**Reg. No. \_\_\_\_\_\_\_\_**

**Karunya University**

**(Karunya Institute of Technology and Sciences)**

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

**Supplementary Examination - June 2011**

**Subject Title: PRODUCTION PROCESSES Time: 3 hours**

**Subject Code: ME282 Maximum Marks: 100**

#### **Answer ALL questions**

**PART – A (10 x 1 = 10 MARKS)**

1. What is the working principle of a lathe?

2. What is the difference between boring and drilling?

3. What do you understand by dressing of a grinding wheel?

4. What are the benefits of using NC machines?

5. What is the tool used in laser beam machining?

6. What is friction hill in forging?

7. Why is roll cambering done?

8. Which lubricant can we use for hot extrusion of steel?

9. Why do we provide a draft angle on a wooden pattern?

10. Name any two arc welding processes.

**PART – B (5 x 3 = 15 MARKS)**

11. List the different types of lathes.

12. What are the different types of milling machines?

13. What are the materials used in grinding wheels?

14. State the different types of extrusion processing.

15. Why is riser used in castings?

**PART – C (5 x 15 = 75 MARKS)**

16. Draw a neat sketch of a lathe and indicate the major parts. Discuss the role of each major part of the lathe.

(OR)

17. Compare and contrast the capstan lathe and the turret lathe.

18. Differentiate between shaper and planer.

(OR)

19. Describe any method of gear manufacturing.

20. Briefly discuss the construction and working of a drilling machine.

(OR)

21. Explain the working principle and setup of Abrasive Jet Machining (AJM).

22. Discuss the various defects in rolled products, their causes and remedies.

(OR)

23. a. Draw neat sketches to indicate the following forging operations:

i) Edging ii) Fullering iii) Swaging iv) Piercing v) Punching

b. Also discuss flash in forging and the purpose of flash gutter.

24. Discuss GMAW (MIG welding) and its advantages and limitations.

(OR)

25. Explain the process of investment casting.