

|  |
| --- |
| **Scheme of Valuation/Answer Key**(Scheme of evaluation (marks in brackets) and answers of problems/key) |
| **APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**FOURTH SEMESTER B.TECH DEGREE EXAMINATION, APRIL 2019 |
| **Course Code: ME210** |
| **Course Name: METALLURGYAND MATERIALS ENGINEERING (MC)** |
| Max. Marks: 100 |  | Duration: 3 Hours |
| **PART A** |
|  | ***Answer any three questions, each carries 10 marks.*** | Marks |
| 1 | a) |  Sketches – 4 marks , effective number of atoms and co-ordination number 6 marks | (10) |
| 2 | a) | Types explanation 4 marks , sketch 3 marks | ( 7) |
|  | b) | Explanation-3 marks | ( 3) |
| 3 | a) | Working principle-2 marks sketch 3 applications-2 marks | (7) |
|  | b) | Explanation-3 marks | (3) |
| 4 | a) | Each 2.5 marks | (5) |
|  | b) | Explanation with stages 5 marks | (5) |
| **PART B** |
| ***Answer any three questions, each carries 10 marks.*** |
| 5 | a) | Explanation 3 marks Diagram 3 marks | ( 6) |
|  | b) | Each 1 mark | ( 4) |
| 6 | a) | Definition-2 marks, Each reaction 2 marks | (10) |
| 7 | a) | Theory 4 marks. Explanation of process 6 marks | (10) |
| 8 | a) | Each 3 marks | (6) |
|  | b) | Each Difference-1 mark, total 4 | (4) |
| **PART C** |
| ***Answer any four questions, each carries 10 marks.*** |
| 9 | a) | Procedure 6 marks, S-N curve sketch 4 marks | (10) |
| 10 | a) | Explanation 5 marks | ( 5) |
|  | b) | Definition 3 marks, Examples 2 marks | (5) |
| 11 | a) | Each 2.5 marks | (10) |
| 12 | a) | Explanation 5marks property 5 marks | (10) |
| 13 | a) | Each 3 marks | (6) |
|  | b) | Explanation 4 marks | (4) |
| 14 | a) | Definition 3 marks, factors 3 marks | (6) |
|  | b) | Definition 2 marks, Advantages 2 marks | (4) |
| \*\*\*\* |