

# Maintenance Technician Test #1 - Lubrication

1. A lubricant's viscosity is rated by what type of unit?
  - A. SSU
  - B. SAE
  - C. ISA
  - D. LVU
2. A lubricant with high viscosity has a:
  - A. High speed.
  - B. High temperature.
  - C. High resistance to flow.
  - D. High resistance to breakdown.
3. A low-viscosity lubricant:
  - A. Provides good cushioning for machine shock loads.
  - B. Can flow into tight spaces for better lubrication.
  - C. Does not carry heat away as well as a high-viscosity lubricant.
  - D. Costs less than a high-viscosity lubricant.
4. What are two disadvantages of high-viscosity lubricants?
  - A. They are expensive and cannot be used on high-speed motors.
  - B. They break down quickly and are difficult to apply.
  - C. They do not flow well and do not carry heat away well.
  - D. They do not protect against abrasive action of dirt, and they breakdown quickly.
5. Multiple-viscosity lubricants differ from single-viscosity lubricants because:
  - A. They have special additives that extend their effective temperature range.
  - B. They are best within a very narrow temperature range.
  - C. They will never degrade under high temperatures.
  - D. They last longer.
6. One advantage of multiple-viscosity lubricants is that:
  - A. They flow better at medium range temperatures than at either extreme.
  - B. They have a high bearing capacity.
  - C. They have a broad working temperature range.
  - D. They do not break down in the presence of water.
7. Which of the following is NOT a factor affecting the selection of a lubricant?
  - A. Machine speed
  - B. Environmental humidity
  - C. Operating temperature
  - D. Environmental temperatures
8. When choosing a lubricant, you want:
  - A. The lubricant to stay thin at high temperatures.
  - B. The lubricant to thicken at low temperatures.
  - C. The lubricant to thin at low temperatures.
  - D. The lubricant to maintain effective viscosity at its highest rated temperatures.



9. An oil cooler is used to:
- A. Add heat to the oil to enable it to flow better at low temperatures.
  - B. Add heat to the oil to keep it from thinning at high temperatures.
  - C. Remove heat from the oil to prevent it from thinning at high temperatures.
  - D. Remove heat from the oil to prevent it from thickening at low temperatures.
10. What function do detergent additives in lubricants perform?
- A. Keep metal surfaces clean
  - B. Keep the lubricant clean
  - C. Minimize the amount of foaming
  - D. All of the above
11. An anti-oxidation additive in a lubricant:
- A. Controls the level of dirt.
  - B. Controls the amount of mixing with air.
  - C. Controls the level of foaming.
  - D. Prevents the lubricant from mixing with metal particles.
12. As a mechanic, you observe that a machine bearing is extremely hot and becoming discolored as it operates. Your conclusion is that the:
- A. Lubricant is contaminated by water.
  - B. Bearing is about to seize.
  - C. Lubricant is causing acid corrosion on the bearing.
  - D. Bearing is not compatible with the lubricant.
13. When cooling an overheated bearing, what should you do first?
- A. Wrap the bearing housing in hot, wet rags.
  - B. Spray cool water on the bearing.
  - C. Inject cool oil in the bearing.
  - D. Wrap the bearing housing in cool, wet rags.
14. Oil returning to the sump is visually cloudy and foaming. You conclude that the oil is:
- A. Contaminated with soot.
  - B. Contaminated with water.
  - C. Contaminated with metal particles.
  - D. In need of detergent additives.
15. Undesired oil misting can be reduced by:
- A. Increasing the temperature of the oil.
  - B. Increasing the speed of the machine.
  - C. Increasing the viscosity of the oil.
  - D. Reducing the viscosity of the oil.
16. A grease cup is defined as a:
- A. Cup filled with grease that screws onto a fitting.
  - B. Timed lubrication system controlled by a rotating cam.
  - C. Gravity system that forces lubricant onto or into the area needing lubrication.
  - D. Fitting that applies oil in droplet form.

17. A lubricating system used in low-speed applications in which a needle valve meters a steady rate of lubricant to a machine without recycling the lubricant is a:
- A. Dip lubricator.
  - B. Shot lubricator.
  - C. Drip lubricator.
  - D. Oil sump.
18. A lubrication system in which the component needing lubrication rotates through an enclosed housing containing oil and carries the oil to other components is called a:
- A. Dip lubricator.
  - B. Shot lubricator.
  - C. Drip lubricator.
  - D. Oil sump.
19. In a force-feed lubrication system, lubricant is moved to the component needing lubrication by a:
- A. Cooler.
  - B. Pump.
  - C. Filter.
  - D. Bearing.
- 20 What is the most undesirable by-product of oil misting?
- A. Bearing failure
  - B. Shaft damage
  - C. Explosion potential
  - D. Oil breakdown

Lubrication
A
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Total Correct / 20 = \_\_\_\_\_ (your score)