

M.C.A. - III (with Credits)-Regular-Semester 2012 Sem V  
**5MCA51 - Paper-V - Elective- I : Embedded System**

P. Pages : 1

Time : Three Hours



**GUG/S/18/3393**

Max. Marks : 80

- Notes :
1. All question carry equal mark and necessary.
  2. Draw neat and clean diagram wherever necessary.
  3. Avoid vague answer and write Answer relevant and specific to question only.

1. Either
- a) Discuss the Recent trends in the embedded system design. **8**
  - b) Draw and explain the Architecture of ES Design. **8**
- OR**
- c) What is mean by Embedded system? Give any three example of Embedded Application. **8**
  - d) What are the design issue of Embedded software? Explain. **8**
2. Either
- a) Draw and explain RISK microcontroller Architecture. **8**
  - b) Discuss stack operation with example. **8**
- OR**
- c) Write about pipelining in detail. **8**
  - d) Briefly explain processor and memory organization. **8**
3. Either
- a) What is Real time clock? Explain. **8**
  - b) Explain **8**
    - i) I2C bus
    - ii) CAN Bus
- OR**
- c) Write about IRDA Data link. **8**
  - d) Enlist the RPC function. Explain any four RPC function in detail. **8**
4. Either
- a) What is DSP? Explain in detail. **8**
  - b) Discuss in detail the concept of smart home. **8**
- OR**
- c) Give the application of RTOS. and explain any two of them. **8**
  - d) Briefly explain context switching. **8**
5. Attempt all the question.
- a) What are the skill required to develop Embedded Application. **4**
  - b) Write a short note on ARM. **4**
  - c) Write a note on Synchronization. **4**
  - d) What is process and thread? **4**

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