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| **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) |
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