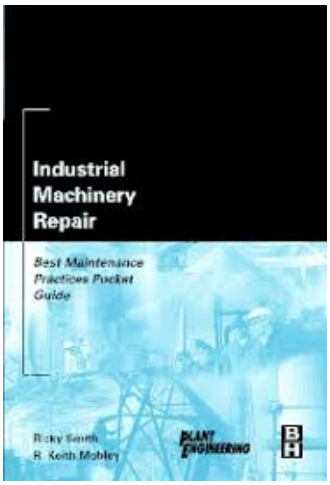
Maintenance Technician Test #2 - Bearings



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)