

**B. Tech. Sem - III (Production Engg.) (2014 COURSE) (CBCS) :
SUMMER - 2019**

SUBJECT: WELDING AND FOUNDRY TECHNOLOGY

Day: Thursday
Date: 09/05/2019

Time: 02.30 PM TO 05.30 PM
Max. Marks: 60

S-2019-2580

N.B:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labeled diagrams **WHEREVER** necessary.
- 4) Assume suitable data if necessary.

Q.1 What is TIG Welding? Explain with suitable sketch Principle, operation advantages, disadvantages and applications of TIG Welding. **(10)**

OR

Q.1 a) Define Welding. Give the classification of welding processes. **(05)**
b) Explain types of flames in Gas welding. **(05)**

Q.2 a) What is seam welding? Explain seam welding process. **(05)**
b) Explain with suitable sketch Projection Welding process. **(05)**

OR

Q.2 What is solid state welding? Explain with suitable sketches Diffusion and Forge welding in detail. **(10)**

Q.3 Write a note on: **(10)**
a) Welding of Polymers
b) Welding of Cast Iron

OR

Q.3 Describe Electron Beam Welding process in detail. Also state advantages, disadvantages and applications. **(10)**

Q.4 a) What are the pattern allowances? Explain them in detail. **(05)**
b) What do you understand by Core, Core prints and Core chaplets? **(05)**

OR

Q.4 Describe Core making procedure in detail. **(10)**

Q.5 Explain with suitable sketches pouring equipments. Also Explain pouring practice. **(10)**

OR

Q.5 Describe Inspection and testing of casting in detail. **(10)**

Q.6 What is shell molding? Explain with suitable sketches steps involved in shell molding process. Also state its merits, demerits and applications. **(10)**

OR

Q.6 What are the different methods of centrifugal casting? Explain them in detail. **(10)**