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Seat No.	
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[4857]-115

S.E. (Mechanical/Auto.) (I Sem.) EXAMINATION, 2015
MANUFACTURING PROCESSES
(2008 PATTERN)

Time : Three Hours

Maximum Marks : 100

- N.B. :—** (i) Attempt Q. No. 1 or Q. No. 2, Q. No. 3 or Q. No. 4,
Q. No. 5 or Q. No. 6, Q. No. 7 or Q. No. 8, Q. No. 9
or Q. No. 10, Q. No. 11 or Q. No. 12.
(ii) Neat diagrams must be drawn wherever necessary.
(iii) Assume suitable data, if necessary.

SECTION I

1. (a) Write short notes on : [6]
(i) Materials for pattern
(ii) Pattern making allowances.
(b) Explain the different types of casting defects with reference
to cause and remedies. [6]
(c) Draw diagram of Jolt Machine and Jolt-squeeze machine. [6]

Or

2. (a) Explain lost wax casting process in detail. [6]
(b) What is core ? Briefly discuss any *three* types with sketch. [6]
(c) What are different properties of moulding sand ? [6]
3. (a) Explain direct and indirect extrusion process with sketch. [6]
(b) Explain wire drawing with neat sketch. [4]
(c) With a neat sketch explain deep drawing [6]

P.T.O.

Or

4. (a) Differentiate between hot and cold working. [6]
(b) Explain shot peening and rotary swaging. [6]
(c) Explain rolling operation with its type. [4]
5. (a) Describe MIG with sketch. [6]
(b) Explain spot welding with sketch. [4]
(c) Describe different types of flames used in gas welding along with their applications. [6]

Or

6. (a) Distinguish between soldering and brazing. [4]
(b) Describe SMAW with sketch. [6]
(c) Describe gas welding process. [6]

SECTION II

7. (a) Explain any *one* taper turning method with sketch. [6]
(b) Explain the following lathe operations : [6]
(i) Parting-off
(ii) Drilling
(iii) Step turning.
(c) Explain half nut mechanism with neat sketch. [6]

Or

8. (a) Write down the specifications of lathe machine with sketch. [6]
(b) What are the different types of mandrels ? Why are they used ? [6]
(c) Explain lathe setting for thread cutting operation with sketch. [6]

9. (a) Write a short note on Radial Drilling Machine. [6]
(b) Compare conventional milling and climb milling. [6]
(c) Explain planer machine with sketch. [4]

Or

10. (a) Explain the procedure to cut a spur gear on milling machine. [6]
(b) Explain Jig boring machine with sketch. [6]
(c) Sketch countersunk drilling and trepanning operation. [4]

11. (a) Explain the meaning of : [4]

W-C-500-H-4-V-17.

- (b) Explain honing and lapping with sketch. [6]
(c) Explain the procedure of mounting the grinding wheel with neat sketch. [6]

Or

12. (a) Explain centerless grinding with sketch. [6]
(b) Write a short note on truing and dressing of grinding wheel. [6]
(c) Explain mounting of grinding wheel with sketch. [4]