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BET-026

**DIPLOMA IN CIVIL ENGINEERING (DCLE(G)) /
DIPLOMA IN ELECTRICAL AND MECHANICAL
ENGINEERING (DEME) /
DCLEVI / DMEVI / DELVI / DECVI / DCSVI**

Term-End Examination

December, 2015

BET-026 : WORKSHOP TECHNOLOGY

Time : 2 hours

Maximum Marks : 70

Note : *Part A is compulsory. Attempt any six questions from Part B and two questions from Part C.*

PART A (Compulsory)

1. Attempt any **seven** questions. **7×2=14**

(a) A core print is an added projection on a pattern and form a seat in the mould which is used to

- (i) Hold the core
- (ii) Locate the core
- (iii) Hold and Locate the core
- (iv) None of the above

(b) Name any five joints used in a carpentry shop.

(c) Solvent is added in paint for _____ its fluidity.

- (d) Teeth are cut parallel to each other at an angle to the centre line of file. In single cut file these cut of teeth are at an angle of
- (i) 60°
 - (ii) 75°
 - (iii) 80°
 - (iv) 90°
- (e) Vehicle is used in oil paints as a binder for extender, base, and colouring pigment. Give two examples of a vehicle as used in oil paints.
- (f) Reamer is used just to finish a hole and bring it to the correct size. Reaming is done after _____ process.
- (i) Tapping
 - (ii) Dieing
 - (iii) Drilling
 - (iv) None of the above
- (g) The colour of oxygen gas cylinder is
- (i) Black
 - (ii) Maroon
 - (iii) Yellow
 - (iv) None of the above

- (h) Which of the following is associated with the term 'Porosity' ?
- (i) Pattern Making
 - (ii) Moulding
 - (iii) Foundry
 - (iv) None of the above
- (i) The temperature of oxy-acetylene flame is about _____ .
- (i) 2400°C
 - (ii) 3200°C
 - (iii) 3600°C
 - (iv) 4000°C
- (j) In Lathe Machine, cross-slide is used for holding _____ .
- (i) Chuck
 - (ii) Tool Post
 - (iii) Tail Stock
 - (iv) None of the above

PART B

Attempt any **six** questions.

6×6=36

2. Enlist the different types of vices used in a fitting shop. Explain any one of them with a neat sketch. 6
3. Name three fluxing agents used in soldering operation. Give their uses. 6
4. Differentiate between Dead Centre, Live Centre and Revolving Centre used in Lathe Machines. 6
5. How many machines are used in Sheet Metal work ? Explain any one of them with a labelled diagram. 6
6. What is 'Press Forging' ? Explain in brief. 6
7. What are the different methods for 'Taper Turning' on Lathe Machine ? Explain any one of them. 6
8. What are the common tests performed on 'Foundry Sand' ? Write in detail about any two of them. 6
9. Mention the use of 'Tong' in forging. Sketch any one of the chisels. 6

PART C

Attempt any two questions.

$2 \times 10 = 20$

10. What are the main constituents of an oil paint ?
Describe in brief. 10
 11. Define 'Heat Treatment'. Explain in brief the
process of annealing. 10
 12. Enlist the different types of 'Measuring Tools'
used in a fitting shop. Describe any two of them
with neat sketches. 10
 13. Sketch and describe the working principle of
'Submerged Arc Welding'. Explain 'Torch' used
in cutting of metals. 10
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