

**FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA**  
**SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION**  
**DEPARTMENT OF INDUSTRIAL AND TECHNOLOGY EDUCATION**  
**FIRST SEMESTER EXAMINATION 2018/ 2019 SESSION**

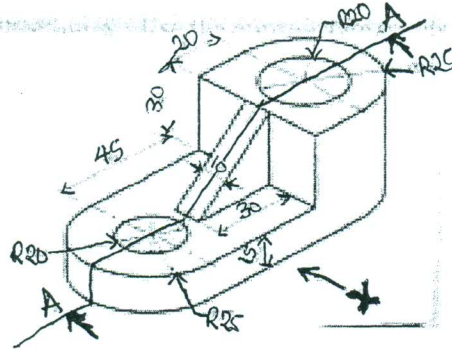
**COURSE CODE: ITE 313**

**COURSE TITLE: TECHNICAL DRAWING III**

**TIME: 2 HOURS**

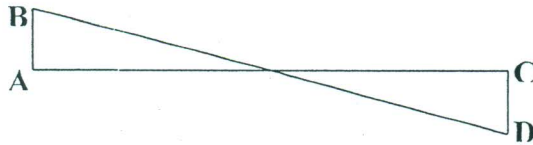
**INSTRUCTION: ANSWER QUESTION (1) COMPULSORY AND ANY OTHER TWO (2) QUESTIONS IN SECTION B**

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



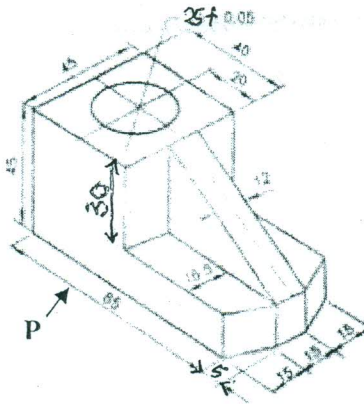
**SECTION B: ANSWER ANY OTHER TWO (2) QUESTIONS**

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 Isometric block into third angle orthographic projection. Looking at the direction of point P



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

