## NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute)

## Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow <br> M.Tech

FIRST YEAR (SEMESTER-II) THEORY EXAMINATION (2020-2021)
(Subjective Type)

## Subject Code: AMTCSE0216

Subject: Advanced Computer Architecture

Max. Mks. : 30
Time : $\mathbf{5 0}$ Minutes

## General Instructions:

All questions are compulsory.
Question No. 1 to 15 are subjective type question carrying 3 marks each. Attempt any 10 out of 15 questions.

| Q.No | Question Content | Question Image | Category | Sub <br> Category | Marks | Options Randomization | Type | Difficulty |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Define Computer Architecture. |  | Attempt any 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Brilliant |
| 2 | What is the need of bus arbitration? |  | Attempt any 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Brilliant |
| 3 | How floating point numbers are represented in a computer system? |  | Attempt any 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Brilliant |
| 4 | Define microinstruction |  | Attempt any 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Brilliant |
| 5 | Draw an instruction format |  | Attempt any 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Smart |
| 6 | Define effective address. |  | Attempt any 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Brilliant |
| 7 | How hazards can be avoided in pipelining? |  | Attempt any 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Smart |
| 8 | Define speed up. |  | Attempt any 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Brilliant |
| 9 | List out the phases of an instruction pipeline |  | Attempt any 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Smart |

Page 1 of 2

| Q.No | Question Content | Question <br> Image | Category | Sub <br> Category | Marks | Options <br> Randomization | Type | Difficulty |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | What is the need of address translation? |  | Attempt any <br> 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Brilliant |
| 11 | Define coherence. | Attempt any <br> 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Smart |  |
| 12 | Differentiate between private and shared virtual memory. | Attempt any <br> 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Smart |  |
| 13 | Define vector processing. | Attempt any <br> 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Smart |  |
| 14 | List out two features of PRAM model | Attempt any <br> 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Smart |  |
| 15 | Draw SIMD architecture | Attempt any <br> 10 questions | $10 \times 3=30$ | 3 |  | Subjective | Smart |  |

