TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL & AUTOMOTIVE ENGINEERING

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN MARINE ENGINEERING

EMR 2116 : TECHNICAL DRAWING II

END OF SEMESTER EXAMINATION

SERIES: APRIL 2016

TIME: 3 HOURS

DATE: 15 May 2016

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID, Drawing paper A2

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE

Details of a small MACHINE HANDLE are shown in figure QN1. The assembly is completed by means of an M12 nut and a washer. Draw full size in Third angle orthographic projection the following views;

(a)sectional front elevation along vertical plane

(b)end elevation viewed from right hand side

(c)plan

Include SIX leading dimension and symbol of projection.

(30 marks)

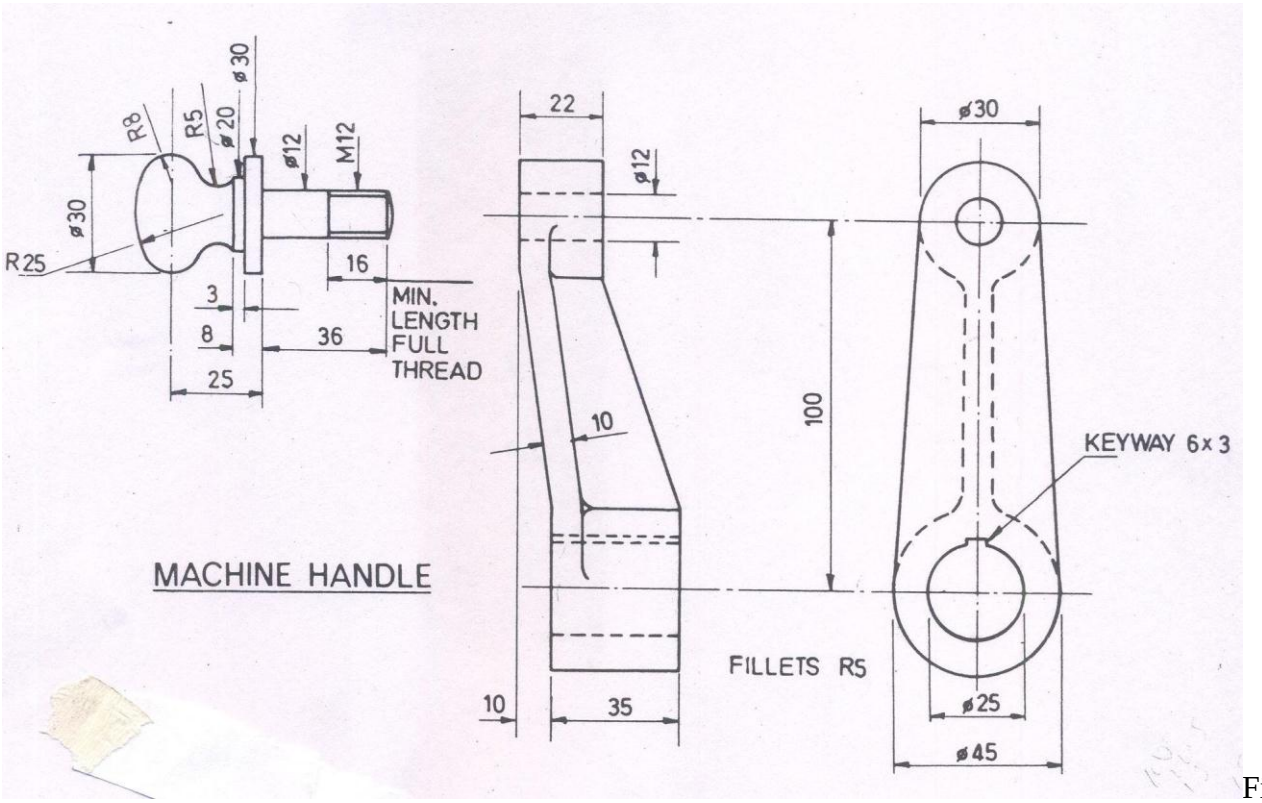

Figure QN1.

Question TWO

A square pipe meets a right cone as shown in Figure QN2. Copy the given view and draw ;

(a) the curve of interpenetration

(b) surface development of the branch square pipe.

(20 marks)

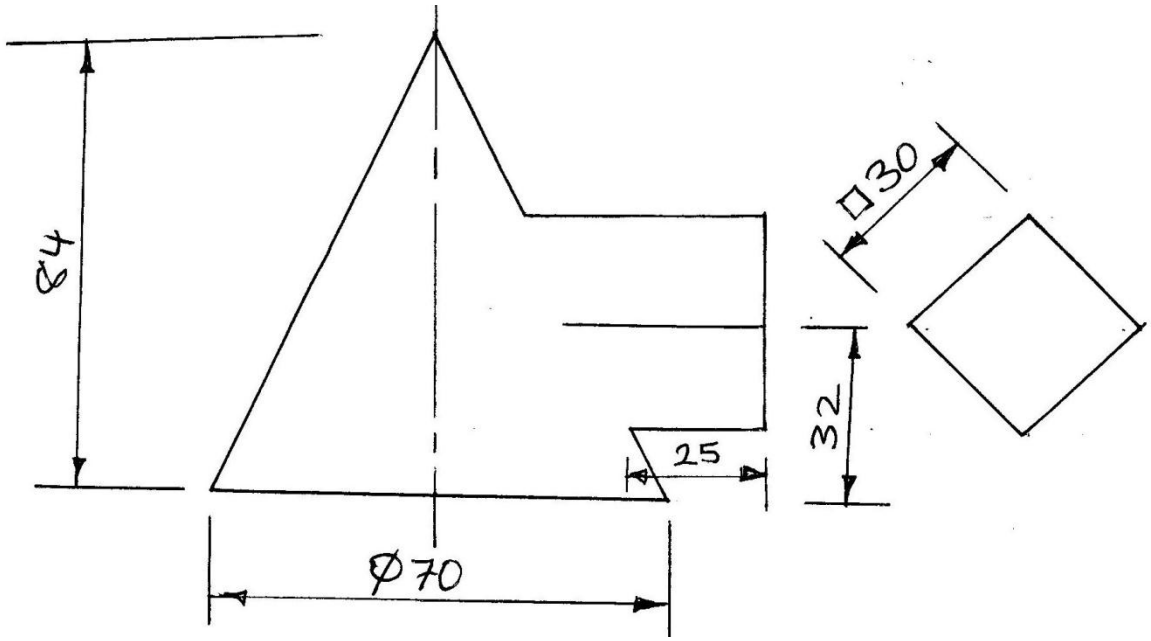

Figure QN2.

Question THREE

Three views of a MACHINE CASTING are shown in Figure QN3. Draw an OBLIQUE view of the casting taking oblique rules into consideration.

(20 marks)

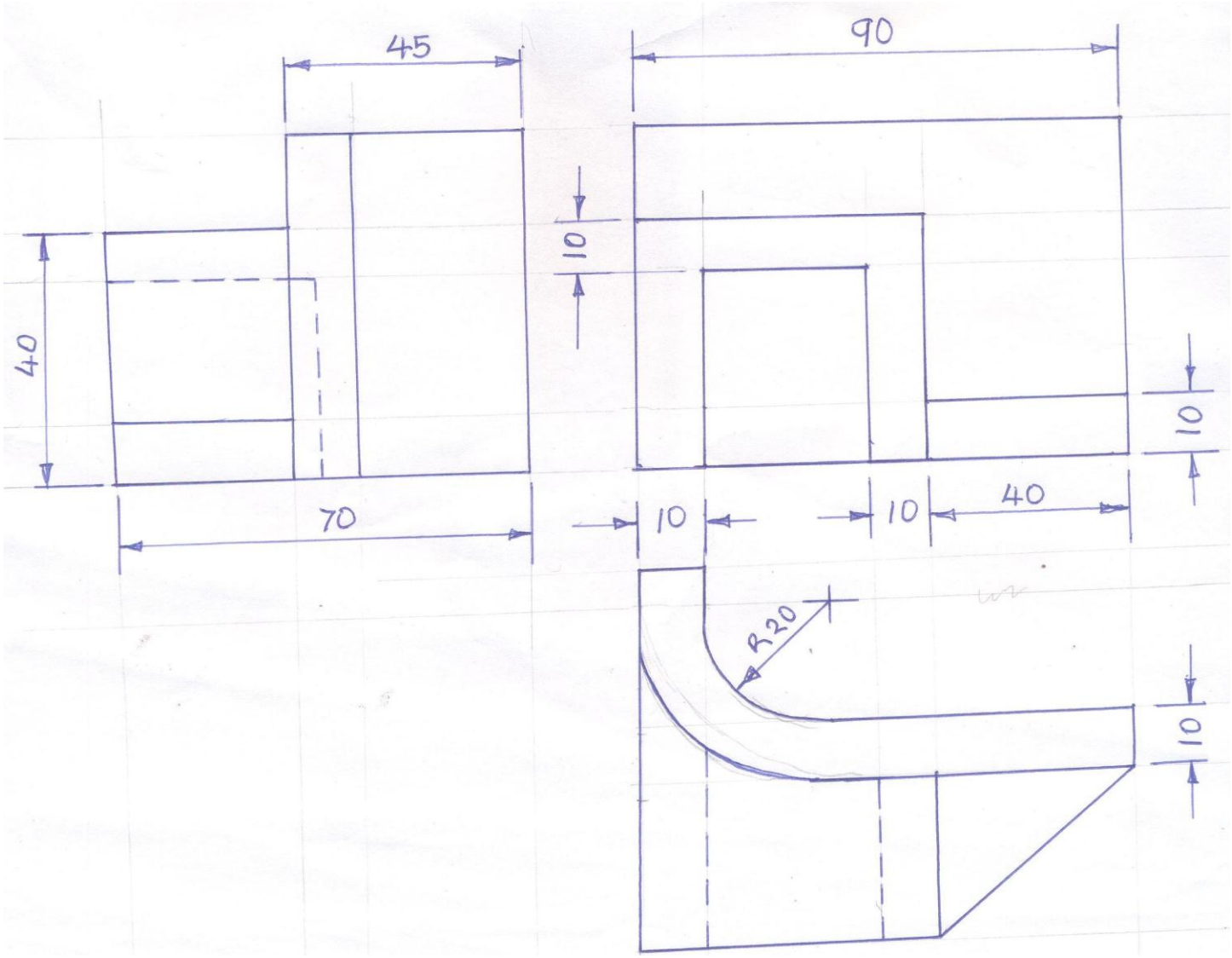

Figure QN3.

Question FOUR

Figure QN4 shows three views of BLOCK drawn in first angle orthographic projection. Draw

an ISOMETRIC view of the block taking corner Q as the lowest point.

(20 marks)

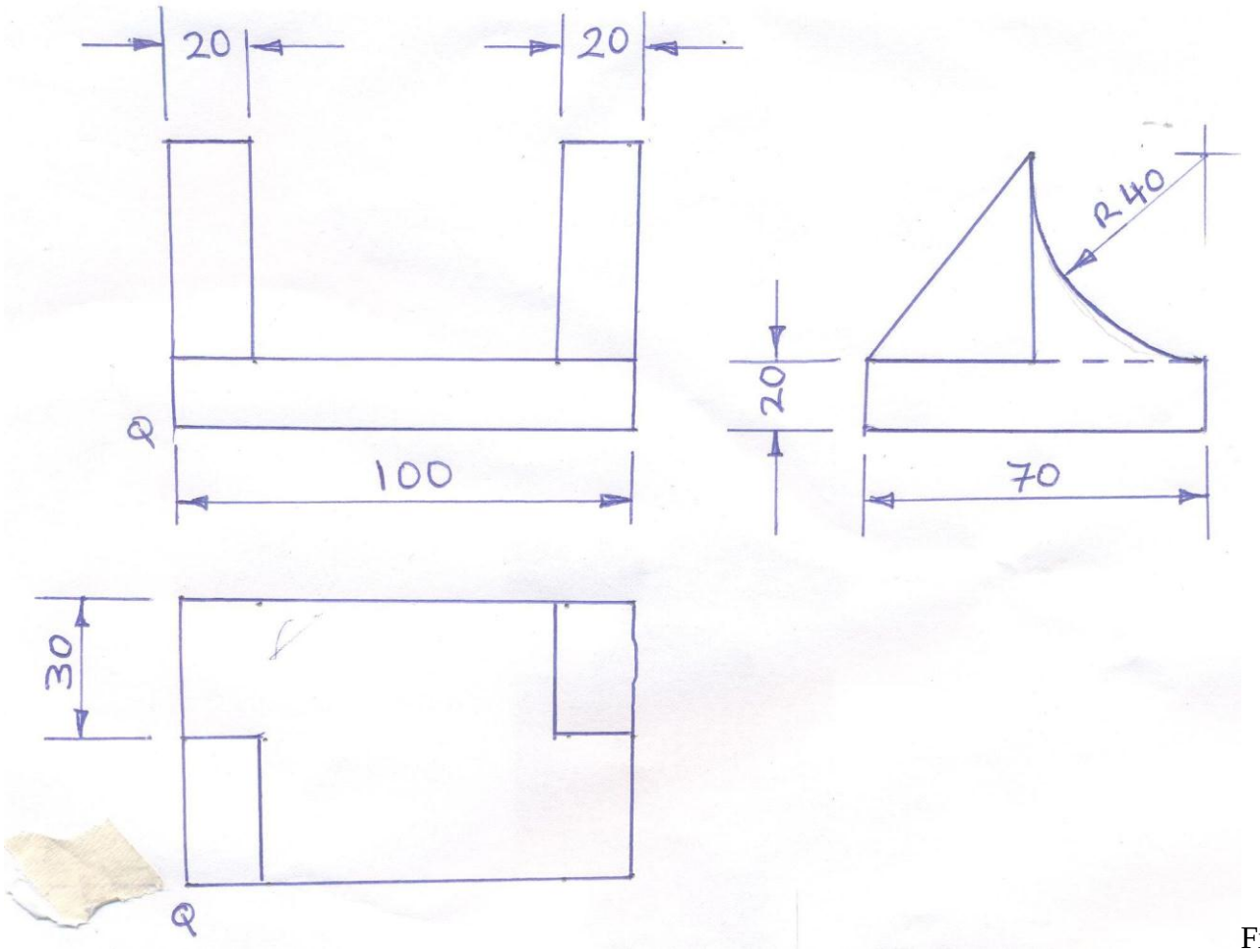

Figure QN4.

Question FIVE

A circular pipe is cut as shown in Figure QN5. Copy the given view and draw

(a) End view in the direction of arrow E

(b) True shape of the surface cut at 30^{o}

(c) Surface development of the pipe

(20 marks)

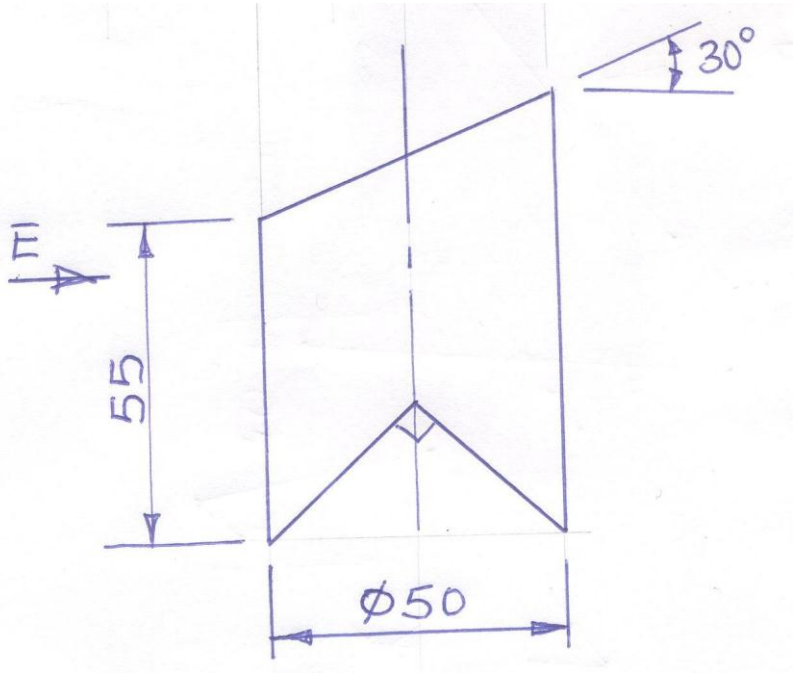

Figure QN5.