

B.E. (Aeronautical Engineering) Fourth Semester (C.B.S.)
Manufacturing Process - I Paper – II

P. Pages : 2

Time : Three Hours



TKN/KS/16/7402

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No.2.
 3. Solve Question 3 OR Questions No.4.
 4. Solve Question 5 OR Questions No.6.
 5. Solve Question 7 OR Questions No.8.
 6. Solve Question 9 OR Questions No.10.
 7. Solve Question 11 OR Questions No.12.
 8. Due credit will be given to neatness and adequate dimensions.
 9. Assume suitable data whenever necessary.
 10. Illustrate your answers whenever necessary with the help of neat sketches.
 11. Use of non-programmable calculator is permitted.

1. a) What are different types of patterns used. Explain with neat sketch. **7**
b) Explain various types of core materials and its properties. **7**

OR
2. a) Explain the various types of allowances provided on pattern. **7**
b) Explain the desirable properties of moulding sand in brief. **7**
3. a) What are requirements of ideal gating system. **6**
b) Explain the process of centrifugal casting with neat sketch. **7**

OR
4. a) Explain with neat sketch working of Induction furnace. **7**
b) Describe the process of Investment casting. Also give its application. **6**
5. a) Explain with neat sketch the process of Rolling? **7**
b) Explain the different types of hammers used in forging? **6**

OR
6. a) Differentiate between cold rolling and Hot rolling? **6**
b) Explain the process of Direct and Indirect Extrusion. **7**
7. a) Describe Oxy-acetylene gas welding. Explain the term 'Kerf' & 'Drag'. **7**

b) Explain weldability of metals. 6

OR

8. a) What is Resistance welding? Give its types? 6

b) Explain the Defects and Inspection of welding? 7

9. a) Explain powder manufacturing technique? 7

b) Explain self lubricating bearing. 7

OR

10. a) Describe the production of sintered structural components? 7

b) What are different types of composite materials and its applications. 7

11. a) Define Plastics? Explain polymerisation? Differentiate between thermoplastic and thermosetting plastic? 7

b) Explain the process of Injection moulding? 6

OR

12. a) Explain with neat sketch the process of Transfer moulding? 5

b) Explain with neat sketch the process of Blow moulding? 5

c) Explain calendaring? 3
