

This question paper contains 2 printed pages]

**AI—272—2017**

**FACULTY OF SCIENCE**

**M.Sc. (Fourth Semester) EXAMINATION**

**MARCH/APRIL, 2017**

**(CBCS Pattern)**

**COMPUTER SCIENCE**

**Paper CS-403**

**(Elective IV)**

**(Embedded System Design Through C and C++)**

**(Wednesday, 26-4-2017)**

**Time : 2.00 p.m. to 5.00 p.m.**

*Time—Three Hours*

*Maximum Marks—75*

*N.B. :— All questions are compulsory.*

1. Attempt the following (any *three*) : 15
  - (a) Explain embedded systems.
  - (b) Explain processor embedded into as system.
  - (c) Explain gates.
  - (d) Explain memory.
  - (e) Explain microprocessors.
2. Attempt the following (any *three*) : 15
  - (a) Explain direct memory access.
  - (b) Explain interrupt basics.
  - (c) Explain round robin with interuopts.
  - (d) Explain semaphores.
3. Attempt the following (any *three*) : 15
  - (a) Explain RTOS architecturer.
  - (b) Explain task and data.
  - (c) Explain timer functions.
  - (d) Explain host and target machines.

P.T.O.

4. Attempt the following (any *three*) : 15
- (a) Explain memory management.
  - (b) Explain embedded s/w into target system.
  - (c) Explain message queue and mail boxes.
  - (d) Explain instruction set simulator.
5. Write short notes on (any *three*) : 15
- (a) Direct memory access
  - (b) RTOS
  - (c) Buses
  - (d) Interrupt latency
  - (e) Events.