



UNIVERSITY OF RUHUNA

Faculty of Engineering

End-Semester 1 Examination in Engineering: August 2014

Module Number: ME1201

Module Name: Engineering Drawing

[Three Hours]

[Answer all questions, each question carries 10 marks]

- Q1 Draw the development of the sheet metal cylinder $\phi 45$, height 50mm which has been cut as shown in Figure Q1. [10 Marks]
- Q2 A circular disc rolls inside a circular ring without slipping as shown in the Figure Q2. The diameter of the disc is 40mm and the diameter of the ring is 200mm. Points A and B are located on the disc on circumference and at a radius of 10mm respectively. Draw the paths of the points A and B for one complete rotation of the disc. [10 Marks]
- Q3 A cone, with its axis horizontal has a base diameter 70mm and height 90mm. It is penetrated by an equilateral triangular prism of which the side is 40mm. The incomplete Front and Plan views of the cone and the prism assembly are shown in Figure Q3. Draw the complete Front view, End view projected in the direction of arrow A and Plan view. Highlight the complete interpenetration curves. [10 Marks]
- Q4 Draw the isometric view of the object shown in the Figure Q4 looking along the direction indicated by arrows in Plan and Elevation. Isometric scale need not be used. [10 Marks]
- Q5 Figure Q5 shows the End view and the Front view of an object. Draw the given Front view of the object and aligned sectional end view on plane XX in first angle projection. Draw casting curves (radius 5mm) wherever necessary. [10 Marks]

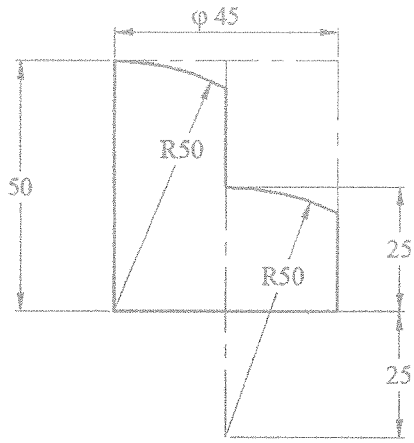


Figure Q1

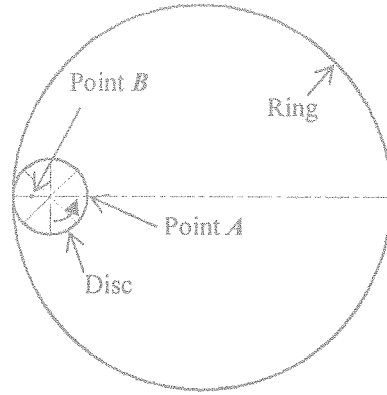


Figure Q2

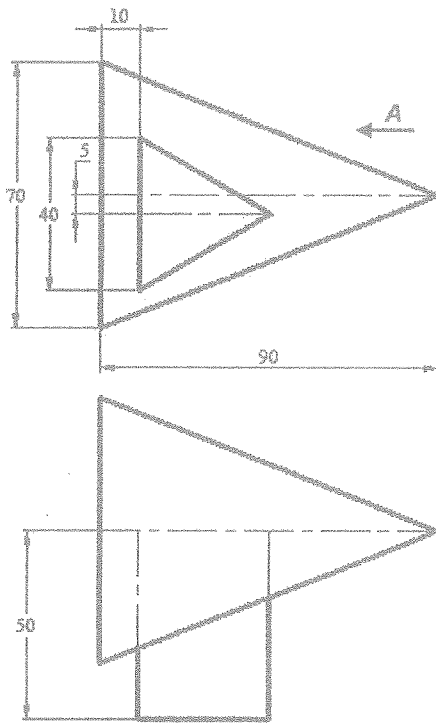


Figure Q3

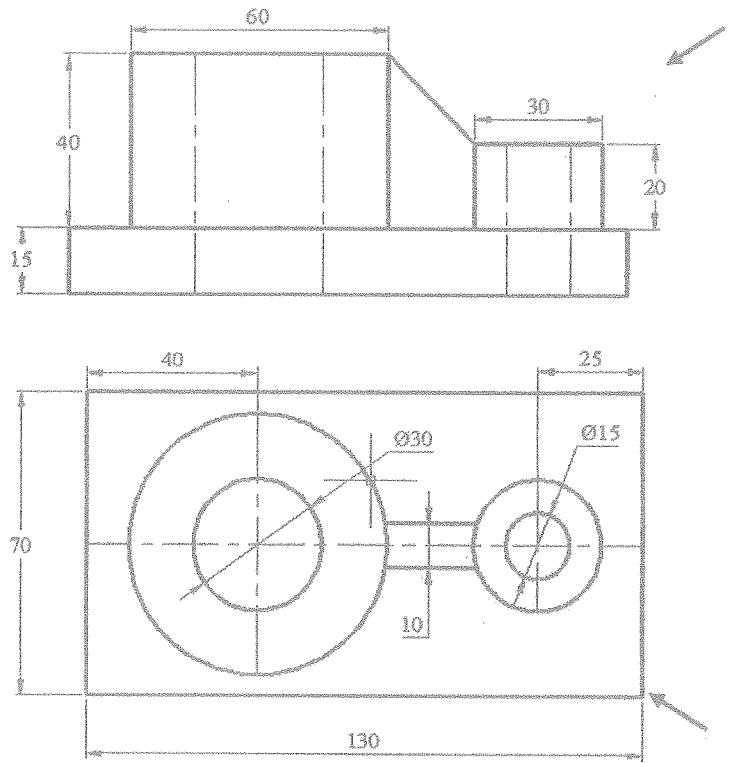


Figure Q4

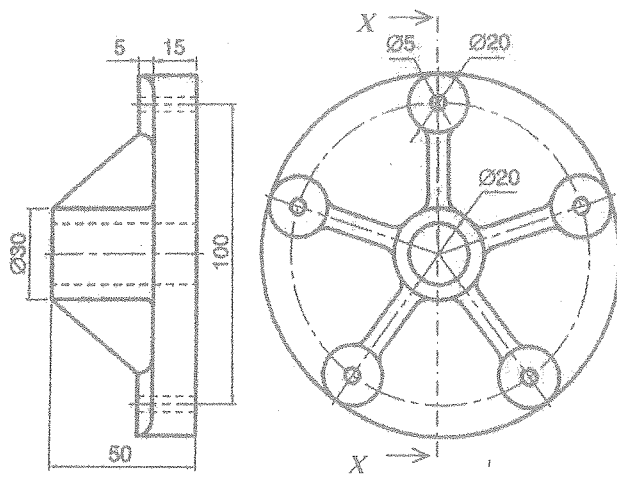


Figure Q5