TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL & AUTOMOTIVE ENGINEERING

UNIVERSITY EXAMINATION FOR:

BTECH MECHANICAL ENGINEERING (SCHOOL BASED PROGRAM)

TMC 4221 : COMPUTER AIDED DRAWING (PAPER 1)

END OF SEMESTER EXAMINATION

SERIES: APRIL 2017

TIME: 2 HOURS

DATE: Pick Date Apr 2017

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

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

Do not write on the question paper.

SECTION A (2D-Drafting and Annotation), COMPULSORY

Question ONE

(a) Create a title block of 420 by 297 mm. The details of the lower right corner should be as of Fig. 1(a).

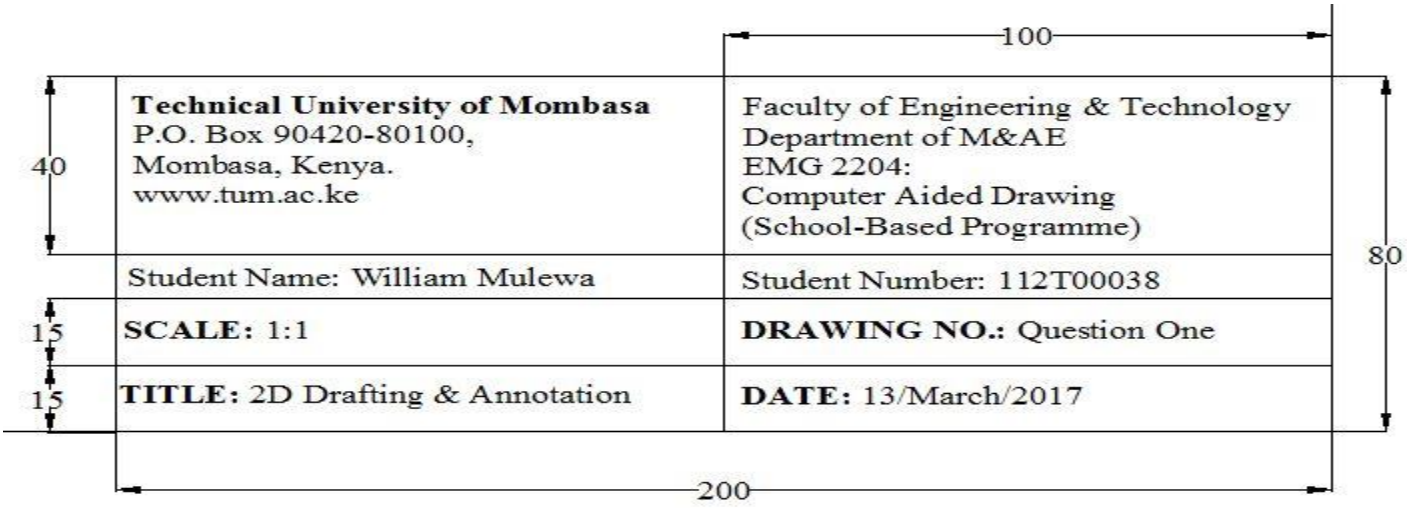

Fig. 1(a)

Title Block Text specifications: Font Name; Times New Roman, Font Style; Regular, Text Height; 4.0,

Text Colour; Any (but should be visible). (10 Marks)

(b) Reproduce Fig. 1(b) in AutoCAD and Dimension Appropriately. Main figure and dimensions should be of different colours of one's own choice but visible.

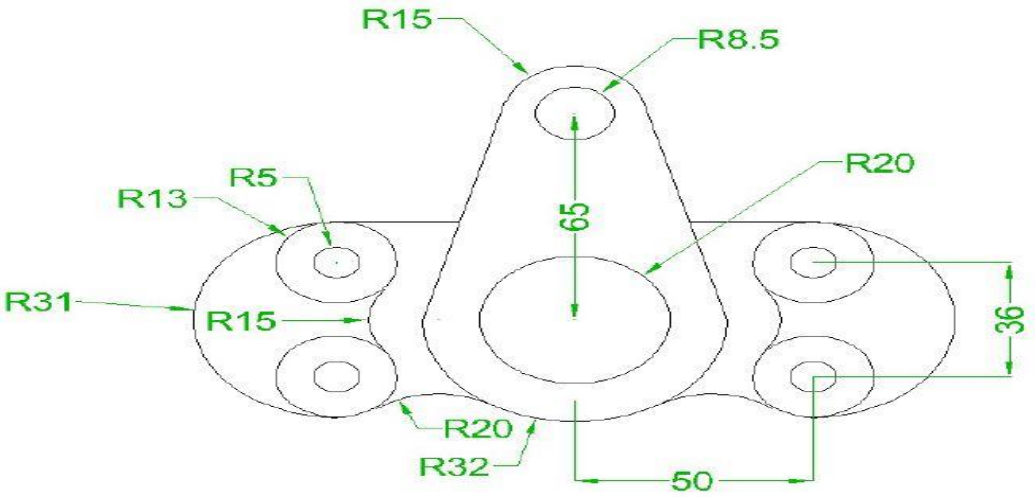

Fig. 1(b)

(15 Marks)

(c) Appropriately insert the Title Block of Fig. 1(a) into Fig. 1(b) or vice versa and present as one final drawing.

(5 Marks)

SECTION B (Isometric Drawing), ATTEMPT Q2 OR Q3

Question TWO

Construct an isometric drawing of Fig. 2 and dimension appropriately. (20 Marks)

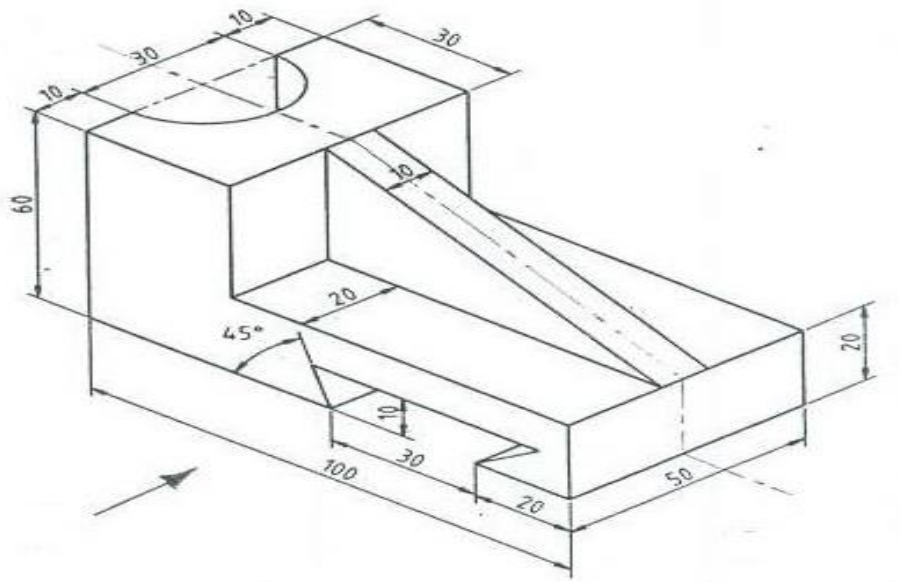

Fig. 2

Question THREE

Construct an isometric drawing of Fig. 3 and dimension appropriately. (20 Marks)

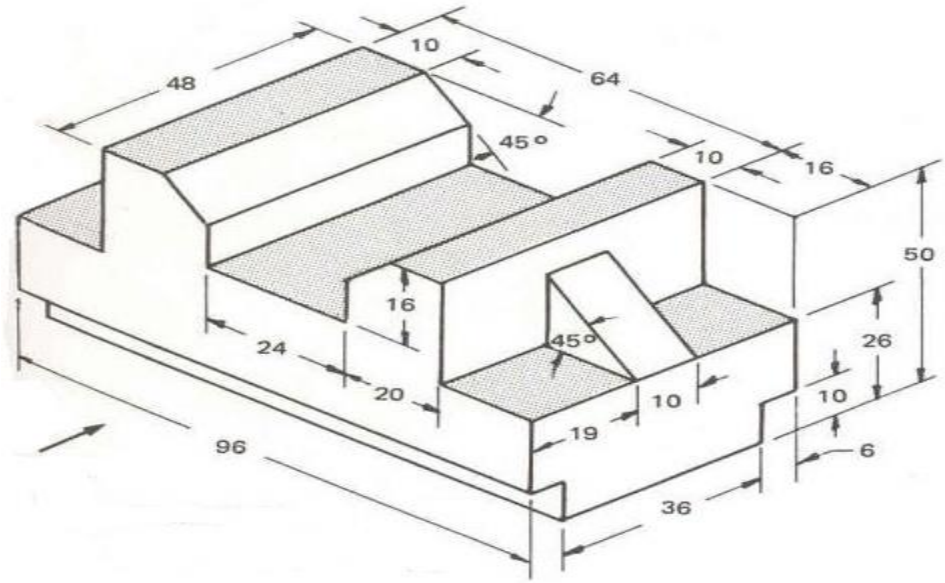

Fig. 3

SECTION C (3D-Modeling), ATTEMPT Q4 OR Q5

Question FOUR

Fig. 4(a) and Fig. 4(b) represent the top and side views of an object respectively. Construct a 3D-model in S/E isometric view and present the model in Conceptual visual style. Do not dimension. (20 marks)

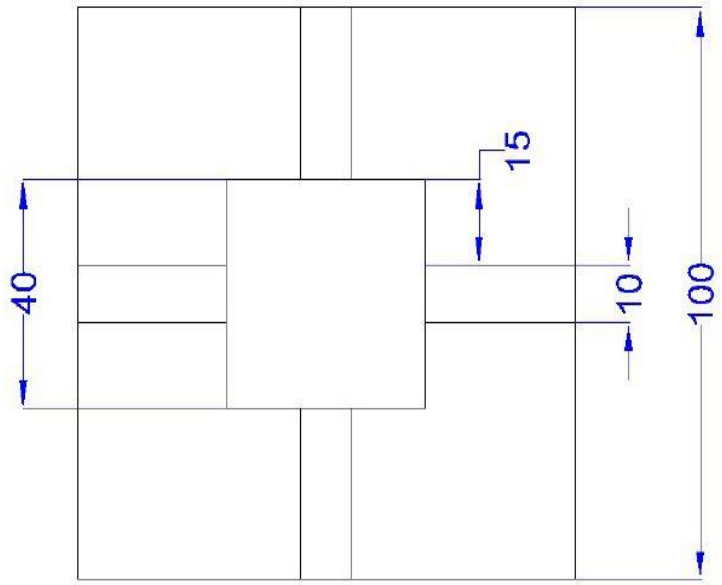

Fig. 4(a)

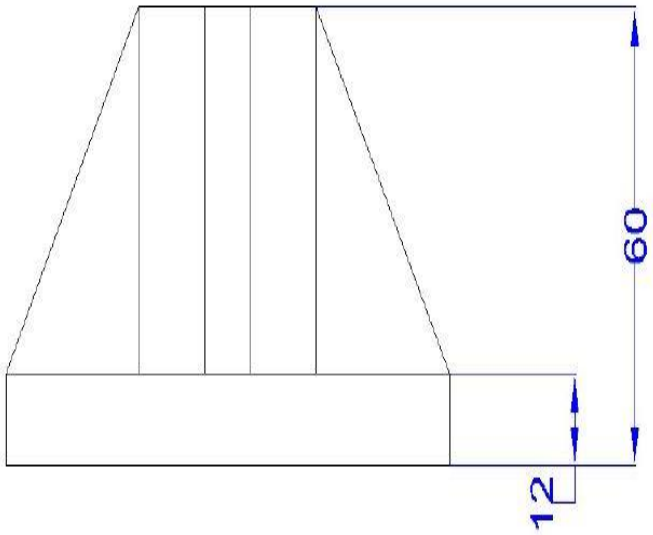

Fig. 4(b)

Question FIVE

Fig. 5(a) and Fig. 5(b) represent the top and right views of an object respectively. Construct a 3D-model in S/E isometric view and present the model in Conceptual visual style. Do not dimension. (20 marks)

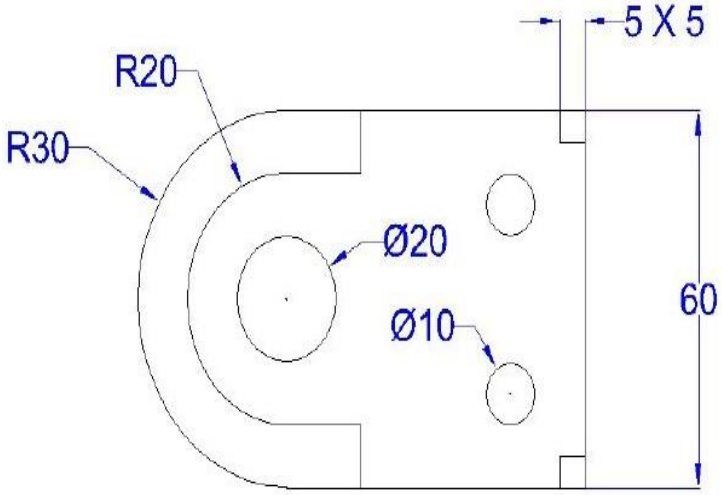

Fig. 5(a)

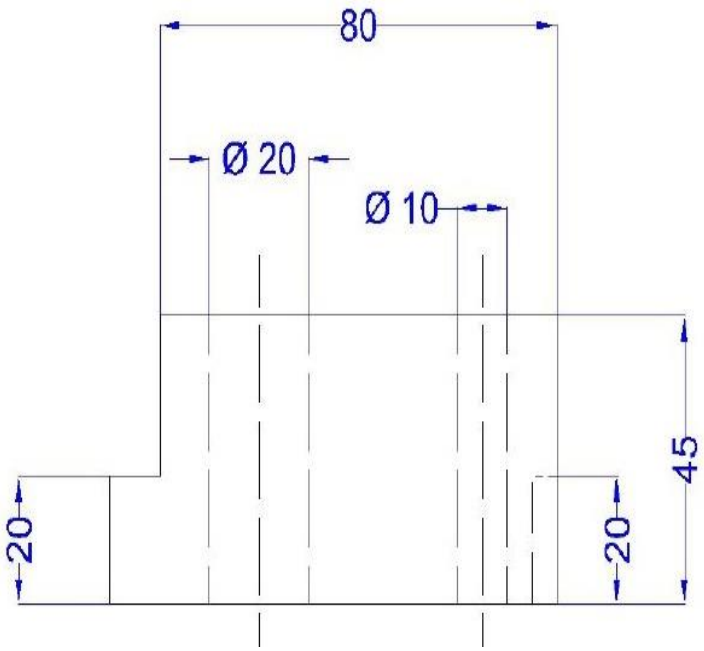

Fig. 5(b)