

MODEL QUESTION PAPER

DSA2/DSM2

III Semester DIPLOMA Examination, August 2011 MANUFACTURING TECHNOLOGY - I

Time: 3 Hours

Max. Marks: 75

GROUP A : Answer any three questions.

- Q.1 Sketch and explain centrifugal casting.
- Q.2 Sketch & explain electric arc furnace.
- Q.3 Sketch and explain Gas Welding Process.
- Q.4 What are the different heat treatment processes?
- Q.5 State the differences between hot working and cold working operations.

GROUP B : Answer any three questions.

- Q.6 What is hot working?
- Q.7 What are the steps to be followed in powder metallurgy?
- Q.8 Sketch and explain TIG welding process.
- Q.9 What is powder metallurgy? What are the steps to be followed in powder metallurgy?
- Q.10 Explain the different types of mouldings.

GROUP C : All Questions are Compulsory.

Q.11 Fill in the blanks

- (i) Drop Forging is done by Power _____.
- (ii) _____ are the basic tools to form the mould cavity and casting.
- (iii) _____ is an art and science of producing fine metal produces.
- (iv) Vernier slide moves over the beams by means of a _____ thumb lever.
- (v) The solid solution of carbon in X-iron is called _____

Q.12 Multiple choice question.

- (i) The forging done by power hammers is _____.
 - (a) Press forging
 - (b) Roll forging
 - (c) Drop forging
 - (d) Upset forging
- (ii) A capstan or turret lathe is a production lathe used to produce identical pieces in quantity of _____.
 - (a) Infinite
 - (b) 100
 - (c) 85
 - (d) 600
- (iii) A low carbon steel contains carbon % upto _____.
 - (a) 20
 - (b) 0.20

- (c) 10 (d) 0.1
- (iv) The fusion achieved by focusing a high power density beam of electrons on the area to be joined is _____.
(a) Electronic welding (b) Laser welding
(c) Electron beam welding (d) Thermit welding
- (v) Grade 'I' accuracy is represents the following grade_____.
(a) Calibration (b) Inspection
(c) Workshop (d) General Application

Q.13 True or false

- (i) Mandrels are devices used to hold the job for machining on lathes.
(ii) Forging is the shaping of metal using localized compressive forces.
(iii) Injection of molten into the die is done by Gatted pattern.
(iv) An Optical comparator is also called a comparator in context.
(v) Plate moulding is used to produce several castings all at a time.
