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# VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD B.E. (Mech. Engg.: CBCS) III-Semester Main Examinations, December-2018 Machine Drawing 

Time: $\mathbf{3}$ hours
Max. Marks: 60
Note: Answer ALL questions in Part-A and any FIVE from Part-B

| Q. No | Stem of the Question |
| :--- | :--- |
|  | Part-A ( $10 \times 2=20$ Marks) |
| 1. | Sketch typical drawing sheet format and explain the <br> items in the format. |
| 2. What are five commonly used enlargement scales? |  |
| 3. | Explain with the help of a simple sketches how to re <br> (ii) Half section. |
| 4.Sketch hexagonal bolt and nut of nominal diame <br> proportions. <br> Sketch the sectional front view of socket and spigot <br> proportions in terms of diameter of the rod 'D' <br> Differentiate between saddle key and sunk key. <br> From the isometric view shown in Fig. |  |
| 7. draw the fro |  |

Fig. 1
8. Draw the sectional front view of the component shown in Fig. 2.


Fig. 2
9. Sketch the sectional front view of a split-muff coupling indicating all proportional dimensions for connecting two shafts of 30 mm diameter.
10. Sketch the sectional front view and top view of single riveted, single strap butt
$\begin{array}{llll}2 & 1 & 2 & 1\end{array}$
$\begin{array}{llll}2 & 1 & 2 & 1\end{array}$ joint showing all the dimensions to connect two plates each 10 mm thick.

## Part-B (40 Marks)

11. Assemble the parts of the stuffing box shown in Fig. 3. And draw
(i) Half sectional front view
(ii) Top view


Parts lisu

| Part Ma. | Hame | Mat | aty |
| :---: | :---: | :---: | :---: |
| 1 | Ebdy | 0 | 1 |
| 2 | cland | Exass | 1 |
| 3 | Bush | 8 8ras | 1 |
| 4 | Stud | MS | 2 |
| 5 | Nuth H12 | H5 | 2 |

Fig. 3. Stuffing Box
M: Marks; L: Bloom's Taxonomy Level; CO: Course Outcome; PO: Programme Outcome

| S. No. | Criteria for questions | Percentage |
| :---: | :---: | :---: |
| 1 | Fundamental knowledge (Level-1 \& 2) | 27 |
| 2 | Knowledge on application and analysis (Level-3 \& 4) | 6 |
| 3 | *Critical thinking and ability to design (Level-5 \& 6) <br> (*wherever applicable) | 67 |

