

Appendix B - Multiple Choice Questions and Answers

Thank you for your participating in this study! Please select the one best answer for each question.

Remember, your responses are solely for the purposes of research and will not affect your Faculty evaluations or teaching curriculum in any way. We kindly request that you keep all test content confidential since leaking the test will affect the outcome of our subsequent data.

* 1. What is your Study Subject Number? (should be a number + letter)

* 2. What is the normal maternal arterial partial pressure of carbon dioxide (PaCO_2) at term? Correct Answer = C

- ☐ A) 42 - 46 mmHg
- ☐ B) 35 - 39 mmHg
- ☐ C) 28 - 32 mmHg
- ☐ D) 21 - 25 mmHg

* 3. At term gestation, a decrease in which of the following lung capacities BEST explains the rapid oxygen desaturation after induction of general anesthesia? Correct Answer = A

- ☐ A) Functional residual capacity
- ☐ B) Inspiratory capacity
- ☐ C) Closing capacity
- ☐ D) Vital capacity

* 4. What is the MOST common side effect of an intravenous bolus dose of oxytocin? Correct Answer = A

- ☐ A) Hypotension
- ☐ B) Uterine relaxation
- ☐ C) Bronchoconstriction
- ☐ D) Headache

* 5. A 36 year old G2P2 is undergoing cesarean delivery with general anesthesia. She is receiving 2% sevoflurane (end-tidal) and 50% nitrous oxide. After delivery of the neonate, which of the following changes should be made to the inhaled agent concentrations? Correct Answer = D

- ☐ A) Decrease the sevoflurane level and decrease the nitrous oxide level
- ☐ B) Increase the sevoflurane level and decrease the nitrous oxide level
- ☐ C) Maintain the sevoflurane and nitrous oxide level
- ☐ D) Decrease the sevoflurane level and increase the nitrous oxide level

* 6. A 32 year old G1P0 patient with preeclampsia develops uterine atony immediately postpartum. Her blood pressure is 150/95 mmHg. Which of the following medications should be avoided? Correct Answer = C

- ☐ A) Carboprost (15-methyl PG F₂ alpha)
- ☐ B) Oxytocin
- ☐ C) Methylergonovine
- ☐ D) Misoprostol (PG E₁)

* 7. Which aspect of the medical history is MOST important to determine before inducing general anesthesia for emergent cesarean delivery due to fetal bradycardia? Correct Answer = A

- ☐ A) Medication allergies
- ☐ B) Time of last meal
- ☐ C) Pain score
- ☐ D) Gestational age

* 8. Which technique BEST describes the correct application of cricoid pressure to prevent regurgitation of gastric fluid into the pharynx during rapid sequence induction? Correct Answer = D

- ☐ A) Light pressure, released for endotracheal tube passage
- ☐ B) Firm pressure, released once the muscle fasciculation phase has ended
- ☐ C) Light backward, upward pressure directed to the right
- ☐ D) Firm pressure, until confirmation of tracheal intubation

* 9. After delivery of the neonate, which of the following is the primary mechanism of hemostasis?

Correct Answer = D

- ☐ A) Vasoconstriction
- ☐ B) Clamping of the umbilical cord
- ☐ C) Primary clot formation
- ☐ D) Myometrial contraction

* 10. What is the normal heart rate range in the term fetus? Correct Answer = C

- ☐ A) 150 - 200 bpm
- ☐ B) 130 - 180 bpm
- ☐ C) 110 - 160 bpm
- ☐ D) 90 - 140 bpm

* 11. Which of the following hematologic changes normally occurs during pregnancy? Correct Answer = A

- ☐ A) Increased fibrinogen
- ☐ B) Increased platelet count
- ☐ C) Decreased red blood cell mass
- ☐ D) Decreased white cell count

* 12. In an emergency, which equipment re-check is MOST important to perform immediately prior to induction of general anesthesia? Correct Answer = B

- ☐ A) Fill level of the vaporizer agent
- ☐ B) Functioning suction canister, tubing and cannula
- ☐ C) Fresh carbon dioxide absorbent
- ☐ D) Calibration of the oxygen analyzer

* 13. Which of the following is a dose-dependent maternal physiologic effect of the administration of inhaled volatile agent during cesarean delivery? Correct Answer = D

- ☐ A) Bradycardia
- ☐ B) Bronchoconstriction
- ☐ C) Hypertension
- ☐ D) Uterine relaxation

* 14. A 38 -year-old G2P1 at 34 weeks' gestation is being transferred to the operating room with acute hemorrhagic shock due to suspected placental abruption. Which of the following is the MOST appropriate next step? Correct Answer = C

- ☐ A) Place an arterial line
- ☐ B) Prepare a vasopressin infusion
- ☐ C) Call your attending for help
- ☐ D) Prime the rapid infuser

* 15. What is the usual timing of initial opioid administration during general anesthesia for cesarean delivery in a healthy parturient? Correct Answer = C

- ☐ A) At induction
- ☐ B) Immediately prior to incision
- ☐ C) After delivery of the neonate
- ☐ D) At skin closure

* 16. During general anesthesia performed in a patient with nonreassuring fetal status, what FiO₂ is recommended until delivery? Correct Answer = D

- ☐ A) 0.21
- ☐ B) 0.3
- ☐ C) 0.4
- ☐ D) ≥ 0.5

* 17. Which of the following airway features BEST explains why the tracheas of pregnant patients are more difficult to intubate than non-pregnant? Correct Answer = C

- ☐ A) Increased neck circumference
- ☐ B) Prominent incisors
- ☐ C) Increased upper airway edema
- ☐ D) Shorter thyromental distance

* 18. Which of the following actions typically takes place BEFORE rapid sequence induction (RSI) of general anesthesia for elective cesarean delivery? Correct Answer = A

- ☐ A) Abdominal preparation and draping
- ☐ B) Initiation of phenylephrine infusion
- ☐ C) Administration of intravenous midazolam
- ☐ D) Placement of orogastric tube

* 19. Which of the following medications will raise the gastric pH fastest? Correct Answer = C

- ☐ A) Omeprazole
- ☐ B) Metoclopramide
- ☐ C) Sodium citrate
- ☐ D) Ranitidine

* 20. What is the estimated incidence of failed intubation in pregnant patients undergoing emergency cesarean delivery? Correct Answer = B

- ☐ A) 1:50
- ☐ B) 1:300
- ☐ C) 1:2,000
- ☐ D) 1:10,000

* 21. Which of the following cardiovascular changes normally occurs during pregnancy? Correct Answer = D

- ☐ A) Decreased cardiac output
- ☐ B) Decreased heart rate
- ☐ C) Increased blood pressure
- ☐ D) Increased blood volume

* 22. Before general anesthesia for emergent cesarean delivery, which feature of the physical examination is MOST important to assess? Correct Answer = B

- ☐ A) Heart sounds
- ☐ B) Airway
- ☐ C) Pulse volume
- ☐ D) Body weight

* 23. Ten minutes after delivery of the newborn the obstetrician asks you to give methergine 200 mcg IM because of uterine atony. Which response BEST describes closed loop communication? Correct Answer = D

- ☐ A) Immediately give the medication
- ☐ B) Ask the circulating nurse to give the medication
- ☐ C) Maintain eye contact when the obstetrician is making the request
- ☐ D) Repeat back what was said and advise the surgeon when the medication has been given

* 24. Which of the following BEST explains why a higher dose of ephedrine is needed in term normotensive parturients compared with non-pregnant women? Correct Answer = B

- ☐ A) Up-regulation of the adrenergic system
- ☐ B) Reduced sensitivity to catecholamines
- ☐ C) Decreased density of beta-2 adrenoceptors
- ☐ D) Lower norepinephrine levels

* 25. Following induction of general anesthesia for cesarean delivery which of the following statements MOST clearly communicates to the obstetricians that they may begin surgery? Correct Answer = B

- ☐ A) The endotracheal tube is in
- ☐ B) You may make incision
- ☐ C) Go
- ☐ D) We are ready

* 26. In a pregnant woman who is not in labor, a decrease in which of the following factors MOST contributes to gastro-esophageal reflux symptoms? Correct Answer = B

- ☐ A) Gastric emptying
- ☐ B) Lower esophageal sphincter tone
- ☐ C) Gastric pH
- ☐ D) Gastric pressure

* 27. Which technique most likely results in adequate pre-oxygenation for emergent cesarean delivery?

Correct Answer = A

- ☐ A) 5 - 10 vital capacity breaths of 100% oxygen
- ☐ B) Tidal breathing of 100% oxygen until the end tidal oxygen fraction is 0.5
- ☐ C) Rapid shallow breathing of 100% oxygen for 1 minute
- ☐ D) Single vital capacity breath of 100% oxygen

* 28. The primary reason for performing a rapid sequence induction (RSI) of general anesthesia for cesarean delivery of a parturient in active labor is to decrease the risk of which of the following outcomes?

Correct Answer = A

- ☐ A) Pulmonary aspiration of gastric contents
- ☐ B) Fetal exposure to anesthetics
- ☐ C) Difficult intubation
- ☐ D) Hypoxia

* 29. Which of the following findings is MOST reliable for confirmation of tracheal intubation? Correct Answer = C

- ☐ A) Bilateral breath sounds
- ☐ B) Fogging of the endotracheal tube
- ☐ C) Continuous waveform capnography
- ☐ D) Chest rise

* 30. Following induction of general anesthesia for emergent cesarean delivery, what end-tidal concentration of inhaled volatile agent is MOST appropriate? Correct Answer = B

- ☐ A) 3 MAC
- ☐ B) 1 MAC
- ☐ C) 0.25 MAC
- ☐ D) 0.0%