Total No. of Questions : 12]

SEAT No. :

P563

[Total No. of Pages : 2

[4457]-15

S.E. (Mech.) (Semester - I)
MANUFACTURING PROCESSES
(2008 Course)

Time :3 Hours]   *[Max. Marks :100*

Instructions to the candidates :

1)   *Section-I: Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
2)   *Section-II: Q.7 or Q.8, Q.9 or Q.10, Q.11 or Q.12*
3)   *Figures to the right indicate full marks.*

SECTION - I

Q1) a)   With a neat sketch explain permeability test.   **[8]**

   b)   Explain with a figure position of hanging and balanced core.   **[8]**

   c)   Why chaplets are used in casting?   **[2]**

OR

Q2) a)   Draw the fig. of Jolt moulding machine and explain it in details.   **[8]**

   b)   What is centrifuging and explain it with fig.   **[8]**

   c)   Explain the term tumbling in casting.   **[2]**

Q3) a)   Draw the fig of planetary rolling mill and explain it in details.   **[8]**

   b)   Explain Toggle ram drive mechanism with fig.   **[8]**

OR

Q4) a)   Compare Forging and casting process.   **[8]**

   b)   With a neat sketch explain Tandem rolling mill.   **[8]**

Q5) a)   Compare A.C and D.C Arc welding.   **[8]**

   b)   Explain Plasma Arc welding with fig. construction, principle, adv, disadv.
   [8]

OR

Q6) a)   With a neat sketch explain Percussion welding construction, principle, adv, disadv.   **[8]**

   b)   Explain Thermit welding with fig, construction, principle, adv, disadv.**[8]**

P.T.O.

SECTION - II

Q7) a) Explain different parts of tailstock of the lathe with fig. **[8]**

b) With fig explain lathe setting for thread cutting. **[8]**

c) Give only types of chuck used in lathe. **[2]**

OR

Q8) a) What are different types of mandrels? Why are they used? **[8]**

b) Write short note on capstan and turret lathe. **[8]**

c) List only different types of accessories used on lathe. **[2]**

Q9) a) With fig. explain straddle and slitting milling. **[8]**

b) Explain upright drilling machine with fig. **[8]**

OR

Q10) a) Draw fig. of jig boring machine and explain it in details. **[8]**

b) Write a short note on Main parts of planer. **[8]**

Q11) a) Explain mounting of grinding wheels with fig. **[8]**

b) Write a short note on bond and bond material used on grinding wheel.**[8]**

OR

Q12) a) Draw fig. of various grinding wheel shapes used, with its names and applications. www.sppuonline.com **[8]**

b) Explain planetary internal grinders with fig. **[8]**

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