

LUBRICATION TEST

BY: **RICKY SMITH,
CMRP, CMRT, CRL**



Lubrication Test

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
C
B
C
A
C
B
D
C
A
C
B
C
B
B
A
C
A
B
C

Total Correct / 20 = _____(your score)

#1 Software for Maintenance & Reliability Teams

UpKeep is a service-first company that builds software designed to make maintenance easier for technicians and managers everywhere. Reduce downtime up to 18% by switching over to a preventative maintenance solution!

www.upkeep.com

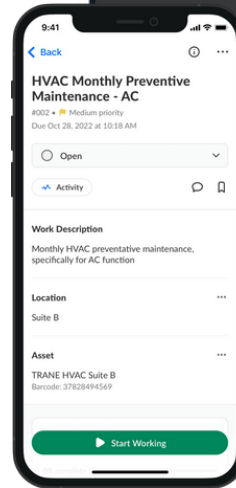
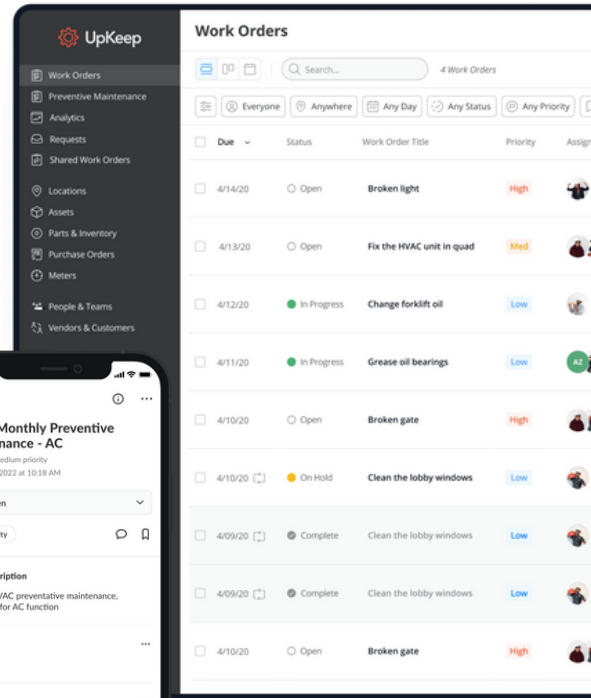
Our Products



Mobile-first maintenance management and collaboration across all location, assets, and teams

With nearly 340 different machines in our work environment, it's an impossible task to manually assign and track PM's. **With UpKeep we can schedule regular maintenance without overlapping tasks with other critical jobs."**

★★★★★ Paul D, Health and Safety Coordinator



An end-to-end solution for remote condition-based monitoring

Connected and secure IoT sensors for real-time remote condition asset monitoring



Integrated & Centralized Data Ecosystem for World Class Asset Operations

The only purpose built Asset Data Platform. Asset Focused ELT Solution for advanced analytics and integrated, real-time asset data.

The Maintenance Community Coalition was founded on the belief that working together will benefit everyone within our community

Committed to helping each other thrive in our individual professional journeys by sharing resources and expertise, granting scholarships, hosting events, and unlocking knowledge – always at no cost.

