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**B.E. / B.TECH. DEGREE EXAMINATIONS, DEC 2019**

Seventh Semester

**AE16702 – VEHICLE MAINTENANCE***(Automobile Engineering)***(Regulation 2016)****Time: Three Hours****Maximum : 100 Marks**

10a Answer ALL questions

**PART A - (10 X 2 = 20 Marks)**

	<b>CO</b>	<b>RBT</b>
1. Differentiate between the terms “Servicing” and “Maintenance”.	<b>1</b>	<b>AP</b>
2. What are the safety precautions to be made during the maintenance of a vehicle?	<b>1</b>	<b>U</b>
3. What are the various cleaning methods to be adopted for the cleaning of major engine components?	<b>2</b>	<b>U</b>
4. What are the special tools to be used in engine maintenance?	<b>2</b>	<b>R</b>
5. Differentiate between clutch drag and clutch slip.	<b>3</b>	<b>AP</b>
6. Mention two main reasons for gear slip of a vehicle.	<b>3</b>	<b>U</b>
7. Name the basic troubles of the brake system.	<b>4</b>	<b>R</b>
8. Give a sketch for tyre rotation to ensure even tyre wear of the tyres of a passenger car having a spare wheel.	<b>4</b>	<b>U</b>
9. What is ‘jump starting’?	<b>5</b>	<b>U</b>
10. What happens if the AC belt gets loosened?	<b>5</b>	<b>U</b>

**PART B - (5 X16 = 80 Marks)**

11. (a) Explain various types of records, books and forms that are being used in an automotive service station of cars. **(16)** **1** **U**

**(OR)**

- (b) Explain the different types of special service tools used in engine service. **(16)** **1** **U**

12. (a) Write the step-by step procedure of overhauling a multi-cylinder petrol engine. (16) 2 U

**(OR)**

- (b) Write the step-by step procedure of overhauling a diesel fuel supply system. (16) 2 U

13. (a) Briefly explain various troubles that may occur in a single plate dry type clutch system and bring out their causes. (16) 3 U

**(OR)**

- (b) Explain the various failures, their causes and necessary remedial work for mechanical type gear box. (16) 3 U

14. (a) Explain different problems that may affect the performance of a hydraulic braking system with drum brakes. (16) 4 U

**(OR)**

- (b) What is wheel balancing? Explain the different methods used for wheel balancing. (16) 4 U

15. (a) Explain the maintenance procedure and the various tests to be conducted on a lead acid battery of a vehicle. (16) 5 U

**(OR)**

- (b) Briefly explain about the leak detection techniques in an Automotive Air Conditioning system. (16) 5 U