

B. TECH. SEM - III (PRODUCTION ENGG.) (2014 COURSE)
(CBCS) : SUMMER - 2018
SUBJECT : WELDING & FOUNDRY TECHNOLOGY

Day : **Monday**
Date : **21/05/2018**

S-2018-2259

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

N.B.:

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

Q.1 a) Which are the fluxes used in welding? What is the use of it? [05]

b) What are the types of flames in gas welding? Explain all with suitable sketches. [05]

OR

Q.1 Define arc welding with suitable sketches discuss plasma arc and stud arc welding in detail. [10]

Q.2 a) Define seam welding. How it is differ from spot welding? [05]

b) With neat sketch explain butt welding. [05]

OR

Q.2 Describe with suitable sketches diffusion welding and ultrasonic welding. Also state merits and demerits. [10]

Q.3 With the aid of sketches describe Thermite Welding and Braze Welding in detail. [10]

OR

Q.3 Write a note on welding of dissimilar metals and welding of polymers. [10]

Q.4 What are the types of pattern? Explain with suitable sketches sweep pattern, segmental pattern, follow board pattern, skeleton pattern and loose piece pattern. [10]

OR

Q.4 a) Explain molding methods in detail. [05]

b) Discuss Gating system in brief. [05]

Q.5 a) Write a note on solidification of casting. [05]

b) Explain with suitable sketches pouring ladles. [05]

OR

Q.5 Describe Fettling and Finishing of castings. [10]

Q.6 With suitable sketches explain gravity die casting and pressure die casting. [10]

OR

Q.6 a) Discuss true centrifugal and semi centrifugal casting. [05]

b) What are the importance of robots in foundry? [05]

* * * *