

B.Tech III Year II Semester (R09) Supplementary Examinations May/June 2017

**COMPUTER ORGANIZATION**

(Common to EIE and E.Con.E)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 1 Explain about floating point representation:
  - (a) Single-precision format.
  - (b) Double-precision format.
- 2
  - (a) Explain how data flows during fetch and interrupts cycles.
  - (b) Explain the operation of 4-bit binary adder with example.
- 3
  - (a) With the help of a diagram, explain the computer hardware configuration.
  - (b) Describe briefly on the fetch routine.
- 4
  - (a) What is the use of fast multiplication circuits? Write about array multipliers.
  - (b) Explain Booth's algorithm with its theoretical basis.
- 5
  - (a) Draw and explain the virtual memory organization.
  - (b) Explain how data is organized and formatted on the magnetic disk.
- 6
  - (a) Discuss the USB transfer types for different applications .
  - (b) What is USB controller? Explain the elements of USB controller.
- 7
  - (a) Write short notes on array processors.
  - (b) Give examples for Super computers and explain them in detail.
- 8 Write in detail about multistage switching networks.

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