

DIPLOMA IN CIVIL ENGINEERING / (DCLEG)
DCLEVI/DMEVI/DELVI/DECVI/DCSV

Term-End Examination

June, 2013

BET-026 : WORKSHOP TECHNOLOGY

Time : 2 hours

Maximum Marks : 70

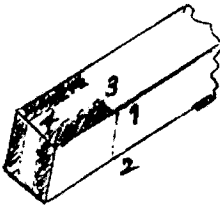
Note : Answer Question 1 and **any four** from remaining **seven** questions.

1. Answer **any seven** of following questions : $2 \times 7 = 14$

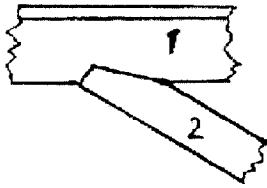
(a) Out of following tools used in wood working choose one which is marking gauge and other which is measuring gauge.

- (i) Try square (ii) Bevel square
(iii) Miter square (iv) Mortise gauge

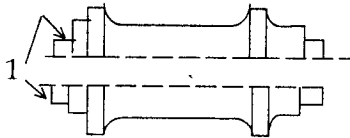
(b) To make a tenon in a rectangular wood block shaded region is to be removed. Cuts will be given along lines 1-2 and 3-4. Which cut is given by a saw and which cut by chisel ?



- (c) In a wood work joint shown below name parts 1 and 2.



- (d) Name the saw left and right in wood work.
 (i) Whose teeth are alternately to ?
 (ii) Which is used for interior cutting ?
- (e) Figure below shows a pattern in wood. Name the pattern and the part marked as 1.



- (f) A caliper which has one leg pointed and other bend at end is called _____ and used for locating the centre of a _____.
- (g) In a double cut file to be used on steel and softer material the teeth are cut at angles of _____ and _____ with the axis of file.
- (h) Two files are named below :
- (i) Bastered file
 (ii) Smooth file
- How many teeth per cm they have ?
- (i) The lowest point of drill is called _____ and the raised portion between flutes of a reamer is called _____.

2. (a) Sketch and describe hacksaw for cutting metals. 7
(b) Sketch a twist drill and show various features. 7
3. (a) Describe types of moulding sand. 6
(b) Describe methods of determining moisture content of moulding sand and its clay content. 8
4. (a) Why is core used in a sand mould ? Describe various core types. 6
(b) What are different zones in cupola when it is being used for melting iron ? Explain. 8
5. (a) What tools are used in plumbing work ? Describe each one of them briefly. 6
(b) Name the pipe joints. Sketch two of them. 8
6. (a) With the help of sketches describe three joints for thin sheets. 6
(b) Describe how soldering is performed to join thin sheets. What are soft and hard soldering ? 8
7. (a) Describe the structure of flame used in gas welding. 7
(b) Describe the process of Metal Inert Gas Arc Welding. How does it differ from tungsten Inert Gas Arc Welding ? 7

8. (a) What are special purpose Lathes ? How do they differ from Capstan and Turret Lathes. 8
- (b) Describe one method of taper turning on Lathe. 6
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