Sample Questions

Production Engineering

1. Study the statements and choose the correct response

Statement 1: A pattern is made exactly similar to the part to be cast.
Statement 2: A pattern is used to make mould cavity for pouring molten metal for casting.

a. Both the statements are true and statement 2 is correct reason for statement 1
b. Both the statements are true but statement 2 is not the correct reason for statement 1
c. Statement 1 is true and statement 2 is false
d. Both the statements are false

2. On which principle does optical gauge function?

a. Reflection of light rays
b. Polarization
c. Interference of light rays
d. Refraction of light rays

3. Which of the following components is/ are required for a DNC system?

a. A dedicated computer
b. Bulk memory
c. Telecommunication lines
d. All of the above

4. What is the relationship of depth of cut to the work piece in a turning operation?

a. Proportional to the diameter of the work part
b. Half of change in diameter of the work part
c. Speed of cutting tool along the length of work piece (feed)
d. Half of speed of cutting tool along the length of work piece (feed)
5. Which of the following statements is not true regarding the moulding process employed for thermoplastic materials?

a. Compression and transfer moulding is employed
b. The moulding process is similar to that of thermosetting plastic except that higher temperature is used
c. The method is similar to that of thermosetting plastics except that a lower temperature is used
d. None of the above statements is true

6. Which of the following would not be included in the factors responsible for the vertical lines parallel to the axis, noticed on the outside of a drawn cylindrical cup?

a. The clearance between the punch and the die is too small.
b. The finish at the corners of the punch is poor.
c. The finish at the corners of the die is poor.
d. The punch and the die alignment is not proper.

7. The casting defect shown in the image is_______________________.

![Image of casting defect]

a. shrinkage cavity
b. misrun
c. cold shut
d. micro porosity

8. Which of the following is a characteristic property of polymer material?

a. High temperature stability
b. High mechanical strength
c. High elongation
d. Low hardness
9. Which of the following processes would be appropriate to drill a hole with a square cross section, 0.25 inch on a side and 1-inch deep in a steel work piece?