

*BEST BMET  
CBET STUDY GUIDE  
MODULE V*

*A & P*



*5 May, 2009*

1. In the Trendelenburg position the
  - a. patient's hips are lower than his/her head
  - b. patient's head is lower than his/her hips
  - c. patient's thighs and legs are flexed to right angles
  - d. patient is lying on his/her abdomen
  - e. both a and c above
  
2. A narrowing of a body passage or opening is called
  - a. ischemia
  - b. stenosis
  - c. regurgitation
  - d. prolapse
  - e. incompetence
  
3. A lengthwise plane running from side to side, dividing the body into anterior and posterior portions is
  - a. coronal
  - b. sagittal
  - c. transverse
  - d. horizontal
  
4. A thrombus is
  - a. the obstruction of an artery
  - b. a blood clot remaining at the site of formation
  - c. a severe, throbbing headache
  - d. a loose clot in the circulating blood
  - e. none of the above
  
5. The circulatory system arterioles
  - a. connect the capillaries to the vein
  - b. do not contain smooth muscle
  - c. are the largest branches of the arterial system
  - d. regulate blood flow by contraction or dilation
  - e. all of the above
  
6. The 'P' wave of an electrocardiogram designated the electrical potential produced by there
  - a. polarization of atria
  - b. depolarization of atria
  - c. repolarization of ventricles
  - d. depolarization of ventricles

7. Normal insertion sites for cardiac catheterization include the
  - a. brachial and coronary veins or arteries
  - b. femoral and brachial veins or arteries
  - c. femoral and coronary veins or arteries
  - d. brachial and carotid vein or arteries
  
8. A myocardial infarction is
  - a. a serious cardiac arrhythmia
  - b. the interruption of blood supply to the heart
  - c. the ischemia of coronary tissues
  - d. the death of a portion of heart muscle resulting from ischemia
  
9. Whole blood minus the cells is
  - a. serum
  - b. lymph
  - c. plasma
  - d. transudate
  
10. The normal oxygen saturation in the systemic venous blood is about
  - a. 38%
  - b. 49%
  - c. 63%
  - d. 75%
  - e. 97%
  
11. A nephrogram is
  - a. a recording of peripheral nerve electrical activity
  - b. a kidney X-ray
  - c. a unit of weight
  - d. an instrument used to determine urine output
  - e. a recording of brain electrical activity
  
12. Difficult, labored respirations are called
  - a. eupnea
  - b. orthopnea
  - c. hyperpnea
  - d. dyspnea

13. The condition in which the blood has decreased pH is
- a. anorexia
  - b. acidosis
  - c. alkalosis
  - d. auscultation
14. An otoscope would normally be used to
- a. examine the ears
  - b. examine the eyes
  - c. examine the teeth
  - d. view oscillatory traces
  - e. view orthopedic defects
15. The type of muscle that contains intercalated disks is
- a. smooth
  - b. skeletal
  - c. cardiac
  - d. voluntary
16. The part of the brain that normally controls the body temperature is
- a. medulla oblonga
  - b. tapituitary gland
  - c. hypothalamus
  - d. reticular formation
- The correct answer is
17. Respiratory tract air that participates very little in gas exchange is the
- a. volume in the functional dead space
  - b. residual volume
  - c. tidal volume
  - d. volume in the expiratory reserve
18. It is not true that
- a. veins have less elastic tissue and smooth muscle than arteries
  - b. the lumens of veins tend to be larger than those of corresponding arteries
  - c. most veins in the extremities have valves
  - d. veins carry only deoxygenated blood

19. The dicrotic notch in the arterial pressure waveform is associated with
- aortic valve closing
  - aortic valve opening
  - variations in the peripheral arteriolar resistance
  - the cardiac rapid-filling phase
20. Korotkoff sounds are caused by
- arterial obstruction
  - the closing of the cardiac valves
  - the contraction of the ventricles
  - the contraction of the atria
21. The science dealing with functions and diseases of the ear is called
- orthology
  - otology
  - oncology
  - osteology
22. Branches of the vagus nerve conduct parasympathetic impulses to the
- lungs and diaphragm
  - forearms and hands
  - eyes and ears
  - pancreas and stomach
23. An abnormal swelling of tissues is called
- phlebitis
  - anemia
  - edema
  - hypertension
24. Motor neurons are used to
- excite movement or reflex action
  - adjust neurological test equipment
  - measure the strength of muscular contractions
  - pass material through a membrane

25. Which combination of bones is found in the human leg?
- humerus, femur, ulna
  - pelvis, radius, femur
  - femur, tibia, fibula
  - radius, tibia, pelvis
26. Which one of the following choices contains only structures found in the brain?
- cranium, pharynx, optic nerve
  - ventricle, cerebellum, pons
  - cerebrum, medulla oblongata, nephron
  - maxilla, thalamus, hippocampus
27. The ileum is part of the
- stomach
  - sacrum
  - small intestine
  - spinal cord
28. Which one of the following choices contains only involuntary muscle?
- skeletal and smooth
  - striated and cardiac
  - smooth and cardiac
  - striated and skeletal
29. The approximate resting potential of a nerve fiber membrane while it remains completely undisturbed is
- 85 mV
  - 25 mV
  - 0 mV<sup>2</sup>
  - 0 mV
30. Hepatitis is
- infection of the kidney
  - infusion of fluid into a cell
  - injury to the gall bladder
  - inflammation of the liver

31. Systole is the period of the cardiac cycle when the heart is
- emptying
  - filling
  - resting
  - fibrillating
32. To detect electrical events of the heart in the form of an ECG, one must
- convert the ionic potential to electron current
  - convert the electron current to ionic potential
  - convert the chemical potential to electrical potential
  - convert the ionic bonds to covalent bonds
33. Korotkoff sounds are heard during
- ECG measurement
  - blood pressure measurement
  - respiratory function tests
  - EEG measurements
34. The equation describing the electrical measurement of ECG is
- Lead I + Lead III = Lead II
  - $a_{VL} + a_{VF} + a_{VR} = 0$  and b
  - Lead I + Lead II + Lead III = 0
35. The heart's natural pacemaker is located in the
- SA node
  - AV node
  - PJ node
  - P node
36. An understanding of respiratory function lies in knowing the following gas laws:
- Boyle's law, Charles's law, Dalton's law, Henry's law
  - Charles's law, Faraday's law, law of nature
  - Boyle's law, L.A. Law, Darwin's law
  - Boyle's law, Dalton's law, Faraday's law
37. Apnea is
- cessation of breathing
  - labored breathing
  - increased breathing
  - decreased ventilation

38. An instrument that quantitatively measures lung volume is a
- barometer
  - spirometer
  - tachometer
  - cardiometer
39. The relationships between various lung volumes are expressed as
- various pulmonary capacities
  - heart capacities
  - blood capacities
  - vessel capacities
40. Pulmonary abnormalities that require artificial respiratory ventilation are
- ventilation/perfusion problems
  - diffusion problems
  - AV shunt problems
  - all of the above
41. The tidal volume for an adult male at rest is approximately
- 6 liters
  - 1 liter
  - 500 milliliters
  - 50 milliliters
42. What is the normal pH of arterial human blood
- 4.2 - 5.62
  - 7.36 - 7.44
  - 8.40 - 8.87
  - none of the above
43. What is 'tidal volume
- the volume of gas inspired or expired during each normal respiratory cycle
  - the amount of volume measured at the 80% value of total expired volume
  - the amount of volume expired into a one liter bellows
  - one of the above



44. The output of the heart in liters per minute is called
- ejection fraction
  - minute volume
  - cardiac output
  - none
45. What is peristalsis
- the contraction of the aorta
  - the flow of blood through the intestines
  - a type of movement common to most regions of the digestive tract
  - contraction of the peritoneum
46. What is a nephron a microscopic unit found in the frontal lobe
- a microscopic unit found in the auricles
  - a microscopic tubular unit found in the kidneys
  - a nerve fiber
47. The term anterior refers to which area of the body
- front
  - back
  - skull
  - middle
48. The portion of the cardiac cycle when the walls of the heart chambers relax and blood flows into the heart through the veins is called
- pericardium
  - systole
  - myocardium
  - diastole
49. The term hemolysis refers to which of the following
- the process of filtering and purifying blood
  - the reproduction and replacement of red blood cells
  - the destruction of red blood cells
  - the counting and classification of cells in a sample of blood

50. Which of the following terms refers to the long propagation channel in a single nerve cell
- dendrite
  - axon
  - somamy
  - elin
51. Which of the following terms refers to the cessation of breathing
- hypoventilation
  - arrhythmia
  - apnea
  - bradycardia
52. The intrinsic pacemaker of the heart is the
- sinoatrial node
  - atrio
  - ventricular node
  - Purkinje network
  - Bundle of His
53. The volume of packed red blood cells, expressed as a percentage of total blood volume, is called the
- mean cell volume
  - buffy layer
  - hematocrit
  - differential count
54. The medical term meaning 'death of tissue' is
- neoplasm
  - necrosis
  - toxicosis
  - endometriosis
55. Maintenance of essentially constant conditions in the body's internal environment is a process called
- stasis
  - hemostasis
  - homeostasis
  - myostasis

56. The concentration of which of the following gases is higher in expired air than inspired air
- carbon dioxide
  - nitrogen
  - argon
  - oxygen
57. Colloid osmotic pressure is principally the effect of
- adequate cardiac output
  - electrolyte balance
  - plasma proteins
  - constant internal body temperature
58. The human eye is sensitive to electromagnetic radiation in which of the following wavelength ranges
- 0.1 - 10.0 nm
  - 10 - 400 nm
  - 400 - 800 nm
  - 800 - 2500 nm
59. Subconscious control of arterial pressure and respiration is controlled mainly by which brain structure(s)
- cerebrum
  - motor cortex
  - cerebellum
  - pons and medulla
60. The total lung capacity of a healthy adult male is typically about
- 0.5 liters
  - 2 liters
  - 4 liters
  - 6 liters