**Reg. No:**

**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR**
(AUTONOMOUS)
**MCA III Year I Semester Regular & Supplementary Examinations Nov/Dec 2019**
**SOFTWARE TESTING**

Time: 3 hours                                                                                  Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)

## UNIT-I

| | | |
|---|---|---|
| **1** | **a** Why we do testing? Explain the goals of testing. | **6M** |
| | **b** Explain briefly about the four factors used to find the importance of bug. | **6M** |

**OR**

| | | |
|---|---|---|
| **2** | **a** Explain Testing versus debugging. | **6M** |
| | **b** Describe taxonomy of bugs. | **6M** |

## UNIT-II

| | | |
|---|---|---|
| **3** | **a** What are the difference between control flow graph and flow chart? | **6M** |
| | **b** Explain various loops with an example. | **6M** |

**OR**

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| **4** | **a** Describe Data Flow testing strategies. | **5M** |
| | **b** Explain Motivation and assumption of data flow testing. | **7M** |

## UNIT-III

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| **5** | **a** Define domain closure and domain dimensionality. | **6M** |
| | **b** Describe interior point, boundary point and extreme point. | **6M** |

**OR**

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|---|---|---|
| **6** | What is meant by domain testing? Discuss the various applications of domain testing. | **12M** |

## UNIT-IV

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|---|---|---|
| **7** | **a** Explain about path products and path expression. | **6M** |
| | **b** Explain applications of regular expression. | **6M** |

**OR**

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|---|---|---|
| **8** | How can we determine paths in domains in logic based testing? | **12M** |

## UNIT-V

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|---|---|---|
| **9** | **a** Define state table and describe the state graphs. | **6M** |
| | **b** Write short notes on equivalent state with example. | **6M** |

**OR**

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|---|---|---|
| **10** | **a** Explain briefly about Good state graphs and Bad state graphs. | **6M** |
| | **b** Discuss briefly about the principles of state testing. | **6M** |

*** END ***