Reg.No.					



MANIPAL INSTITUTE OF TECHNOLOGY



(Constituent Institute of MAHE –Deemed University) Manipal – 576 104

THIRD SEMESTER B.E (MECH. & I.P. ENGG) DEGREE END SEMESTER(MAKE-UP)EXAMINATIONS **SUBJECT: PRODUCTION TECHNIQUES**.(MEE-209/IPE-209)

(REVISED CREDIT SYSTEM)

16/01/07	
Time: 3 Hours.	MAX.MARKS: 50
 Instructions to Candidates: Answer ANY FIVE full questions. Draw NEAT SKETCHS wherever necessary 	
1. a) Explain the allowances generally provided on the pattern.	[03]
b) With neat sketch explain metal inert gas arc welding process.	[04]
c) Write a note on specification of Electrodes used in arc welding.	[03]
2. a) Explain with sketch centrifugal casting process.	[05]
b) Explain with sketch permeability test conducted on moulding sand.	[05]
3. a) Discuss the various properties of moulding sand.	[03]
b) Distinguish between hot and cold working of metals.	[03]
c) With the help of neat sketch explain the working of spring hammer.	[04]
4. a) Explain with sketch combination die.	[05]
b) Explain the various rolling and extrusion defects.	[05]
5. a) Distinguish between i) Blanking and piercing ii) Coining and embossing	[05]
b) Explain the followingi) Forging operationsii) Forging defects	[05]
6. Write a note on following i) Ultrasonic testing ii) Magnetic particle testing iii) Weldability iv) Drawing process	[10]
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