

00403 B.Tech. AEROSPACE ENGINEERING  
(BTAE)

Term-End Examination

December, 2016

BAS-004 : WORKSHOP TECHNOLOGY

Time : 3 hours

Maximum Marks : 70

Note : Attempt any five questions. All questions carry equal marks.

1. Enumerate the general considerations for the selection of materials for manufacturing. Explain any two of them in detail. 14
2. (a) Name various types of hand tools used in a carpentry shop. Explain any two of them with neat sketch. 7  
(b) Discuss the relative advantages and limitations of vernier callipers and micrometer. 7
3. (a) Describe the method of investment casting. 7  
(b) What is a pattern ? Explain any five types of patterns. 7
4. (a) Explain the advantages and limitations of CNC machines. 7  
(b) Explain the working of a bevel protractor. 7

5. (a) Distinguish between 'Up milling' and 'Down milling' with neat sketches. 7
- (b) Explain boring and taper turning operations with neat sketches. 7
6. (a) Describe the different types of flames and their uses. 7
- (b) Differentiate between arc welding and gas welding. 7
7. Write short notes on any **four** of the following :  $4 \times 3 \frac{1}{2} = 14$
- (a) Twist Drill
  - (b) Fits
  - (c) Handsaw
  - (d) Forging
  - (e) Cold and Hot Working
-