

# **MODEL QUESTION PAPER**

**DSA4/DSM4**

## **III Semester DIPLOMA Examination, August 2011 MACHINE DRAWING**

Time: 3 Hours

Max. Marks: 75

### **GROUP A : Answer any three questions.**

- Q.1 Write the proportions of the Square nut.
- Q.2 What is the name of section in which the cross-section of part is shown separately?
- Q.3 Explain the fit and its types.
- Q.4 What are the different diameters in square thread? Briefly write about each. Write short note on multi start thread.
- Q.5 Sketch the different forms of screw threads.

### **GROUP B : Answer any three questions.**

- Q.6 What is the need of sectioning?
- Q.7 What is the general relationship between lead and pitch in a multi-start thread?
- Q.8 State the various Auto CAD commands and their uses.
- Q.9 What is the usual proportion for radius of woodruff key in terms of diameter of shaft?
- Q.10 What is the main use of the offset section? Draw an offset section. Compare revolved section and removed section.

### **GROUP C : All Questions are Compulsory.**

#### **Q.11 Fill in the blanks.**

- (i) The section lines should be drawn at an angle of \_\_\_\_\_ to the boundary line.
- (ii) Fit is the condition of \_\_\_\_\_ or \_\_\_\_\_ between two mating parts assembled together.
- (iii) A \_\_\_\_\_ saddle key is placed on the flat surface made on the shaft.
- (iv) The key which is having uniform width and tapering thickness is called \_\_\_\_\_ key.
- (v) The algebraic difference between an actual size and the corresponding basic size is \_\_\_\_\_.

#### **Q.12 Multiple choice question.**

- (i) The outermost position which joins the two sides of a thread is \_\_\_\_\_.

- (a) Root (b) Crest  
(c) Flank (d) Angle
- (ii) In British association thread, the angle of the thread is \_\_\_\_\_.  
(a)  $60^\circ$  (b)  $52^\circ$   
(c)  $47.5^\circ$  (d)  $45^\circ$
- (iii) The standard taper of the sunk key is \_\_\_\_\_.  
(a) 1 in 50 (b) 1 in 100  
(c) 1 in 150 (d) 1 in 200
- (iv) The thread used generally for power transmission is \_\_\_\_\_.  
(a) Square (b) V-Thread  
(c) Acme (d) Metric
- (v) In AutoCAD which command is used to draw smooth round arcs to connect two objects?  
(a) Arc (b) Circle  
(c) Point (d) Fillet

**Q.13 True or false.**

- (i) A V-Thread is used for power transmission.  
(ii) The term hole refers to any External dimension or a component.  
(iii) Geometrical Tolerance indicate the minimum & maximum hole size.  
(iv) Fillet command is used to draw symmetrical images.  
(v) For interference fit shaft is always larger than the hole.

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