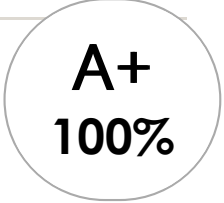


15 Multiple choice questions



A+
100%

1. an artificial part used to replace a damaged or diseased body part
 - a. sepsis
 - b. PIC
 - c. **CORRECT: prosthesis**
 - d. torque

2. a simple series connection provides only on pathway for current to flow; parallel circuits form multiple pathways or branches that enable a range of separate paths for current flow
 - a. sepsis
 - b. **CORRECT: series circuit**
 - c. weld decay
 - d. resorb

3. biological process of dissolving and assimilating tissue such as bone
 - a. **CORRECT: resorb**
 - b. PIC
 - c. torque
 - d. sepsis

4. a healthy process used in powder metallurgy, involving the consolidation of metallic powder into a solid compact; temperatures below the melting point of the metal powders are used such that fusion takes place by a process of solid state diffusion
 - a. titanium
 - b. sepsis
 - c. torque
 - d. **CORRECT: sintering**

5. a programmable interface controller, a small computer complete with input, output and memory that can be programmed to perform simple tasks
- sepsis
 - CORRECT: PIC**
 - torque
 - resorb
6. non-ferrous metal used extensively in industry due to its high resistance to corrosion and good strength-to-weight ratio; these properties along with excellent biocompatibility has seen titanium and its alloys used in biomedical applications
- CORRECT: titanium**
 - torque
 - sintering
 - PIC
7. a temporary structure that allows support for biological growth of bone or tissue
- sintering
 - resorb
 - sepsis
 - CORRECT: scaffold**
8. a popular term for a defect that may occur as result of welding stainless steels; the region adjacent to the weld may reach a sufficiently high temperature to precipitate chromium carbides at the grain boundaries; the region adjacent to the grain boundaries are consequently depleted in chromium, resulting in a loss of corrosion resistance
- resorb
 - prosthesis
 - CORRECT: weld decay**
 - sepsis
9. the moment of a force; a measure of a force's tendency to produce torsion and rotation about axis
- sepsis
 - PIC
 - resorb
 - CORRECT: torque**

10. allows for re-charging of implanted devices through the skin without direct contact about an axis
 - a. **CORRECT: transcutaneous charging**
 - b. prosthesis
 - c. sintering
 - d. truth table

11. ability of a metal to return to change between two shapes on heating and cooling
 - a. **CORRECT: shape memory alloy**
 - b. plasma spray
 - c. weld decay
 - d. scaffold

12. iron base alloys of 13-30wt% Cr named for their resistance to discolouration or staining due to corrosion
 - a. sepsis
 - b. sintering
 - c. prosthesis
 - d. **CORRECT: stainless steel**

13. used in digital electronics, this predicts the output of a circuit under all possible combinations of input and output conditions
 - a. titanium
 - b. torque
 - c. **CORRECT: truth table**
 - d. prosthesis

14. germs
 - a. **CORRECT: sepsis**
 - b. resorb
 - c. prosthesis
 - d. PIC

15. a technology used to apply coatings by bio-inserts by spraying powdered particles transformed into plasma, accelerated and deposited in a molten form onto implant surfaces
- scaffold
 - CORRECT: plasma spray**
 - prosthesis
 - weld decay