

# METALLURGICAL ENGINEERING

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**Q1.** Which of the following heat treatments does not affect the chemical composition of the surface?

- Nitriding
- Cyaniding
- Flame hardening
- Carburizing

**Q2.** The breaking stress of a particular steel is 1.4 GPa. What force will be needed to break a piece of wire of diameter 0.4 mm?

- 176N
- 180N
- 236N
- 158N

**Q3.** Machinability of steel containing which of the following elements can be enhanced if the sulphur content is increased?

- Copper
- Calcium
- Manganese
- Magnesium

**Q4.** Which of the following methods detects the crack at the surface of steel?

- Holography
- Radiography
- Ultrasonic testing
- Eddy current testing

**Q5.** Which of the following methods determines the crystal structure in metals and alloys?

- Transmission electron microscopy
- Scanning electron microscopy
- Neutron diffraction
- Optical microscopy
- X-ray diffraction

Have a query? Call:  
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