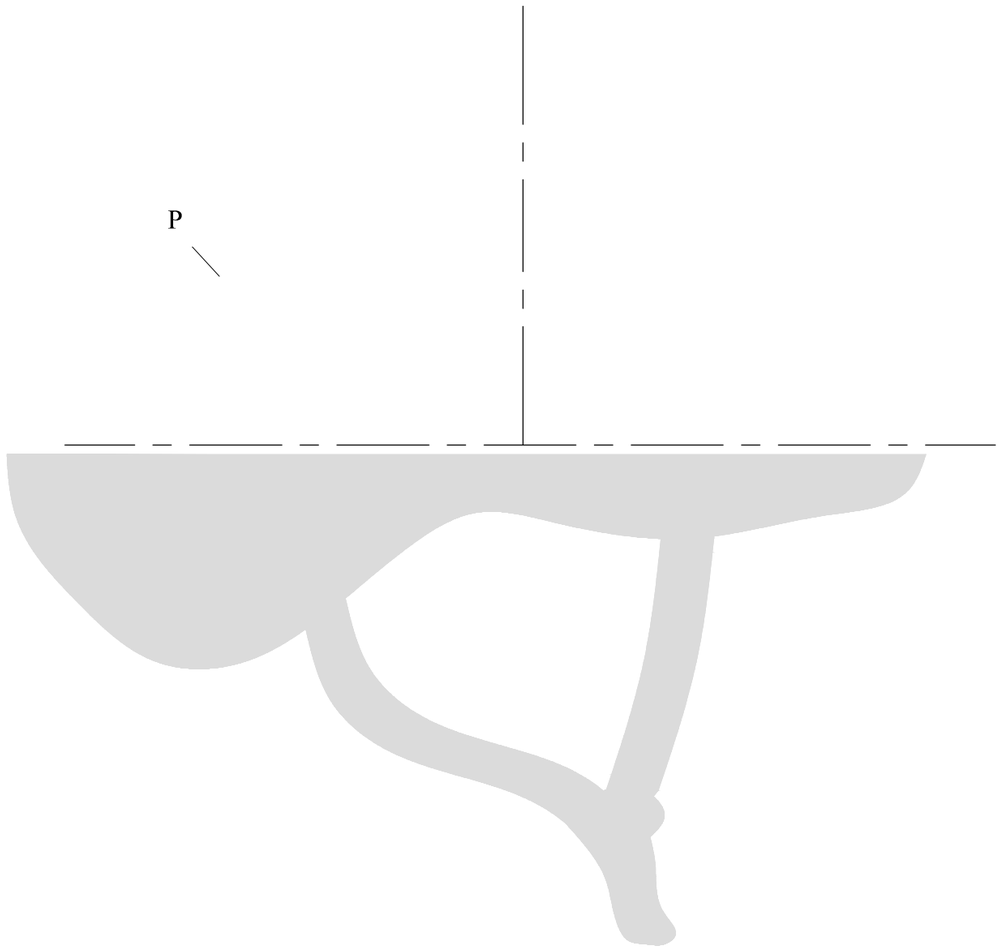
Class:

Question 2. The profile of a cyclist's helmet consists mainly of a semi ellipse and a tangential straight portion. On the given start lines and to the given dimensions:

a) Construct a semi ellipse having a major axis of 132mm and a minor axis of 96mm.

b) Construct a tangent at point P to complete the helmet.

12 marks

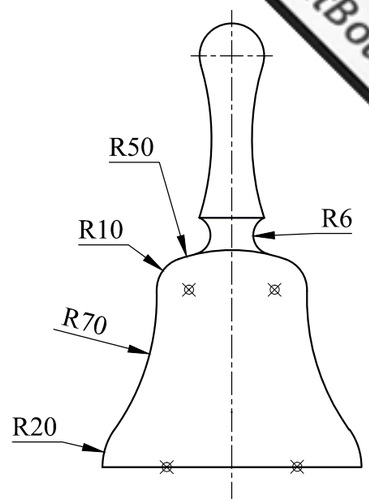


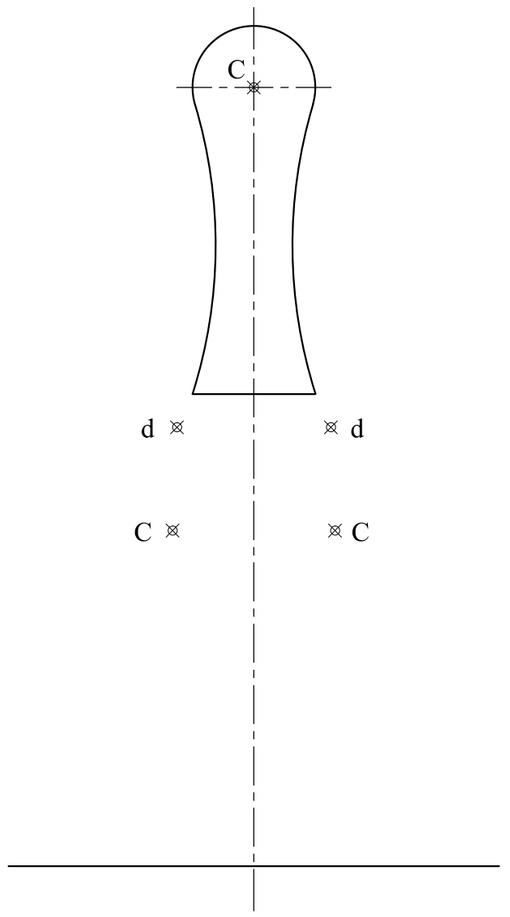
Question 3. The outline of a hand-held bell consists of a number of straight lines and arcs. Using the given start lines and centre lines, construct the bell and the lower part of the handle.

Notes:

- *Leave all constructions to locate centres and points of tangencies visible.*
- *Centres of R10 (c) and R6 (d) are given.*

16 marks





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GRAPHICAL COMMUNICATI

Class:

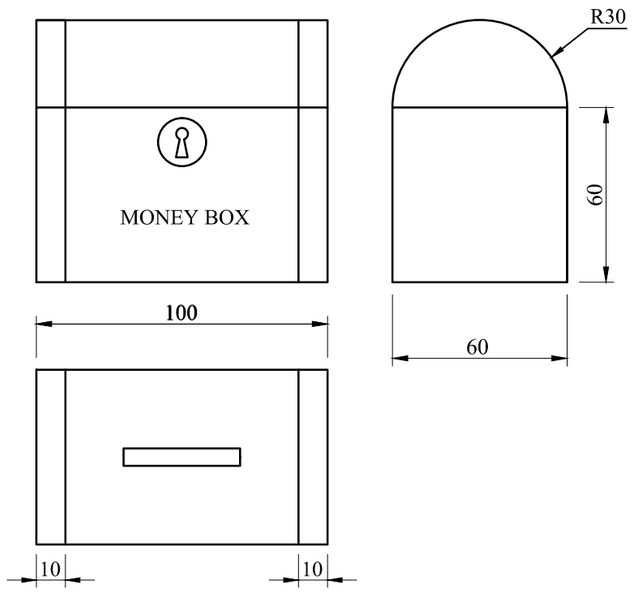
Question 4. Three orthographic views of a Money Box in the form of a treasure chest are given.

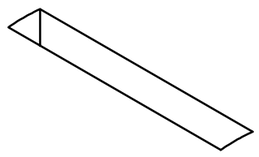
On the given start lines and using the given dimensions, draw an isometric view of the Money Box.

Notes:

The coin slot and the key hole are given.

16 marks



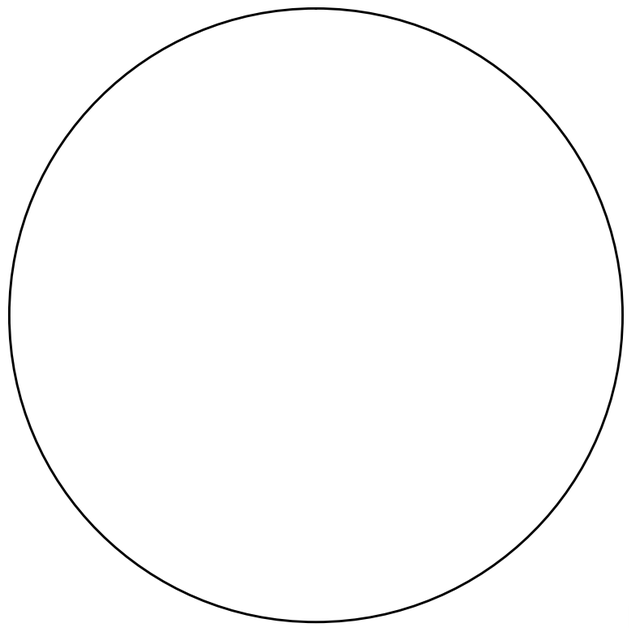


Question 5. A drawing of a jack hammer operator and a photograph of the safety gear nece erate the jack hammer are given below.

In the circle provided, draw one mandatory sign that orders the operator to wear one of the items sh the photograph.

Note: Colour your safety sign in accordance to regulations set on ISO 7010.

14 marks



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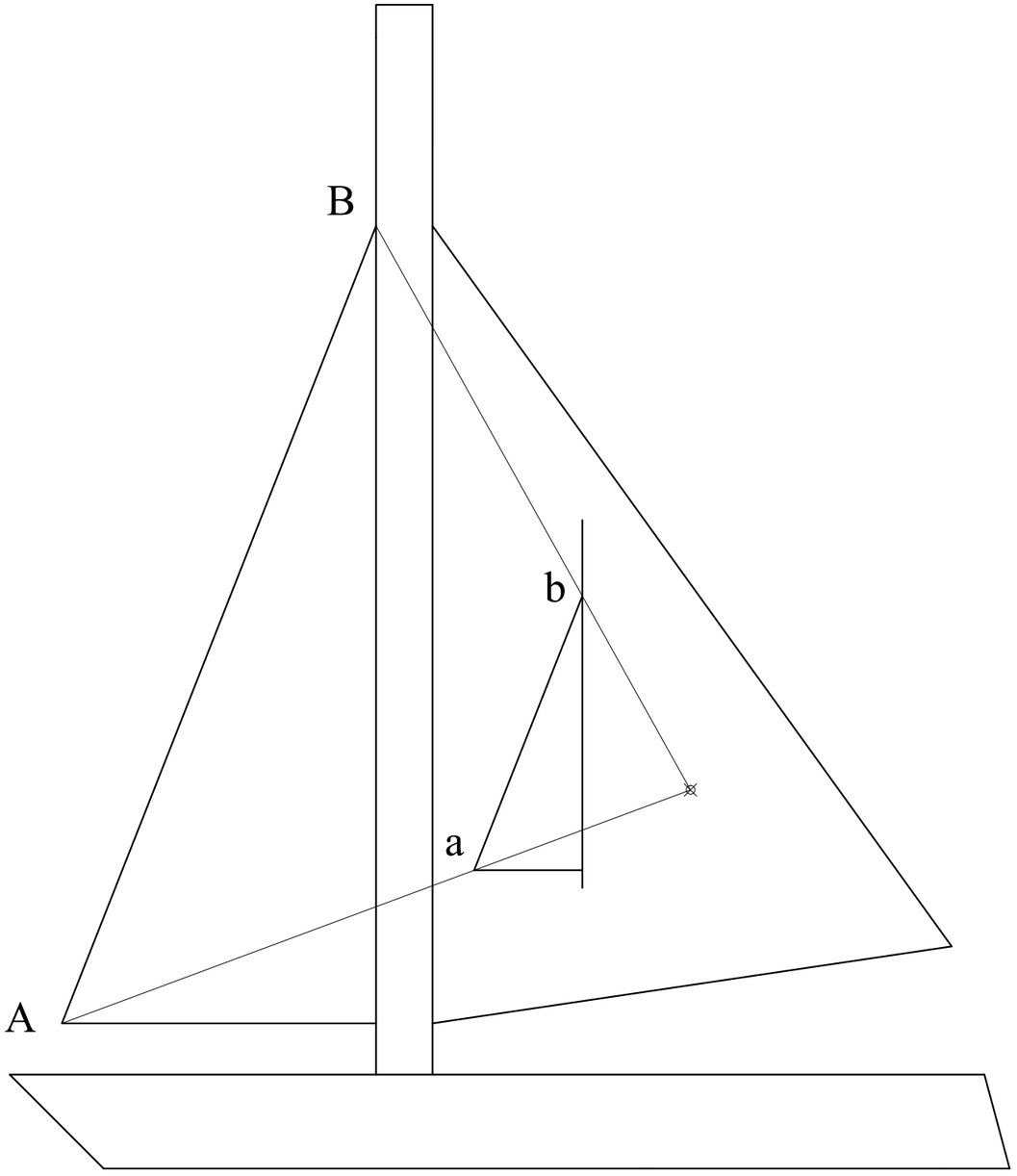
Class:

Question 6. The drawing of a sailing boat is given below. Reduce geometrically the size of the drawing such that line AB is reduced to line ab. Leave all construction lines visible.

Note: Part of the solution has already been completed.

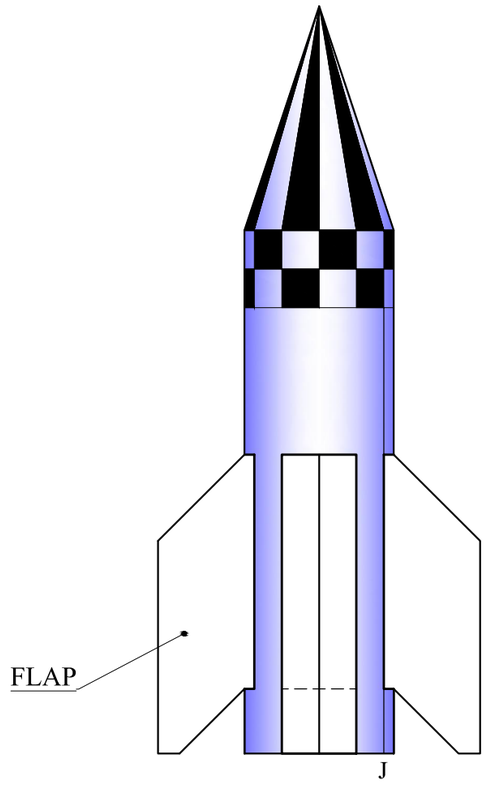
10 marks

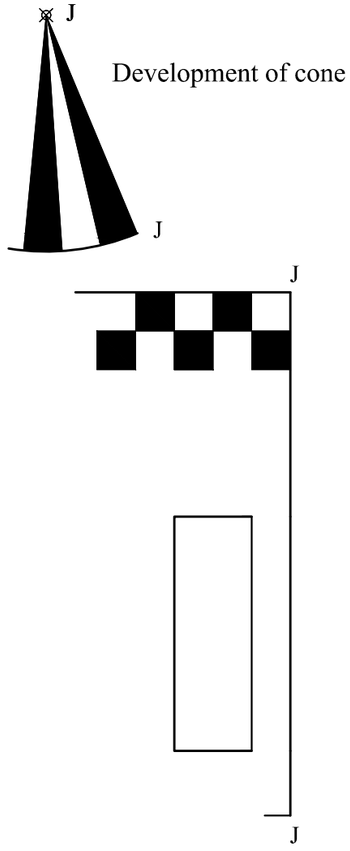


Question 7. A Front View and a Plan of a cardboard toy rocket are given below.
The front part of the rocket consists of a cone and the rear part consists of a cylinder.
In the space provided and on the given start lines:
a) Complete the construction of the development of the cone.
b) Complete the construction of the development of the cylinder.
c) Mark on the development of the cylinder the four rectangles where the flaps are attached.
d) Shade the cone and cylinder as per given drawing.

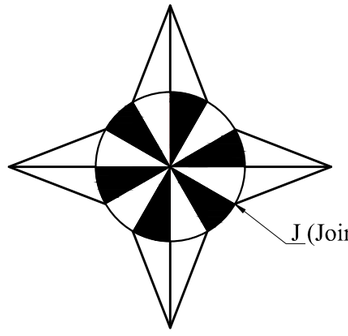
Note: JJ is the joint line.

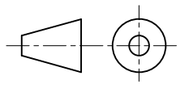
14 marks





Development of cylinder





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GRAPHICAL COMMUNICATI(

Class: