Medical Staff Office Use Only:

☐ Congratulations! You passed the Moderate Sedation Competency Examination. Enclosed is the test for your follow-up review.

Test Results: ________________________ %   (______ of 32 correct)

☐ Your test result was <80%. Please contact Dr. Myrka Smith, Chair, Dept. of Anesthesia, at 410-535-8295, to discuss and review the results of your Moderate Sedation Competency Exam. Approval for these privileges cannot be granted until you have successfully completed this review with Dr. Smith.

Name______________________________________   Date______________

CalvertHealth Medical Center’s Moderate Sedation Competency Examination

1. All the following are contraindications to the propofol, except:
   a. Allergy to milk
   b. Allergy to soy
   c. Allergy to propofol
   d. Allergy to eggs

2. All the following are possible predictors of laryngospasm and apnea with ketamine, except:
   a. Age > 12
   b. Prophylactic benzodiazepines
   c. Large ketamine doses
   d. Prophylactic glycopyrrolate or atropine

3. You opt to administer a prophylactic dose of IV ondansetron prior to ketamine administrations. According to the CAPSULE lesson, how many patients need to be treated to prevent one emesis?
   a. 1:50
   b. 1:10
   c. 1:100
   d. 1:13

4. According to the most recent procedural sedation guidelines by the American College of Emergency Physicians, preprocedural fasting has not been shown to reduce the risk of aspiration or emesis during procedural sedation
   a. True
   b. False
5. Your patient has asked about the possible side effects of propofol. What should you tell them? (Choose all that apply)
   a. The drug may cause you to stop breathing and we may have to temporarily breath for you
   b. The drug may hurt when injected into the vein
   c. This drug may decrease your blood pressure and we may have to give you a bolus of fluid

6. Which of the following is not part of the rationale for combining the use of ketamine and propofol (ketofol) for procedural sedation?
   a. Lower doses of either agent utilized due to synergy
   b. Mitigation of adverse events associated with either agent
   c. Shorted time to recovery with ketofol following procedural sedations
   d. Current evidence suggests a smoother and more predictable procedural sedation with ketofol

7. The following are true about fentanyl EXCEPT this it:
   a. About 100 times more potent than morphine
   b. Can cause chest wall rigidity if given rapidly
   c. Can cause tachycardia
   d. Rarely causes histamine release
   e. Has a duration of about 30-60 min.

8. The following are true about Midazolam Except that it:
   a. Can cause respiratory depression if administered rapidly in high doses
   b. Its actions can be reversed by Flumazenil
   c. Is given no more than 2.5 mg over a period of 2 min
   d. Has greater analgesia than sedation

9. The peak onset of action of an IV does of midazolam is 1-2 minutes:
   a. True
   b. False

10. JCAHA requires all the following except:
    a. Physician ordering and administering moderate sedation must be credentialed
    b. Recommended doses must never be exceeded
    c. Monitoring of patients receiving moderate sedation must be uniform whenever it is administered
    d. A pertinent history and physical

11. Ketamine requires the addition of an opiate for adequate pain control?
    a. True
    b. False

12. The following are true about morphine EXCEPT that it
    a. A synthetic opioid providing good pain relief
    b. Is about 10 times more potent than Meperidine
    c. Must be used with caution on the elderly and patients with COPD
    d. Causes Histamine release
    e. Can cause nausea and vomiting
13. According to the policy at CHMC, the nurse is able to administer etomidate during the sedation:
   a. True
   b. False

14. All are correct regarding registered nurses EXCEPT:
   a. May not leave the patient unattended unless the attending physician remains with the patient
   b. Must maintain competencies in moderate sedation
   c. Must start an IV only for patients undergoing IV moderate sedation
   d. Has the right and duty to refuse to administer medication in amounts which may convert the patient’s states to deep sedation
   e. Documents each medication dose and informs the physician of the total amount of the drug administered

15. The airway of choice for a deeply unconscious patient in shock is:
   a. Oropharyngeal airway
   b. Nasopharyngeal airway
   c. Endotracheal tube
   d. Esophageal airway

16. Synchronized cardioversion is the treatment of choice for:
   a. Pulseless electrical activity
   b. Symptomatic sinus tachycardia
   c. Unstable Supraventricular tachycardia
   d. Ventricular fibrillation

17. The following are all a potential treatable cause of asystole except:
   a. Hypoxia
   b. Acidosis
   c. Hyperkalemia
   d. Tension Pneumothorax
   A. 1 and 2
   B. 2 and 3
   C. 2 and 4
   D. All are potentially treatable causes

18. The appropriate dose of Ketamine for sedation is:
   a. 1-2 mg/kg IV
   b. 3-4 mg/kg IV
   c. 5-6 mg/kg/IV

19. All are true of Ketamine EXCEPT:
   a. It is a dissociative agent
   b. Has both analgesic and sedative properties
   c. Commonly causes bradycardia and hypotension
   d. Can cause emergence reactions
20. The methods of quickly establishing an open airway are:
   a. Tilt head backward
   b. Turn the head to one side
   c. Lift jaw forward and up
   d. Wipe the mouth and throat of the unconscious patient
      
      a. 1 and 2
      b. 2 and 3
      c. 1 and 3
      d. 1 and 4

21. The following should be classified as an ASA class II patient except:
   a. Smoker
   b. Mild obesity
   c. Mild hypertension
   d. Old MI
   e. Well controlled DM

22. The following should be classified as an ASA Class III patient except:
   a. Septic Shock
   b. Severe COPD
   c. Chronic renal failure on dialysis
   d. CAD with h/o Stents

23. Post sedation instructions should be reviewed with the patient prior to administration of moderate sedation:
   a. True
   b. False

24. A separate informed consent is necessary for both the individual sedation and the procedure:
   a. True
   b. False

25. What components below could be looked at for QA/QI indicators for procedural sedation:
   a. Any use of a reversal agent
   b. Any use of BVM ventilation
   c. Any new cardiac arrhythmia
   d. Any change in vital signs greater than 30% of the pre-procedure vitals
   e. All the above

26. Oropharyngeal airways:
   a. Eliminate the need for head positioning
   b. Eliminated the possibility of complete upper airway obstruction
   c. Are of no value once an endotracheal tube is inserted
   d. May stimulate vomiting and/or laryngospasm in semi-conscious patients
MATCH THE FOLLOWING WITH THE APPROPRIATE DEFINITION:

27. Minimal Sedation (anxiolysis) _____
28. Moderate Sedation _____
29. Deep Sedation _____
30. General Anesthesia ______
   a. A drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is impaired. Cardiovascular function may be impaired. Limited to anesthesiologists
   b. A drug induced state during which patients respond normally to verbal commands. Cognitive function and coordination may be impaired. Ventilatory and cardiovascular functions are unaffected.
   c. An intentional drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Must have dedicated sedation physician AND second provider to perform the procedure. Limited to anesthesia or emergency medicine physicians
   d. A drug-induced depression of consciousness during which patients respond purposefully to verbal commands. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained.

31. Pre-sedation requirements include all EXCEPT:
   a. Pulse Oximeter 
   b. Anesthesia Machine 
   c. End tidal CO2 monitor 
   d. Blood pressure monitor 
   e. Oxygen Delivery System 
   f. Suction Equipment 
   g. IV Equipment & supplies 
   h. Cardiac Monitor 
   i. Crash Cart 

32. The general recommended dosing for titrating propofol in sedation is:
   a. 1 mg/kg IV with a subsequent dose of .5 mg/kg IV if needed
   b. 0.1 mg/kg IV with a subsequent dose of .05 mg/kg IV if needed
   c. 0.1 mg/kg IV with a subsequent dose of 1 mg/kg IV if needed