

**DIPLOMA IN
MECHANICAL ENGINEERING(DME)**

Term-End Examination

December, 2013

**BME-055 : COMPUTER INTEGRATED
MANUFACTURING**

Time : 2 hours

Maximum Marks : 70

Note : Answer any seven questions only. All questions carry equal marks.

1. Explain briefly the different components in AS/RS with sketch. 10
2. Explain the use of robots in material handling applications. 10
3. What are the different types of FMS ? Explain any one in detail. 10
4. What are the benefits and objectives of CIM ? 10
5. "Quality can not be inspected, it has to be inbuilt within the system" - Justify the statement with suitable examples. 10

6. What are the factors causing error in manual inspection and automated inspection ? Explain your understanding on inspection accuracy. **10**
7. What is a CMM ? Explain the various components in CMM. Briefly describe the construction of CMM. **10**
8. What are the different components of a AGUS ? Describe any one in detail. **10**
9. Explain the following in detail :
- (a) Product flexibility **5**
 - (b) Machine flexibility **5**
10. How are the robots classified based on control system? Describe any one in detail. **10**
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