| Seat No.: | Enrolment No |
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| GU | JARAT TECHNOLOGICAL UNIVERSITY |

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| | ME - SEMESTER- II (OIG COURSE) REMEDIAL EXAMINATION - SUMMER 2015 | | | |
|--|---|---|----|--|
| • | | Code: 1720802 Date:13/05/2015 | | |
| Subject Name: Computer Aided Manufacturing Time: 02:30 pm to 5:00 pm Total Marks: 70 Instructions: | | | | |
| instruc | 1. 2. | Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. | | |
| | <i>J</i> . | rightes to the right indicate full marks. | | |
| Q.1 | (a | Justify the role of õCAMö in present day competitive mfg. that has emerged out in Indian Industries. | 07 | |
| | (b | õCNC Machining centre is considered to be a highly productive machineö. Give your justification. | 07 | |
| Q.2 | (a | Differentiate the NC and CNC machines. Explain utilization of CNC machines in batch production. | 07 | |
| | (b | • | 07 | |
| | | OR | | |
| | (b) | Classify CNC machine tools on the basis of (1) Programming methods (2) Types of controllers | 07 | |
| Q.3 | (a | What is a canned cycle and do loops? Explain any three canned cycles with their syntax. | 07 | |
| | (b | | 07 | |
| | | OR | | |
| Q.3 | (a | Discuss the concept of CIM wheel and explain the importance of integrating the enterprise included therein. | 07 | |
| | (b | Write short note on õExpert systems and AI based scheduling in CIM environment.ö | 07 | |
| Q.4 | (a | Explain the types of flexibilities in FMS and discuss the factors on which these flexibilities depend. Draw a typical layout of FMS used in industries. | 07 | |
| | (b | * ** | 07 | |
| | | OR | | |
| Q.4 | (a | handling and storage systems. | 07 | |
| | (b) | Discuss the various tool supply concepts used in the FMS context. While bringing out the specific advantages and applications, mention the most widely practiced principle in the industry. | 07 | |
| Q.5 | (a | Explain with neat sketch AS/RS system used in FMS. | 07 | |
| _ | (b | • | 07 | |
| Q.5 | (a | What is part classification and coding requirements in GT. Explain OPTIZ system | 07 | |

(b) List the different technologies available in automatic identification system in factory 07

of coding.

data collection system and explain any one in detail.