

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Which crack detection technique requires the use of a blacklight? 1) _____
A) Zyglo
B) Dye penetrant
C) Magnetic flux
D) None of these

- 2) Plugging can be used to repair cracks _____. 2) _____
A) in cast-iron cylinder heads
B) in aluminum cylinder heads
C) in both cast-iron and aluminum cylinder heads
D) only in cast-iron blocks

- 3) Any internal part that has a crack or flaw should be replaced, not repaired. 3) _____
A) True
B) False

- 4) Technician A says that pressure testing involves injecting pressurized air into engine block water and oil passages. Technician B says that one pressure testing method involves injecting heated water and a dye into engine block water and oil passages. Which technician is correct? 4) _____
A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician

- 5) Many cleaning methods involve chemicals that are hazardous to use. The least hazardous method is generally considered to be the _____. 5) _____
A) pyrolytic oven
B) hot vapor tank
C) hot soak tank
D) cold soak tank

- 6) Abrasive pads or discs should be used _____. 6) _____
A) on disassembled engine parts only
B) according to the specified grit size for the material being cleaned
C) but clean the part thoroughly, to wash away the abrasive material
D) all of the above

- 7) Technician A says that engine parts should be cleaned before a thorough test can be done to detect cracks. Technician B says that pressure testing can be used to find cracks in blocks or cylinder heads. Who is right? 7) _____
A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician

- 8) Cleaning chemicals are usually either a caustic material or an acid material. Which of the following statements is TRUE? 8) _____
- A) Both caustics and acids have a pH of 7 if rated according to distilled water.
 - B) An acid is lower than 7 and a caustic is higher than 7 on pH scale.
 - C) An acid is higher than 7 and a caustic is lower than 7 on pH scale.
 - D) Pure water is a 1 and a strong acid is a 14 on the pH scale.
- 9) Technician A says that an attendant must be present any time a pyrolytic oven is used. Technician B says that aluminum parts should be cleaned at a temperature greater than 600 deg F. Which technician is correct? 9) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 10) A pyrolytic oven is used to clean parts; however, caution should be used to limit the temperature in order to prevent damaging engine parts. What are the maximum recommended temperatures? 10) _____
- A) 300° F (150° C) for all engine parts
 - B) 600° F (315° C) for aluminum parts
 - C) 800° F (425° C) for cast iron
 - D) Both B and C