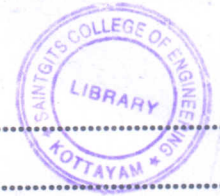


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Reg. No.....
Name.....



B.TECH. DEGREE EXAMINATION, MAY 2015

Sixth Semester

Branch : Mechanical Engineering

AU 010 604 }
ME 010 604 } METROLOGY AND MACHINE TOOLS (AU, MU)

(New Scheme—2010 Admission onwards)

[Regular/Improvement/Supplementary]

Time : Three Hours

Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 3 marks.

1. What is the difference between Drilling and Boring ?
2. Name different types of Milling Cutters.
3. What do you mean by tapping ?
4. Name any *six* instruments used for angle measurements.
5. Write short notes on laser interferometry.

(5 × 3 = 15 marks)

Part B

Answer all questions.

Each question carries 5 marks.

6. What is the difference between Turret lathe and Capstan lathe ?
7. Briefly explain the methods of honing.
8. What do you meant by gear hobbing ? Name the basic types of hobbing machines.
9. Write short note on gauge blocks.
10. How the Squereness of a drilling machine spindle with table is tested ?

(5 × 5 = 25 marks)

Turn over

Part C

Answer all questions.

Each question carries 12 marks.

11. (a) With a neat sketch, explain a tool room lathe.

Or

- (b) Briefly explain a slotter machine using a neat sketch.

12. (a) Briefly explain different methods of milling and nomenclature to specify a milling cutter.

Or

- (b) What do you mean by Grinding? Explain various types of grinding machines and how grinding wheels are specified.

13. (a) Explain gear milling and various operations involved in gear milling.

Or

- (b) Explain any *three* thread production processes.

14. (a) Briefly explain fits and tolerances.

Or

- (b) What do you mean by comparator? Explain any *two* types of comparators.

15. (a) Briefly explain surface roughness measurement techniques and terms used for the measurement.

Or

- (b) Explain any *two* methods used for gear tooth measurement.

(5 × 12 = 60 marks)

