S.B. Roll No...

MECHANICAL ENGINEERING DRAWING-I
3rd Exam/Mech./9053/Jan'2022
(For Batch 2018 onwards)

Duration: 1.15Hrs.   **M.Marks:25**
Note: If any dimension is not clear/Missing, assume proportionate value for the same

SECTION-A

Q1. Attempt any three questions.   **3x5=15**
    i. What do mean by a term 'Standardization'.
    ii. From dimension $20^{(+0.007,-0.006)}$ find the basic size, maximum limit of size and minimum limit of size.
    iii. Explain briefly different types of fit.
    iv. What are two methods of finding line of intersection between surfaces of two interpenetrating solids?
    v. What are various types of control switches?
    vi. Draw any two types of roller bearing.

SECTION-B

Q2. Attempt any one question.   **1x10=10**
    a. A horizontal cylinder of base diameter 40 mm interpenetrates a vertical cylinder of base diameter 50 mm. The axis of the horizontal cylinder is 7 mm behind the axis of the vertical cylinder. Both the axis are parallel to V.P. and right angles to each other. Draw the projections and complete the curves of interpenetration.
    b. Draw electrical circuit diagram for operating one bulb, one fan and one tube with independent switches.
    c. Detail drawing and pictorial views of a Universal Coupling is shown in **fig no.1**. Draw half sectional elevation upper half in section.
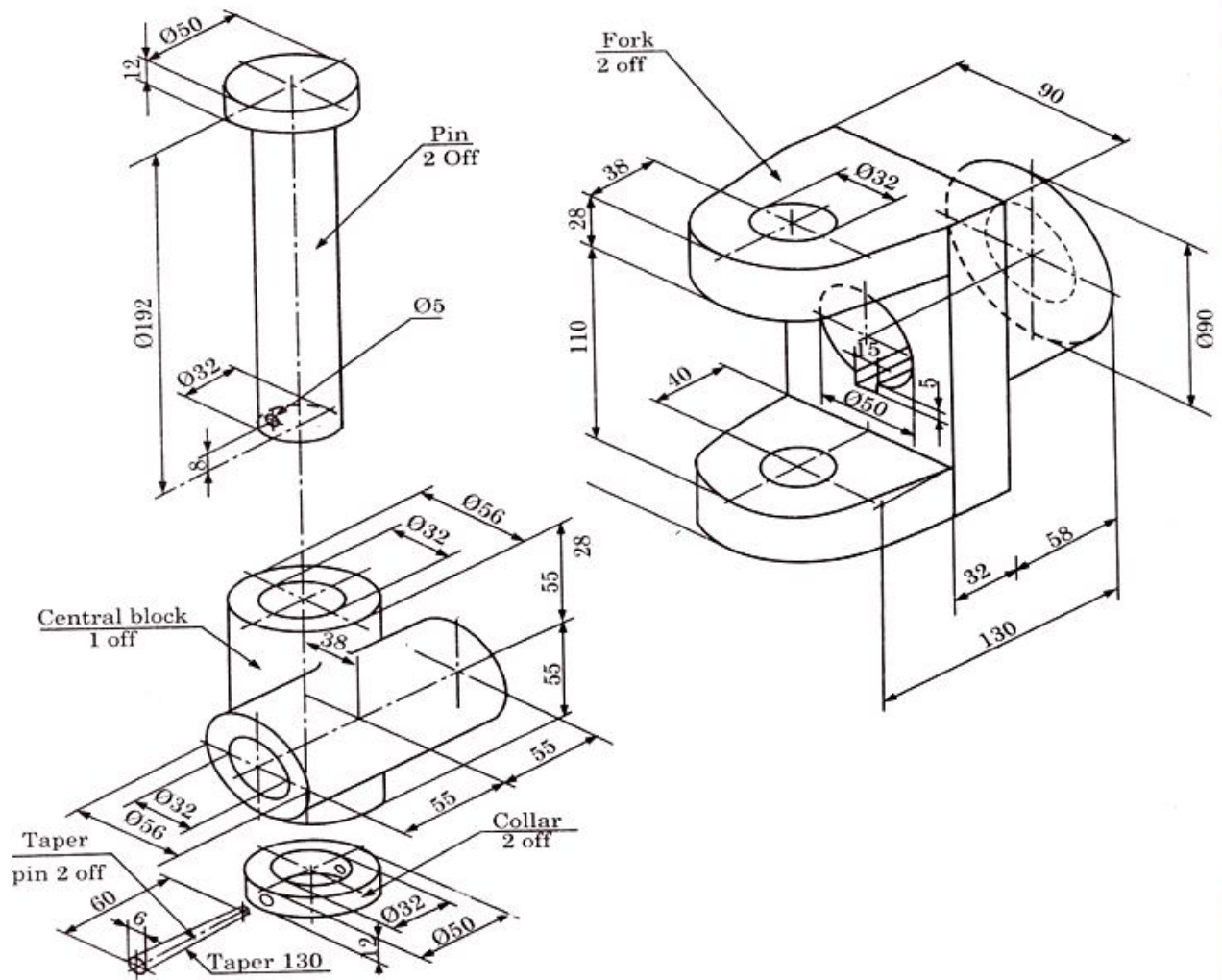   d. What are different types of pipes and write their uses.

Fig no.1. Pictorial views of a Universal Coupling.