# University of Mumbai Online Examination 2020 

Program: BE Automobile Engineering<br>Curriculum Scheme: Revised 2012<br>Examination: Fourth Year Semester VIII<br>Course Code: AEC803 and Course Name: Vehicle Maintenance

Time: 1hour
Max. Marks: 50

Note to the students:- All the Questions are compulsory and carry equal marks .

| Q1. | During inspection of cylinder head if cracks are suspected, the area is checked <br> using - |
| :--- | :--- |
| Option A: | Stud puller |
| Option B: | Thickness gauge |
| Option C: | Dye penetrant |
| Option D: | Filler gauge |
|  |  |
| Q2. | Which of the following means that people wait until equipment fails and repair it <br> $?$ |
| Option A: | Preventive Maintenance |
| Option B: | Predictive Maintenance |
| Option C: | Breakdown maintenance |
| Option D: | Periodic maintenance |
|  |  |
| Q3. | In a normally operating engine, intake and exhaust valves are opened by a cam <br> and closed by the <br> Option A: |
| Rocker arms or cam follower |  |
| Option B: | Valve spring |
| Option D: | Lifters (tappets) |
|  | Valve guide and/or pushrod |
| Q4. | Which of the following is the most important property of the lubricant? |
| Option A: | Density |
| Option B: | Thermal conductivity |
| Option C: | Viscosity |
| Option D: | Melting point |
|  |  |
| Q5. | The following is considered as best antifreeze solution |


| Option A: | Ethylene glycol |
| :--- | :--- |
| Option B: | Distilled glycerin |
| Option C: | Methanol |
| Option D: | Denatured alcohol |
|  |  |
| Q6. | The acid used in automobile battery is? |
| Option A: | Hydrochloric acid |
| Option B: | Hydrofluoric acid |
| Option C: | Sulphuric acid |
| Option D: | Nitric acid |
|  |  |
| Q7. | The discharged lead acid battery has on its plates? |
| Option A: | Lead peroxide (PbO4) |
| Option B: | Spongy lead (Pb) |
| Option C: | Sulphuric acid (H2SO4) |
| Option D: | Lead sulphate (PbSO4) |
|  |  |
| Q8. | Frequent addition of water in battery is because of |
| Option A: | Overcharging |
| Option B: | Undercharging |
| Option C: | rusted terminals |
| Option D: | frayed cable |
|  |  |
| Q9. | Which of these has reduced the weight and expense of wire bundles in today's <br> automobiles? |
| Option A: | Aluminum wiring |
| Option B: | Shared circuits |
| Option C: | High-voltage circuits |
| Option D: | Controller area networks |
|  |  |
| Q10. | Which of these digital multimeter (DMM) readings indicates a current <br> flow of 3 amps in a circuit? |
| Option A: | 3000 micro amps |
| Option B: | 3.0 milliamps |
| Option C: | 3000 milliamps |
| Option D: | 0.3 amps |
|  |  |
| Q11. | All electrical <br> electrical power from mechanical power. <br> O12. |
| Option A: | When the battery is half (50\%) charged the S.G. of acid in battery is |
| Option B: | Alternators |
| Option C: | Horns |
| Wption D: | Amplifier |
|  |  |


| Option B: | 1 |
| :--- | :--- |
| Option C: | 1.19 |
| Option D: | 1.12 |
|  |  |
| Q13. | PM motors used in power windows, mirrors, and seats can be reversed by |
| Option A: | Sending current to a reversed field coil |
| Option B: | Reversing the polarity of the current to the motor |
| Option C: | Using a reverse relay circuit |
| Option D: | Using a relay and a two-way clutch |
|  |  |
| Q14. | A battery can be charged by |
| Option A: | Adding distilled water |
| Option B: | Adding sulphuric acid |
| Option C: | Applying voltage in the reverse direction to that of charging |
| Option D: | Applying voltage in the same direction to that of charging |
|  |  |
| Q15. | Diagnostic trouble code is displayed as a |
| Option A: | 4 |
| Option B: | 3 |
| Option C: | 5 |
| Option D: | 6 |
|  |  |
| Q16. | Learacter alphanumeric code. |
| Option A: | bending |
| Option B: | twisting |
| Option C: | compression |
| Option D: | tension |
|  |  |
| Q17. | Front disc and rear drum brakes have |
| Option A: | Pressure differential valve |
| Option B: | metering valve |
| Option C: | combination valve |
| Option D: | Proportioning valve |
|  |  |
| Q18. | What type of sound will a defective wheel bearing make? |
| Option A: | whistle |
| Option B: | whine. |
| Option C: | growl. |
| Option D: | clunking sound. |
| Opto the front brakes. |  |
| Q19. | On-board diagnostics II (OBDII) data are retrieved by connecting a scan tool to <br> the: <br> Option B: <br> Option C: |
| Dption D: | Diagnostanction indicator lamp. |


|  |  |
| :--- | :--- |
| Q20. | Which of these is not a type of clutch? |
| Option A: | a) Single disc |
| Option B: | b) Conical |
| Option C: | c) Centrifugal |
| Option D: | d) Cylindrical |
|  |  |
| Q21. | Which of the following condition is true for uniform wear theory? |
| Option A: | a. p $=$ constant |
| Option B: | b. p/r = constant |
| Option C: | c. p.r = constant |
| Option D: | p-r=constant |
|  |  |
| Q22. | The following is an automatic clutch which is controlled by engine speed |
| Option A: | Cone clutch |
| Option B: | Centrifugal clutch |
| Option C: | fluid clutch |
| Option D: | Disc clutch |
|  |  |
| Q23. | The smallest gear inside the differential casing are known as |
| Option A: | Side gear |
| Option B: | Pinion gears |
| Option C: | Ring gear |
| Option D: | Sun gears |
|  |  |
| Q24. | Central portion of propeller shaft is made from |
| Option A: | Steel tube |
| Option B: | Cast iron rod |
| Option C: | Gun metal shaft |
| Option D: | Steel shaft |
|  |  |
| Q25. | What is the need of the universal joint? |
| Option A: | To bend sideways |
| Option B: | To change inclination |
| Option C: | To change length |
| Option D: | To transfer torque at an angle |
|  |  |

