

Reg No.: _____

Name: _____

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

Course Code: MR205

Course Name: SCIENCE OF MEASUREMENTS

Max. Marks: 100

Duration: 3 Hours

PART A

Answer all questions, each carries 5 marks.

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| 1 | Explain any 5 methods of measurement. | 5 |
| 2 | Explain the calculated output correction method for spurious inputs. | 5 |
| 3 | Compare and contrast primary and secondary transducers. | 5 |
| 4 | What is a rota meter? Explain its working | 5 |
| 5 | What is wringing? Explain the procedure | 5 |
| 6 | What are angle gauges? How do they differ from slip gauge? | 5 |
| 7 | What are the types of errors in thread? | 5 |
| 8 | What are the common errors in gear? | 5 |

PART B

Answer any three questions, each carries 10 marks.

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| 9 | a) Write a note on classification of errors. | 5 |
| | b) With a neat figure, explain generalized measurement system | 5 |
| 10 | Explain the method of inherent insensitivity and signal filtering | 10 |
| 11 | With a neat figure, explain capacitance transducers. | 10 |
| 12 | What is a McLeod gauge used for? Explain the procedure. | 10 |
| 13 | What is a pyrometer? Explain total radiation pyrometer | 10 |

PART C

Answer any two questions, each carries 15 marks.

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| 14 | With a neat figure, explain the working of Tomlinson surface meter. | 15 |
| 15 | Explain Taylor Hobson talysurf instrument with a sketch | 15 |
| 16 | Explain the classification of pitch errors | 15 |
| 17 | Write a note on Two wire method & Three wire method | 15 |
