

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
SIXTH SEMESTER B.TECH DEGREE EXAMINATION, APRIL 2018

Course Code: MP 368

Course Name: ADVANCED MATERIALS AND PROCESSES (PE)

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any three full questions, each carries 10 marks.

Marks

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|---|---|------|
| 1 | What are composites? List the advantages of composites. | (10) |
| 2 | What is meant by fiber reinforced plastic? | (10) |
| 3 | Explain any one method to process metal matrix composite. | (10) |
| 4 | Discuss the relevance of composites in the present world. | (10) |

PART B

Answer any three full questions, each carries 10 marks.

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|---|---|------|
| 5 | Explain rotating electrode method of powder production. | (10) |
| 6 | Explain metal injection molding in powder metallurgy. | (10) |
| 7 | Why nano materials exhibit superior properties? | (10) |
| 8 | What are the applications of nano materials? | (10) |

PART C

Answer any four full questions, each carries 10 marks.

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|----|---|------|
| 9 | Differentiate between conventional and non-conventional material removal processes. | (10) |
| 10 | Explain electrical discharge machining process with a neat diagram. | (10) |
| 11 | Describe the electro chemical machining process with a neat diagram. | (10) |
| 12 | Discuss about surface textures in engineering components. | (10) |
| 13 | Explain any one of the spraying method for surface coating. | (10) |
| 14 | With a neat sketch explain the physical vapour deposition method for surface coating. | (10) |
