



**PRESIDENCY UNIVERSITY
BENGALURU**

ROLL NO: _____

SCHOOL OF ENGINEERING

Odd Semester: 2018-19

TEST 2

Date: 28 November 2018

Course Code: MEC 401

Time: 1 Hour

Course Name: Automotive Vehicles

Max Marks: 40

Branch & Sem: Open Elective VII Sem Group - I

Weightage: 20%

Instructions:

(i) Answer all the questions.

Part A

Answer **all** the Questions. **Each** Question carries **four** marks

(4x4=16)

1. Give any four reasons for using engine cooling systems.
2. Explain briefly need of thermostat valve in cooling system.
3. Briefly explain four main purposes of lubrication system
4. Classify chassis based on structure and control.

Part B

Answer **all** the Questions. **Each** Question carries **eight** marks

(3x8=24)

5. Sketch and explain the forced circulation water cooling system.
6. With neat schematic diagram explain dry sump lubrication system.
7. With neat schematic diagram explain Mac Pherson Strut suspension system.



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**PRESIDENCY UNIVERSITY
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SCHOOL OF ENGINEERING

END TERM FINAL EXAMINATION

Odd Semester: 2018-19

Course Code: MEC 401

Course Name: Automotive Vehicles

Programme & Sem: VII sem. (Open Elective)

Date: 29 December 2018

Time: 2 Hours

Max Marks: 80

Weightage: 40%

Instructions:

- (i) Read the question properly and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Use pencil for Sketches.

Part A

Answer **all** the Questions. **Each** question carries **six** marks.

(4Qx6M=24)

1. Discuss the types of springs used in suspension system.
2. With nomenclature sketch, explain helical spring or coil spring.
3. List the Functions of fuel injection system.
4. Explain in detail the need of brake fluids.

Part B

Answer **all** the Questions. **Each** question carries **ten** marks.

(3Qx10M=30)

5. With neat sketch explain shock absorber.
6. With neat sketch explain air braking system.
7. Differentiate between disc and drum brakes.

Part C

Answer **both** the Questions. **Each** question carries **thirteen** marks.

(2Qx13M=26)

8. List the two methods used for atomizing the fuel. Explain with sketch, Common Rail Injection system.
9. Explain in detail, the working of Anti-lock braking system.