



Aswan University
Faculty of Medicine
Anesthesia, ICU and Pain
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Time: 3 Hour
MD 2nd part

Date: 7/11/2022

Paper IV

Choose correct answer (S)

- 1- Select the correct statement regarding color Doppler imaging.
 - A. It is a form of M-mode echocardiography
 - B. The technology is based on continuous wave Doppler
 - C. By convention, motion toward the ultrasound probe is red and motion away from the probe is blue
 - D. Two ultrasound crystals are used: one for transmission of the ultrasound signal and one for reception of the returning wave

- 2- What percent desflurane is present in the vaporizing chamber of a desflurane vaporizer (pressurized to 1500 mm Hg and heated to 23° C)?
 - A. Nearly 100%
 - B. 85%
 - C. 65%
 - D. 45%

- 3- Which of the following methods can be used to detect all leaks in the low-pressure circuit of all contemporary anesthesia machines ?
 - A. Negative-pressure leak test
 - B. Common gas outlet occlusion test
 - C. Traditional positive-pressure leak test
 - D. None of the above

- 4- Which of the following valves prevents transfilling between compressed-gas cylinders?
 - A. Fail-safe valve
 - B. Check valve
 - C. Pressure-sensor shutoff valve
 - D. Adjustable pressure-limiting valve

- 5- The O₂ pressure-sensor shutoff valve requires what O₂ pressure to remain open and allow N₂ O to flow into the N₂ O rotameter?
 - A. 10 psi
 - B. 30 psi
 - C. 50 psi
 - D. 100 psi

- 6- A 78-year-old patient is anesthetized for resection of a liver tumor. After induction and tracheal intubation, a 20-gauge arterial line is placed and connected to a transducer that is located 20 cm below the level of the heart. The system is zeroed at the stopcock located at the wrist while the patient's arm is stretched out on an arm