|  |
| --- |
| **APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**FIFTH SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2018 |
| **Course Code: EC 305** |
| **Course Name: MICROPROCESSOR & MICROCONTROLLER** |
| **Scheme of Valuation** |
| (Scheme of evaluation (marks in brackets) and answersof problems/key) |
| **PART A** |
|  |  | ***Answer any twofull questions, each carries15 marks.*** | Marks |
| 1 | a | Diagram with necessary markings –Explanation of GPR,SPR,Flags | (4)(2+2+2) |
|  | b | ComparisonControl Signals | (3)(2) |
| 2 | a | Timing DiagramExplanationTime Required | (5)(3)(2) |
|  | b | Purpose of each signal (1 mark each) | 1X5=(5) |
| 3 | a | AdvantagesScan linesEncoded ModeDecode mode | (2)(2)(3)(3) |
|  | b | DiagramExplanation | (3)(2) |
| **PART B** |
| ***Answer any twofull questions, each carries15marks.*** |
| 4 | a | Logically correct program -Logic /algorithm/flowchart - | (7)(3) |
|  | b | SegmentsAdvantagePhysical address determination | (2)(1)(2) |
| 5 | a | Explanation 1 mark each | (1X5) |
|  | b | Diagram with necessary markings –Explanation of memory map– | (5)(5) |
| 6 | a | FunctionP1 as InputP1 as output | (4)(3)(3) |
|  | b | Addressing modes with examples | (5) |
| **PART C** |
| ***Answer any twofull questions, each carries20 marks.*** |
| 7 | a | Diagram with necessary markings –Explanation – | (5) (5) |
|  | b | TMOD description TCON description SCONIEIP | (2 X5) |
| 8 | a | Logically correct program -Logic/ algorithm/flowchart | (7)(3) |
|  | b | DiagramExplanationprogram | (3)(3)(4) |
| 9 | a |  Logically correct program -Logic/ algorithm/flowchart | (7)(3) |
|  | b | DiagramExplanation | (5) (5) |
| \*\*\*\* |