Employee name: ___________________________     Score: ____/____ = % ____

Critical Care/ Emergency Department
Medication Competency Exam

Please circle or write in (where applicable) the correct answer for each question below. There is only 1 correct answer per question.

Scenario 1
A 32 year old male presents to the Emergency Department with a dislocated shoulder. The ED physician has tried numerous times to relocate the shoulder without success. He orders an IV and drugs to consciously sedate the patient.

26. Medications he may order are:
   a. Valium (diazepam) 10 mg IV
   b. Morphine 5 mg IV
   c. Dilantin (phenytoin) 100 mg IV
   d. Both a and b

27. During the course of treatment, the patient experiences a respiratory arrest and needs ventilatory assistance. What drug will reverse the effects of the opiate medication given?
   a. Verapamil 2.5 mg IV
   b. Narcan (naloxone) 0.4 mg IV
   c. Romazicon 02 mg IV
   d. Fentanyl 40 mcg IV

28. The above medication did not reverse the respiratory depression. What medication would you anticipate to be given next?
   a. Benadryl (diphenhydramine) 50 mg IV
   b. Decadron (dexamethasone) 4 mg IV
   c. Romazicon 0.2 mg IV
   d. Atropine 1 mg IV

End of scenario 1
Scenario 2
A victim of a traffic accident enters your department. He is semiconscious, combative, and in C-spine precautions. The staff is unable to adequately assess him due to his combativeness. The doctor orders sedation for him.

29. What medication may be indicated?
   a. Versed (midzolam) 2.5 mg IV
   b. Demerol (meperidine) 150 mg IV
   c. Lidocaine 75 mg IV
   d. None of the above

30. The above medication does not help. The doctor decides to use a neuromuscular blocker on this patient. Which of the following medications could be ordered?
   a. Tracrium (atracurium)
   b. Atropine
   c. Diprivan (propofol)
   d. All of the above

31. Prior to giving this drug, what nursing precautions must be considered?
   a. Be prepared to assist with intubating the patient and provide emergency respiratory support
   b. No additional monitoring is needed, as the patient will be immobilized
   c. Sedative and analgesic agents must also be ordered, as these drugs do not provide sedation or pain relief
   d. Both a and c

End of scenario 2

32. Mr. Jones is having an acute inferior wall myocardial infarction. The cardiologist orders thrombolytic therapy. Which medication is an adjunct to thrombolytic therapy?
   a. Epinephrine
   b. Adenocard
   c. Heparin
   d. Lidocaine

33. Which of the following anticoagulants is most appropriate prior to PCI (percutaneous coronary intervention)?
   a. Integrilin (eptifibatide)
   b. Coumadin (warfarin)
   c. Persantine (dipyridamole)
   d. Innohep (tinzaparina)
34. The following ECG change should be considered an adverse reaction when administering Pronestyl intravenously?
   a. Widened QRS interval
   b. Decreased PR interval
   c. Shortening of the QT interval
   d. Narrowed QRS interval

35. A 9 year old female with status asthmaticus was just admitted to ICU for observation. She has inspiratory and expiratory wheezes auscultated throughout her lung fields. She has moderate substernal and intercostal retractions and mild nasal flaring noted. Oxygen at 30% via Ventimask is in place, and an IV of D5W is infusing. The medication most likely to be ordered for this patient is:
   a. Dilantin (phenytoin)
   b. Dopamine
   c. Aminophylline
   d. Demerol (meperidine)

36. A 24 month old male near-drowning victim is in the ICU. He is intubated, on a ventilator and his Glasgow Coma Score is 9. Which of the following medications might be ordered to help improve his oxygenation?
   a. Ampicillin
   b. Tylenol (acetaminophen)
   c. Insulin
   d. Pavulon (pancuronium)

37. The MD has ordered gentamycin 15 mg IM to be given to a 3 month old, 11 pound patient admitted with r/o sepsis. The injection site that should be used is the:
   a. vastus lateralis
   b. ventrogluteal
   c. deltoid
   d. gluteus medius

38. A 6 month old patient with a diagnosis of pneumonia has a temperature of 103.3 F (rectal). She has an order for Tylenol Elixir 80 mg po q 4 hours prn temperature > 101 F rectal. What is the most appropriate way to administer this medication?
   a. Let her drink it from a cup
   b. Mix it with Kool-Aid and put it in her bottle
   c. Wait for her mom to give it to her
   d. Use an oral medication syringe, place it in her mouth at the cheek, and administer the medication
39. An order is written for the emergency nurse to administer one gram of Dilantin (phenytoin sodium) in an intravenous drip to an adult patient. The dilution mixture is one gram Dilantin in 20 ml normal saline. This infusion should be programmed to infuse at a maximum rate of:
   a. 2 ml/min
   b. 4 ml/min
   c. 1 ml/min
   d. 3 ml/min

40. Adenocard (adenosine) is a newer anti-dysrhythmic agent given primarily to
   a. convert supraventricular tachycardia
   b. act as a second line drug for premature contractions
   c. treat AV block
   d. coarsen ventricular fibrillation so that defibrillation is effective

41. Epinephrine in cardiac arrest is a peripheral vasoconstrictor which
   a. leads to improved coronary perfusion pressures
   b. leads to improved cerebral perfusion pressures
   c. increases systolic and diastolic blood pressures
   d. all of the above

42. The physician orders a Lasix (furosemide) drip for a patient in severe CHF. The order states “give Lasix IV drip at 1 mg/kg/hr.” You would
   a. start the drip as ordered, this is an appropriate dosage range for an adult CHF patient
   b. question the order with the pharmacist and physician, as it exceeds maximum dose recommendations
   c. start the drip as ordered, and continue all other antihypertensives currently being given
   d. none of the above

Scenario 3
DP is a 52 year old male admitted with acute anterior wall MI. He is diaphoretic and anxious. You hear a systolic murmur at the apex. He weighs 75 kg. He has a low urine output. HR = 120, BP = 86/58, RR= 32.

43. What therapy would you anticipate, based on the above information?
   a. Lidocaine IV infusion
   b. Dopamine IV infusion
   c. Nitroprusside IV infusion
   d. Nitroglycerin sublingual
44. The physician orders the infusion to run at 5 mcg/kg/min. The bag comes pre-mixed at 800 mg in 250 ml of D5W. The concentration is 3200 mcg/ml. What is the drip rate?

a. 5 ml/hr  
b. 7 ml/hr  
c. 14.5 ml/hr  
d. 28 ml/hr

45. DP develops chest pain while sitting up in the chair without wearing his oxygen. The cardiologist orders a nitroglycerin IV infusion to run at 10 mcg/min. The concentration of the bottle of NTG is 50 mg in 250 ml of D5W. The concentration is 200 mcg per ml. What drip rate will you set on the IV infusion pump?

a. 30 ml/hr  
b. 15 ml/hr  
c. 2 ml/hr  
d. 3 ml/hr

46. Ancillary drug therapy for this patient will probably include

a. aspirin  
b. heparin  
c. beta blockers  
d. all of the above

47. The most appropriate analgesic order for this patient would be

a. morphine sulfate 2-4 mg IV every 5 minutes to relieve discomfort  
b. demerol (meperidine) 100 mg IM q 3 hours to pain  
c. Vicodin ES 2 tabs po q 6 hours prn pain  
d. Dilaudid (hyrdomorphone) 2 mg IV q 2 hours prn pain

End of scenario

48. Normodyne (labetolol) is a/an

a. ventricular antiarrhythmic  
b. supraventricular antiarrhythmic  
c. cardiac inotropic agent  
d. anti-hypertensive
49. Cordarone (amiodarone) is a high alert drug. This means that
   a. it is very expensive, and should only be used as a last resort
   b. has a high potential for causing harm to the patient, and must be used cautiously
   c. you must have another nurse verify dose, patient, pump settings, drug concentration, and line set-up with you prior to administering
   d. b and c

50. Cardizem (diltiazem) is indicated for all of the following except:
   a. multifocal PVCs
   b. atrial fibrillation
   c. atrial flutter
   d. PSVT

Employee’s signature: ________________________________   Date: _________