

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA  
 SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION  
 DEPARTMENT OF INDUSTRIAL AND TECHNOLOGY EDUCATION  
 FIRST SEMESTER EXAMINATION 2019/ 2020 SESSION

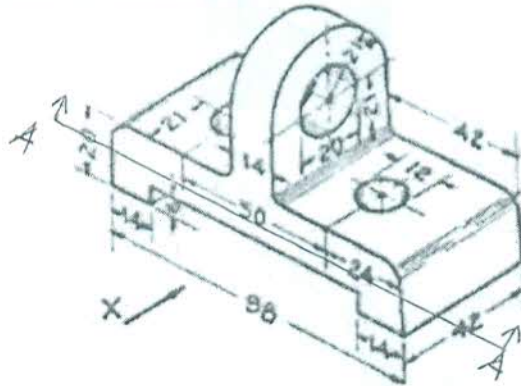
COURSE CODE: ITE 313

COURSE TITLE: TECHNICAL DRAWING III

TIME: 2 HOURS

INSTRUCTION: ANSWER QUESTION (1) COMPULSORY AND ANY OTHER TWO (2) QUESTIONS IN SECTION B

1. Draw the isometric block below in first angle orthographic projection looking at the direction of point X and the Sectional top view A-A of the block



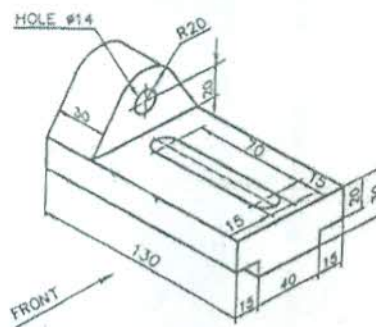
**SECTION B**

2. A linked crank mechanism consisting of two cranks, AB and CD, joined by a link DB which is fixed at D and slides through B as shown below:
  - a. Draw to a scale of 1:1 the given schematic of the mechanism
  - b. Trace the locust generated by point P for one complete revolution of the mechanism



**NB:** As crank AB rotates in anticlockwise direction, crank CD rotates in a clockwise direction at the same velocity. AB= 20 mm; AC= 40mm

3. Draw the free-hand sketches of front, top and right side views of the pictorial view shown below:



4. Draw the development of a lateral surface of part P of the cylinder of 45mm diameter as shown below:

