# CSE 3215: Microcontroller Based System Design

**Quiz 1 (Set A1)**

**Time: 20 minutes**

**Marks: 10**

|  |  |  |
| --- | --- | --- |
| No. | Question | Marks |
| 1. | A microcontroller is basically a …………………………………… | [1] |
| 2. | Why is pipelining easier in RISC processors whereas difficult in CISC processors? | [3] |
| 3. | What is the split cache version of the Modified Harvard Architecture? | [4] |
| 4. | A 1024K memory chip has 16 pins for data. Find:   1. the organization 2. the number of address pins for this memory chip. | [2] |

# CSE 3215: Microcontroller Based System Design

**Quiz 1 (Set B1)**

**Time: 20 minutes**

**Marks: 10**

|  |  |  |
| --- | --- | --- |
| No. | Question | Marks |
| 1. | A microprocessor is basically a …………………………………… | [1] |
| 2. | Why are Register banks used for Fast Context Switching? | [3] |
| 3. | Analyze which one gives better performance between modified Harvard architecture and Harvard architecture. | [4] |
| 4. | A 512K memory chip has 16 pins for data. Find:   1. the organization 2. the number of address pins for this memory chip. | [2] |

# CSE 3215: Microcontroller Based System Design

**Quiz 1 (Set A2)**

**Time: 20 minutes**

**Marks: 10**

|  |  |  |
| --- | --- | --- |
| No. | Question | Marks |
| 1. | AVRs are all ……………………….. , meaning that the CPU can work on only ………….. of data at a time. | [1] |
| 2. | What is embedded system and why does it use microcontroller most of the time? | [3] |
| 3. | Explain the purpose and working procedure of a watchdog timer. | [4] |
| 4. | Write down the difference between Flash Memory and EEPROM. | [2] |

# CSE 3215: Microcontroller Based System Design

**Quiz 1 (Set B2)**

**Time: 20 minutes**

**Marks: 10**

|  |  |  |
| --- | --- | --- |
| No. | Question | Marks |
| 1. | The ARM architecture is a ……………………………….. developed by ARM Ltd. | [1] |
| 2. | What is memory organization and memory capacity of a semiconductor memory chip? | [3] |
| 3. | Distinguish between RISC and CISC. | [4] |
| 4. | Why was Von-Neumann Architecture more popular than Harvard Architecture in the earlier days? | [2] |