|  |  |  |
| --- | --- | --- |
| **Auto Upkeep (2nd Edition)** |  | Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Mid-Term Chapters 1-10 |  | Date \_\_\_\_/\_\_\_\_/\_\_\_\_ |
|  |  | Test Score \_\_\_\_ |

# Section 1: Selected Response

Directions: Place the letter that corresponds to the correct answer on the space provided.

\_\_\_ 1. Most 4-cylinder engines are configured in this way.

1. V
2. Slant
3. X
4. Inline

\_\_\_ 2. Which of the following can enter the bloodstream, reducing the flow of oxygen throughout the body?

1. nitrogen
2. particulate matter
3. carbon dioxide
4. carbon monoxide

\_\_\_ 3. What summarizes the work that was completed on a vehicle?

1. estimate
2. repair order
3. Visa receipt
4. towing receipt

\_\_\_ 4. This federal agency was created to prevent work related deaths, illnesses, and injuries.

1. OSHA (Occupational Safety and Health Administration)
2. Insurance Institute for Highway Safety
3. National Institute for Automotive Service Excellence
4. Department of Homeland Security

\_\_\_ 5. For a fire to exist, it needs \_\_\_\_\_\_\_\_\_\_, heat, and fuel.

1. carbon dioxide
2. carbon monoxide
3. oxygen
4. nitrogen

\_\_\_ 6. A/an \_\_\_\_\_\_\_\_\_\_\_\_ wrench is used to tighten a fastener to a specific amount of force.

1. adjustable
2. torque
3. combination
4. open-end

\_\_\_ 7. This is used to help prevent spills when adding oil to the engine.

1. funnel
2. cup oil filter wrench
3. oil drain pan
4. grease gun

\_\_\_ 8. Most automobiles have a \_\_\_\_\_\_\_\_\_\_\_\_\_ finish.

1. basecoat
2. primer
3. primer-basecoat
4. basecoat-clearcoat

\_\_\_ 9. What provides shine and endurance to a finish, while also providing a protection from UV rays, pollution, and other damaging environmental conditions?

1. carnauba wax
2. car wash soap
3. Armor All®
4. aluminum polish

\_\_\_ 10. Which of the following is a common multigrade engine oil?

1. 75W-140
2. 80W-90
3. 30W-60
4. 5W-30

\_\_\_ 11. Which of the following is a type of automatic transmission fluid?

1. DOT 3
2. Dex-Cool
3. Dexron/Mercon®
4. 80W-90

\_\_\_ 12. Electricity is the movement of electrons through a/an \_\_\_\_\_\_\_\_\_\_\_\_\_.

1. insulator
2. conductor
3. battery case
4. fiber optic line

\_\_\_ 13. A starter converts \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. electrical energy to mechanical energy
2. mechanical energy to chemical energy
3. radiant energy to mechanical energy
4. thermal energy to chemical energy

\_\_\_ 14. What would be an example of an SAE rating?

1. SM
2. ACEA
3. ILSAC
4. 5W-20

\_\_\_ 15. What would be an example of an API rating?

1. SM
2. ACEA
3. ILSAC
4. 5W-20

\_\_\_ 16. Technician A says carbon monoxide is a colorless, odorless, and poisonous gas. Technician B says proper ventilation is required when running a vehicle in a garage. Who is correct?

1. Technician A
2. Technician B
3. Both Technician A and Technician B
4. Neither Technician A nor Technician B

\_\_\_ 17. Technician A says that is better to use a 6-point box-end wrench when possible to minimize the risk of stripping the head of the fastener. Technician B says that if you are in a tight spot you can flip the wrench since the ends are offset to continue to loosen or tighten a fastener. Who is correct?

1. Technician A
2. Technician B
3. Both Technician A and Technician B
4. Neither Technician A nor Technician B

\_\_\_ 18. Technician A says that car wash soap is specially formulated to float away dirt and grime without harming the finish. Technician B says that it is OK to use dish wash soap since it is a good cleaner. Who is correct?

1. Technician A
2. Technician B
3. Both Technician A and Technician B
4. Neither Technician A nor Technician B

\_\_\_ 19. Technician A says that manual transmissions commonly have a plug on the side of the transmission to check the level. Technician B says that manual transmissions are permanently sealed and checking the fluid is not necessary. Who is correct?

1. Technician A
2. Technician B
3. Both Technician A and Technician B
4. Neither Technician A nor Technician B

\_\_\_ 20. Technician A says that a fully charged battery is less likely to freeze than a discharged battery. Technician B says that the state of charge has no impact on freezing. Who is correct?

1. Technician A
2. Technician B
3. Both Technician A and Technician B
4. Neither Technician A nor Technician B

\_\_\_ 21. Technician A says that 5W-30 would be better to use than 20W-50 in most vehicles in cold weather conditions. Technician B says 20W-50 flows better than 5W-30 in cold weather. Who is correct?

1. Technician A
2. Technician B
3. Both Technician A and Technician B
4. Neither Technician A nor Technician B

# Section 3: Constructed Response

Directions: Use complete sentences to answer the following questions. The criteria below will be used to assess your answers. Maximum 4 marks per question.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Outstanding**  **(A = 4)** | **Very Good**  **(B = 3)** | **Acceptable**  **(C = 2)** | **Attempted**  **(D = 1)** | **Did Not Attempt (F = 0)** |
| Student demonstrates a complete understanding of the problem. Several details and examples were given to support the answer. The response was extremely well organized. | Student demonstrates a considerable understanding of the problem. Some details and examples were given to support the answer. The response was presented in a thoughtful manner. | Student demonstrates a partial understanding of the problem. Few details and examples were given to support the answer. The response was somewhat organized, but did not have smooth transitions. | Student demonstrates little understanding of the problem. Details and examples were not relevant or not given. The response was difficult to follow and confusing to the reader. However, the student made an honest attempt at answering the question. | No attempt was made to answer the question. |

22. What are the four strokes in the four-stroke spark ignition engine? What occurs during each stroke?

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

23. How would you choose an auto repair facility? Explain your answer.

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

24. What are the different types of fire extinguishers? Give examples of what types of fires each put out and how they work.

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

25. What are the different types of service manuals? Explain the benefits and disadvantages of each.

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

26. What are the steps to repair a chip or scratch? Explain each step.

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

27. How do you check the oil on an engine? Explain the steps.

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

28. How do you change the oil and filter on an engine? Explain the steps.

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

Part A /21

Part B /28

TOTAL /49