B.TECH. (AEROSPACE ENGINEERING) (BTAE)

Term-End Examination

December, 2013

BAS-004: WORKSHOP TECHNOLOGY

Time: 3 hours Maximum Marks: 70

Note: Answer any seven questions.

All questions carry equal marks.

- Enlist various engineering materials. Discuss the properties of any five engineering materials.
- 2. (a) What are the advantages and limitations of hot working process over cold working process? 5+5=10
 - (b) What do you mean by production processes?
- 3. (a) What are the different hand tools used in carpentry? Explain any one of them with neat sketch.

 5+5=10
 - (b) What are the salient differences between a plain and universal milling machine?
- **4.** Explain working principle of lathe with a neat **10** sketch.

- (a) What are the essential properties of a moulding sand?5+5=10
 - (b) What is casting? Enlist the various casting processes.
- 6. What do you mean by pattern? Discuss different 10 types of pattern.
- 7. (a) Distinguish between arc welding and gas welding. 5+5=10
 - (b) Explain shielded arc welding.
- 8. Explain the following operations: 2.5x4=10
 - (a) Sheet metal working
 - (b) Forging
 - (c) Drilling
 - (d) Gear cutting
- 9. Write short notes on any two of the following:
 - (a) Tolerances
- 5x2=10

- (b) CNC machines
- (c) Shaping machine