

**Diploma in Civil Engineering / Diploma
in Electrical & Mechanical Engineering**

Term-End Examination

June, 2012

BET-026 : WORKSHOP TECHNOLOGY

Time : 2 hours

Maximum Marks : 70

Note : Question No. 1 is compulsory. Attempt any six questions from Part 'A' and two questions from Part 'B'.

Attempt *any Seven* Questions.

2x7=14

1. (a) Name of three chisels, used in carpentry work.
- (b) Sweep pattern is used for preparing large size of symmetrical mould (mark Yes or NO)
- (c) As per colour coding for pattern, Indicate the colour
 - (i) For surface to be left unmachined.
 - (ii) For core-prints.
- (d) Indicate the name of core which is used to produce a blind hole along a horizontal axis.

- (e) Select the value of lip or cutting angle in case of Twist - drill,
- (i) 120° (ii) 60° (iii) 118°
- (f) Hand-Tap is obtained in set of three pieces. Write down the name of each piece.
- (g) Fluxing Agents may be of Two-Types Corrosive type and Non-corrosive type. Give the example of each type.
- (h) The standard colour of Acetylene cylinder is
- (i) Black (ii) Maroon (iii) White
- (i) What is the Function of Extender or Inert-Filler in the preparation of oil-paint ?

PART-A

Attempt *any six* Questions. All Questions carry *equal* marks (6 - marks each) 6x6=36

2. Give a list of chisels used in carpentry work. Describe the use of any two with sketches.
3. Distinguish between "CORE" and "CORE-PRINT". What is 'SETTING OF SAW-TEETH' ? Why is it done ?
4. Define "GATING-SYSTEM" in Foundry-work. What are the main functions of an Ideal Gating-system ? Explain with neat sketches.
5. Describe the functions of a file. How are the files classified ? What is the metal of files ?
6. Why are stakes used in sheet metal works ? Describe any one with sketches.
7. How would you differentiate between "FUSION-WELDING" and "PRESSURE-WELDING" ?
8. What is forgeability ? Sketch any Two TYPES OF "RIVETS".
9. Name at least Five members of Smithy tools. Sketch any Two.

PART-B

Attempt *any Two* Questions. All the Questions carry *Equal marks*. (10-marks each) 10x2=20

10. In what way do varnishes differ from paints ? Explain step by step the painting process on a new wooden surface.

 11. Make a list of different Accessories and Attachments used with lathe machine. Describe any three with neat sketches.

 12. Enlist the different types of vices used in Fitting and Plumbing work. Describe any one in details with the help of neat sketches.

 13. How is soldering process is different from Brazing process ? Show the comparison of both. (minimum 5 points along with application).
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