

End Term Examinations (December 2018)

School: School of Engineering Program: M Tech (APE)

Course: Automotive Equipment Design Course Code: APE503

Semester: I Max Marks: 50 Duration (mins): 120

Note: 1. Figures to the right indicates full marks.

Q1. Explain important stages of heat treatment process. (10)

- Q2. Explain stress-strain diagram highlighting below parameters:
 - A) Upper & lower yield point
 - B) Resilience
 - C) Toughness
 - D) Ultimate tensile strength (10)
- Q3. Explain Power metallurgy process as a manufacturing process and state it's advantages over conventional casting process. (10)
- Q4. State all stages of product development stages involved in product making of Alloy wheel and state in brief about material used. (20)