

**1783****Code : 15ME63A***Register  
Number*

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**VI Semester Diploma Examination, April/May-2018****AUTOMOBILE ENGINEERING****Time : 3 Hours ]****[ Max. Marks : 100****Note :** (i) Answer any **six** questions from PART – A.(ii) Answer any **seven** questions from PART – B.**BETA CONSOLE!****PART – A**

1. Classify different types of Automobiles.



Diploma - [All Branches]

Beta Console Education

3+

**5**

2. Explain with a neat sketch the working of oil control ring.

**5**

3. Compare between Dry liners and Wet liners.



Diploma Question Papers [2015-19]

Beta Console Education

3+

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4. Explain with neat sketch the working of constant mesh gear box.

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5. List the main components of water cooling system.

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6. Making use of a sketch explain power steering.

**5**

7. With neat sketch, explain hydraulic telescopic shock absorber.

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8. Explain the working of charging system with a neat sketch.

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9. List and explain the important lights used in Automobiles.

**5**

**PART – B**

10. Identify the different steps involved in Engine Disassembly. 10
11. (a) Explain with neat sketch cylinder block. 5  
(b) What is overdrive unit ? List its important advantages. 5
12. (a) Explain with neat sketch the working of a differential. 6  
(b) Explain briefly the Automatic transmission system. 4
13. (a) Explain the importance of Torque convertor with a neat sketch. 6  
(b) Identify the role of universal joint. 4
14. (a) Explain with neat sketch the working of A.C. Mechanical pump. 5  
(b) Explain Common Rail Direct Injection (CRDI) system with a neat sketch. 5
15. (a) Define : 6  
(i) Camber  
(ii) Caster  
(iii) Toe-in and Toe-out  
(b) Explain Anti-lock Braking System (ABS). 4
16. (a) Making use of a neat sketch, explain Disc Brake. 5  
(b) List important functions of Suspension system. 5
17. (a) Making use of a sketch, explain wishbone type independent suspension system. 6  
(b) Explain the importance of Wheel alignment and Wheel balance. 4
18. (a) Explain with neat sketch Leaf spring. 6  
(b) Explain Tubeless tyre. 4
19. (a) Develop a simple block diagram of smart wiper control system and explain. 5  
(b) Explain the importance of Air bags in Automobiles. 5