

Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**

Fifth Semester B.Tech Degree Examination (Regular and Supplementary), December 2020

**Course Code: AU305****Course Name: VEHICLE MAINTENANCE**

Max. Marks: 100

Duration: 3 Hours

**PART A***Answer any three full questions, each carries 10 marks.*

Marks

- |   |                                                                                    |      |
|---|------------------------------------------------------------------------------------|------|
| 1 | What do you mean by Job card and Service History? Explain with suitable examples.  | (10) |
| 2 | a) What are the methods of starting a starting service station?                    | (4)  |
|   | b) Draw the layout of Road side service station indicating various departments     | (6)  |
| 3 | a) What is the importance of tappet clearance? How it is adjusted? Explain         | (8)  |
|   | b) What is decarbonizing of cylinder head?                                         | (2)  |
| 4 | a) What is the difference between OBD I and OBD II?                                | (3)  |
|   | b) How modern cars equipped with OBD will be analysed and services with scan tool? | (7)  |

**PART B***Answer any three full questions, each carries 10 marks.*

- |   |                                                                                                   |      |
|---|---------------------------------------------------------------------------------------------------|------|
| 5 | a) What are the various diagnostic tests conducted on AC Mechanical Fuel Pump? Explain briefly.   | (4)  |
|   | b) How the injector is tested for proper functioning? Explain.                                    | (6)  |
| 6 | a) What is the importance of FIP calibration? How it is done in inline Jerk pump system? Explain. | (7)  |
|   | b) What are the possible causes for engine does not crank?                                        | (3)  |
| 7 | a) What are the various ill effects of loose fan belt tension?                                    | (2)  |
|   | b) What are the various steps involved in servicing of radiator? Explain.                         | (8)  |
| 8 | What are the various methods used for leak detection in an Air conditioning system? Explain.      | (10) |

**PART C**

*Answer any four full questions, each carries 10 marks.*

- 9 Explain the steps involved in major overhauling of a single plate clutch. (10)
- 10 What is the importance of backlash in a differential? How it is carried out? (10)  
Explain with relevant sketches.
- 11 a) How the repair of tubeless tire is carried out? (4)  
b) What do you mean by retreading? Explain how cold retreading process is (6)  
carried out.
- 12 What are the various methods of adjusting headlights? Explain them briefly. (10)
- 13 What are the various steps involved in maintenance of lead acid battery? (10)  
Explain briefly.
- 14 a) What is the importance of tuning of horn? How it is carried out? (5)  
b) What is the importance of regulator setting? How it is done? (5)

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