

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Tech. (Agril. Engg.)

Semester	: II (New)	Term	: II	Academic Year	: 2017-18
Course No.	: FMPE 123	Title	: Workshop Technology		
Credits	: 2 (1+1)	Time	: 09.00 to 11.00	Total Marks	: 40
Day & Date	: Thursday, 03.05.2018				

- Note :
1. Solve ANY EIGHT questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

SECTION "A"

- Q.1 Explain iron-carbon equilibrium diagram especially for iron cementite system.
- Q.2 Discuss effect of chemical element on iron.
- Q.3 What is annealing? Discuss full annealing method of heat treatment.
- Q.4 Enlist the types of pattern making and explain solid pattern.
- Q.5 Explain types of arc welding methods and discuss carbon arc welding.
- Q.6 Enlist the types of lathes and explain in detail speed lathe and the bench lathe.
- Q.7 Enlist the types of shapers and explain crank shaper.
- Q.8 Enlist the types of milling machine and explain plain milling machine.
- Q.9 Enlist the types of drilling machine and explain the sensitive drilling machine.
- Q.10 Enlist the types of moulding sand and explain green sand.

SECTION "B"

- Q.11 Fill in the blanks.
- 1) The process of producing a structure of globular pearlite is known as _____.
 - 2) Homogenising is carried out at temperature of _____ at which diffusion proceeds quite easily and to some extent, equalizes the composition of steel.
 - 3) Green sand that has been dried or baked after the mould is made is called _____.
 - 4) A thin projection of metal, not intended as a part of the casting is called the _____.
- Q.12 Define the following terms.
- 1) Shaper
 - 2) Milling machine
 - 3) Drill hole
 - 4) Welding

