



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examinations (APRIL 2019)

School: School of Engineering.

Program: M-Tech- APE

Course: **Automobile Emissions**

Course Code: APE604

Semester: IV

Max Marks: 40

Qualifying Marks: 20

Duration: 100 (mins)

- Note: 1) Figures to the right indicate full marks.
2) Assume suitable data, if necessary.
3) Neat diagrams must be drawn wherever necessary.
4) Use of only electronic pocket calculator is allowed.
5) Solve Any Four out of all the questions

Automotive Emissions

- Q1. In 2-3 lines each explain the different Tests to be conducted for Type Approval of a 4Wh Vehicle [10]
- Q2. Briefly explain giving limits, the Pollutants regulated by law for a BSIV CI HCV or BSIV CI Passenger Car. Describe their principles of measurement. [10]
- Q3. With Schematic diagram, explain the CRDI system in CI Engines for BSIV. How does a CRDI system help in reducing Emissions for LCV and HCV? [10]
- Q4. Explain in short the ESC and ETC cycles for HCV Emission measurement. [10]
- Q5. Explain the Harmful effects of Pollutants on Human Health. [10]
- Q6. Describe the Emission tests on a Chassis Dynamometer for BSIV. [10]
- Q7. Explain the features of Engine architecture for BSIV MPFI and CRDI vehicles` [10]