

PP-I

QP Code : 5199

(3 Hours)

[Total Marks : 80

- N.B. : (1) Question no. 1 is compulsory
 (2) Attempt any three questions out of remaining five questions.
 (3) Figures to the right indicate full marks.
 (4) Assume suitable data wherever necessary.
 (5) Notations carry usual meaning.

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| 1. (a) Explain various welding defects with their causes and remedies. | 10 |
| (b) Differentiate between soldering and brazing. | 5 |
| (c) Compare transfer molding and compression molding. | 5 |
| 2. (a) A cylindrical riser is to be designed for a sand casting mould. The size of steel casting is 7.5 cm x 12.5 cm X 2cm. The previous observation have indicated that the total solidification time for casting is 96 sec. The cylinder riser have $(d/h) = 1$. Find the size of riser so that its solidification Time is 120 sec. | 10 |
| (b) Discuss friction welding with its applications. | 5 |
| (c) Differentiate between open and closed die forging. | 5 |
| 3. (a) Discuss various rolling defects. | 6 |
| (b) Differentiate between core and core print. | 6 |
| (c) With a neat sketch explain resistance welding process giving its applications | 8 |
| 4. (a) Write advantages and disadvantages of powder metallurgy. | 6 |
| (b) With a neat sketch explain swaging process. | 6 |
| (c) What are the different NTD methods? Explain any two methods in detail. | 8 |
| 5. (a) Explain the screw type injection moulding with neat sketch .Discuss its advantages, limitations and applications. | 8 |
| (b) Discuss different methods of making powder in powder Metallurgy | 6 |
| (c) Explain different gas welding equipments | 6 |
| 6 Write short note on | 20 |
| (i) Pattern allowances | |
| (ii) Casting defects | |
| (iii) Thermit welding | |
| (iv) Thread rolling | |

Course: S.E. (SEM - III) (REV.-2012) (CBSGS)(Prog T1823 CW T0523)

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Correction:

Q.no. 2 (a)

Read As:

The cylindrical riser (d/h)=1

Instead of:

The cylinder riser (d/h) = I

Q.no. 4 (c)

Read As:

What are **NDT**.....in detail.

Instead of:

What are **NTD**.....in detail.

Query Update time: 09/12/2015 03: 55PM

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