

**B.Tech. AEROSPACE ENGINEERING
(BTAE)
Term-End Examination
June, 2017**

00230

BAS-004 : WORKSHOP TECHNOLOGY

Time : 3 hours

Maximum Marks : 70

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

1. Define the following for a forging die with the help of a sketch : $4 \times 3 \frac{1}{2} = 14$
 - (a) Flash
 - (b) Cutter
 - (c) Draft
 - (d) Parting Line

2. (a) Why is the deposition rate high in submerged arc welding ? State the disadvantages of submerged arc welding. 7
(b) Describe gas welding with a neat sketch. 7

3. Distinguish between elastic and plastic deformation of a material. What are the advantages and disadvantages of hot working ? 14

4. (a) What is a pattern ? Explain different pattern allowances in brief. 7
- (b) Discuss the properties of a moulding sand. 7
5. (a) What is Sine Bar ? Explain its use with a neat diagram. 10
- (b) State one practical reason for using unilateral tolerances. 4
6. With a neat sketch, explain the working of a lathe machine. Explain any five operations that can be performed on a lathe. 14
7. Write short notes on any **four** of the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Applications of CNC Machine
 - (b) Gear Cutting Machine
 - (c) Optical Comparator
 - (d) Centrifugal Casting
 - (e) Sweep Pattern
 - (f) Extrusion
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