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## 3rd SEM./ Mechanical Engg Subject : Mechanical Engg Drawing

Time: 3 Hrs.
M.M. : 100

## SECTION-A

Note: Very short Answer type questions. Attempt any 10 questions out of twelve.
(10x2=20)
Q. 1 Give the need of Limits in mass production. (CO1)
Q. 2 Define allowance. (CO1)
Q. 3 What is the need of giving tolerances to the parts?
(CO1)
Q. 4 Define interference fit.
Q. 5 What do you mean by shaft basis system?
Q. 6 Give one application where universal coupling is used?
(CO3)
Q. 7 What is the use of bearings?
Q. 8 Give the material used for manufacturing pulley.
Q. 9 What are the uses of expansion joint? (CO2)
Q. 10 Give the need of drilling jig.
Q. 11 Which part of IC engine is connected to the big end of connecting rod?
Q. 12 Define dedendum
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## SECTION-B

Note:Long answer type questions. Attempt any four questions out of five questions. (20x4=80)
Q. 13 Draw at least two views of L-wall bracket as shown in figure below in first angle projection.

Q. 14 Explain any five gear terminologies with their supporting free hand sketches.
(CO6)
Q. 15 Assemble the parts of Screw jack given in fig. 1 and drawn the Elevation (Right half in section)Assume and missing dimension
(CO4)
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Q. 16 Draw the labelled assembled front view of the petrol engine connecting rod from the given figure -assume any missing dimension (CO5)
Part list

| Part No | Name | Material | Qty |
| :--- | :--- | :--- | :--- |
| 1 | Rod | Forged steel | 1 |
| 2 | Cap | Forged steel | 1 |
| 3 | Bearing brass | Gun metal | 2 |
| 4 | Bearing bush | Phosphor bronze 1 |  |
| 5 | Bolt | Medium carbon steel2 |  |
| 6 | Nut | Medium carbon steel2 |  |

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Q. 17 Figure below shows the pictorial view of a FOOT STEP BEARING.
(CO2)
Draw to a conventional scale the following :
a) Full sectional front view.
b) Top View.

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