

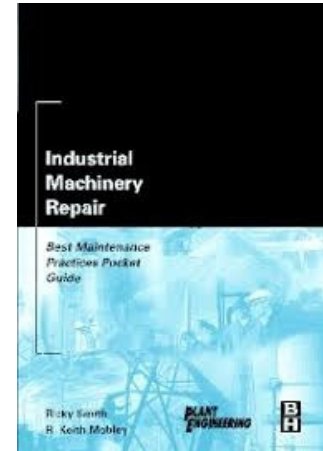
MAINTENANCE TECHNICIAN ASSESSMENT #2- BEARINGS

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



Maintenance Technician Test #2 - Bearings

1. The two basic categories of bearings are:
 - A.Plain and antifriction.
 - B.Ball and roller.
 - C.Journal and ball.
 - D.Pillow-block and roller.
2. Bearings:
 - A.Are found in machines with moving parts.
 - B.Function as guides.
 - C.Help reduce the friction between moving parts.
 - D.All of the above.
3. Thrust bearings:
 - A.Support axial loads on rotating members.
 - B.Support radial loads on rotating members.
 - C.Both A and B.
 - D.None of the above.
4. Antifriction bearings:
 - A.Contain balls.
 - B.Contain rollers.
 - C.Will run hot if they are overlubricated.
 - D.All of the above.
5. Bearing lubrication systems include:
 - A.Lubrication by hand.
 - B.Central grease systems.
 - C.Pressure-feed oil systems.
 - D.All of the above.
6. Plain bearings operate by:
 - A.Separating the races with balls or rollers.
 - B.Using an air gap.
 - C. Hydraulics.
 - D.Running on a film of lubricant.
7. Antifriction bearings operate by:
 - A.Separating the races with balls or rollers.
 - B.Using an air gap.
 - C. Hydraulics.
 - D.Running on a film of lubricant.
8. Roller bearings are used over ball bearings for which of the following situations?
 - A.High-speed applications
 - B.High-load applications
 - C.Wet environments
 - D.Mobile equipment engines
9. Bearing clearance can be described as:
 - A.The space between the rolling elements and the races.
 - B.The allowed difference between the shaft size and the bearing inner race.
 - C.The allowed differences between bearing inner and outer race.
 - D.None of the above.



10. Shaft tolerance can be defined as:

- A. The allowed difference between the shaft size and the bearing inner race.
- B. The force applied during installation.
- C. The space between the rolling elements and the races.
- D. None of the above.

11. The preferred method for installing an antifriction bearing is:

- A. With a small hammer if needed.
- B. To sand down the shaft until the bearing slides on.
- C. With a bearing heater.
- D. Both B and C.

12. When tightening the locknut on a spherical roller bearing, the preferred tool is:

- A. A spanner wrench.
- B. A bearing heater.
- C. A hammer and punch.
- D. None of the above.

13. The bearing best suited for both radial and thrust loads is a bearing.

- A. tapered sleeve
- B. linear motion
- C. needle
- D. tapered roller

14. A bearing lubricated with oil is capable of speeds than the same bearing lubricated with grease.

- A. lower
- B. higher
- C. the same
- D. different

15. As you tighten the nut on a spherical roller bearing, the space between the race and the rolling element:

- A. Increases.
- B. Decreases.
- C. Remains the same.
- D. Develops cracks.

16. On a metric bearing with the number 7307, the ID of the bearing is:

- A. 35 mm.
- B. 7 mm.
- C. .035".
- D. .007".

17. To convert the metric shaft size of a bearing to inches, you multiply the millimeters by:

- A. 5.
- B. 39.
- C. .03937.
- D. .05.

18. A failed bearing that has a cracked inner race probably failed because:

- A. the shaft was too large.
- B. of a lack of lubricant.
- C. the operator failed to do the proper inspection.
- D. of over lubrication.

19. An antifriction bearing can run hot because:

- A. of over lubrication.
- B. it is about to fail.
- C. of excessive load.
- D. all the above.

20. A 20% increase in bearing load, can result in a % decrease in Bearing life.

- A. 20
- B. 100
- C. 50
- D. 10

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

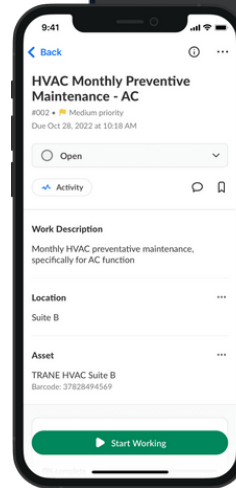
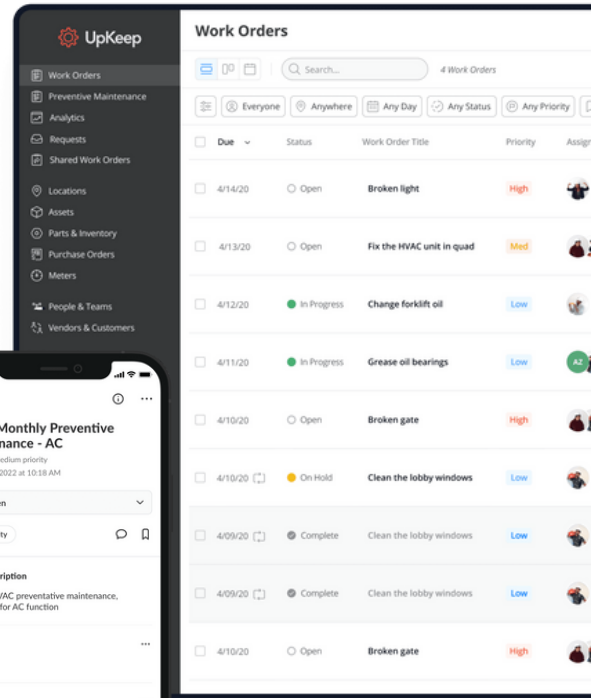
Our Products



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.

