

Reg No.: _____

Name: _____

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

Course Code: MP201

Course Name: MACHINE TOOL TECHNOLOGY (PE)

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any three full questions, each carries 10marks

Marks

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|---|--|------|
| 1 | Illustrate the constructional features of Lathe with a detailed sketch. | (10) |
| 2 | Describe the back-gear mechanism of lathe. | (10) |
| 3 | Differentiate between up milling and down milling. Point out a scenario in which the above mentioned processes are used. | (10) |
| 4 | Describe three different operations performed on milling machine | |

PART B

Answer any three full questions, each carries 10marks

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|---|--|------|
| 5 | Enumerate on centreless grinding. | (10) |
| 6 | Discuss the standard method of specifying a grinding wheel by taking an example. | (10) |
| 7 | With the help of a neat sketch explain the crank and slotted link mechanism. | (10) |
| 8 | Point out the main differences between shaper and planer. | (10) |

PART C

Answer any four full questions, each carries 10marks

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|----|---|------|
| 9 | Enumerate on the lapping process. | (10) |
| 10 | Explain honing process with its advantages and disadvantages. | (10) |
| 11 | Explain about super finishing process. | (10) |
| 12 | List out the advantages and limitations of gear hobbing process over other gear generation processes. | (10) |
| 13 | Describe about gear grinding and gear lapping process. | (10) |
| 14 | Explain the following: | (10) |
| | i) Gear shaving ii) Gear grinding | |
