

BPS1101

Mid Term 1 (February 4, 2010)

(1 point is given for each correct answer. 1 point is subtracted for 5 incorrect answers)

1. Joseph Lister is associated with the development of what important medical breakthrough?
  - a) antiseptics
  - b) antihistamines
  - c) anesthetics
  - d) antibiotics
  - e) antidotes
  
2. Which of the following are not related
  - a) Joseph Lister and carbolic acid (phenol)
  - b) malaria and quinine
  - c) W.T. Morton and ether
  - d) Hippocrates and the doctrine of humors
  - e) Salicylic acid and the boneset plant
  
3. Which of the following was not associated with the doctrine of humors?
  - a) blood
  - b) black bile
  - c) phlegm
  - d) mandrake
  - e) bloodletting
  
4. Life expectancy in the world throughout most of history was
  - a) approximately the same as it is now
  - b) approximately half what it is now
  - c) impossible to estimate
  - d) about 80 years
  - e) recorded in historical records
  
6. Which of the following has had the biggest benefit to human survival?
  - a) the chlorination of water
  - b) the development of anesthetics
  - c) the discovery of A.S.A.
  - d) the availability of over-the-counter (OTC) drugs
  - e) the doctrine of humors in the development of medications
  
7. Which of the following diseases no longer exists on earth
  - a) small pox
  - b) the great pox
  - c) polio
  - d) measles
  - e) dracunculiasis
  
8. Which of the following statements is false
  - a) plants are a good source of medicines because they are a good source of poisons
  - b) ancient cultures made extensive use of plants in medicine
  - c) bloodletting was developed using the doctrine of signatures
  - d) the difference between a drug and a poison is the dose
  - e) all substances can be poisonous if the dose is high enough
  
9. Which of the following statements regarding drug safety is true
  - a) the thalidomide incident occurred because the drug company did not follow proper testing procedures as required by law
  - b) sulphanilamide poisoned children because the drug company did not follow proper testing procedures as required by law
  - c) the birth defects caused by thalidomide prompted the U.S. government to create the F.D.A.
  - d) liquid sulphanilamide was a safe drug when used properly
  - e) sulphanilamide tablets were a safe drug when used properly
  
10. The Board of Food and Drug Inspection, founded in 1907, was created to ensure that drug companies
  - a) perform proper safety testing on their drugs
  - b) include proper instructions for use on the label
  - c) list all of the included substances on the label
  - d) follow proper procedures to manufacture their drugs
  - e) test their drugs in animals using scientific methods
  
11. Which of the following statements regarding modern drug testing are true
  - a) drugs must be tested in at least one primate
  - b) drugs must be tested in rats or another suitable rodent
  - c) the F.D.A. tests all drugs to ensure they are safe
  - d) drugs are tested at a dose that will produce a response
  - e) drugs are only tested before they are sold
  
12. Which of the following statements regarding patent medicines is false
  - a) patent medicines are no longer sold
  - b) patent medicines made before 1930 could contain any substance that the company chose to include
  - c) by law, the label had to indicate what was in the patent medicine
  - d) some patent medicines were very effective
  - e) public outrage over patent medicines resulted in the first government regulations for drugs
  
13. Which of the following statements regarding the discovery of Aspirin is true
  - a) Aspirin was discovered by the reverend Edward Stone in 1763
  - b) Willow bark was used as a treatment for malaria
  - c) Aspirin was first isolated from willow bark
  - d) Aspirin is manufactured from salicin
  - e) Aspirin is manufactured from petroleum

14. Which of the following are related
- Felix Hoffman and acetaminophen
  - Ibuprofen and Reye syndrome
  - Aspirin and prostaglandins
  - Naproxen and liver damage
  - Acetaminophen and cyclooxygenase
15. Which of the following drugs are not indicated for children?
- naproxen
  - ibuprofen
  - A.S.A.
  - Tylenol
  - amoxicillin
16. What is the mechanism that produces the major side effects associated with A.S.A.?
- inhibition of cyclooxygenase in the stomach
  - inhibition of cyclooxygenase in the muscles
  - activation of cyclooxygenase in the liver
  - activation of prostaglandins in the stomach
  - inhibition of prostaglandins in the stomach
17. Which of the following drugs is not indicated for rheumatoid arthritis pain?
- Tylenol
  - A.S.A.
  - ibuprofen
  - Vioxx
  - Naproxen
18. Acetaminophen was discovered by Carl Duisberg, but the compound was not sold as a pain reliever until thirty years later. This was because
- Duisberg thought it would be too toxic
  - Duisberg would not sell his patent to the Bayer company
  - initial tests on the compound mistakenly showed that it was toxic
  - the compound was too expensive to manufacture
  - petroleum supplies needed to make the compound were limited due to World War I
19. Children's Tylenol is more expensive than regular Tylenol because
- it is specially formulated to be gentle on a child's stomach
  - the safety sealed bottles produced as a result of the Tylenol cyanide incident were very expensive to develop and produce
  - children's drugs require extra safety testing
  - children's drugs must be specially formulated for the different metabolism of the child
  - the company charges a higher price and people pay it
20. What factor should you not consider when buying generic drugs
- the price of the generic and the name brand
  - the medicinally active ingredients in the medications
  - the amounts of medicinally active ingredients in the medications
  - the effectiveness of each product
  - the fact that name-brand medications work better than generic drugs.
21. Acetaminophen can sometimes produce liver damage. This is because
- at high doses, the pathway by which the drug is metabolized changes and a toxic metabolite is produced
  - at low doses, the pathway by which the drug is metabolized changes and a toxic metabolite is produced
  - the drug cannot be metabolized completely by the liver and therefore overloads the kidneys
  - at high doses, the liver cannot completely metabolize the drug
  - at low doses, the liver begins producing toxic enzymes
22. Which of the following products contains acetaminophen?
- Maalox
  - Aspirin
  - Tums
  - Baking soda
  - Tylenol
23. Which medication should you be cautious about using for a hangover?
- A.S.A.
  - ibuprofen
  - naproxen
  - vioxx
  - acetaminophen
24. One of the following statements concerning vascular headaches is incorrect. Which one?
- vascular headaches, in general, are more painful than muscular headaches
  - vascular headaches are mainly a result of stress
  - some vascular headaches are a result of vasodilatation that is induced by poisons
  - vascular headaches can sometimes be treated with caffeine
  - some vascular headaches give the sufferer a warning before the pain begins
25. Migraine headaches normally follow a well defined progression involving several stages. After the headache is triggered, what is the proper progression of these stages?
- Aura, prodrome, pain phase and postdrome
  - Aura, prodrome, postdrome and pain phase
  - Prodrome, Aura, pain phase and postdrome
  - Prodrome, pain phase, aura and postdrome
  - Prodrome, postdrome, aura and pain phase

26. Eating rye bread that is made from improperly stored grain can produce what affliction?
- St. Augusta's fire
  - St. Elmo's fire
  - St. Anthony's fire
  - St. Vincent's fire
  - St. Amethyst's fire
27. The ergot fungus was a toxic substance that, in low doses, could have which of the following medical applications?
- treat muscular headaches
  - reduce hangover severity
  - induce labor
  - prevent cluster headaches
  - reduce psychiatric conditions misinterpreted as witchcraft
28. Tryptan drugs abort migraine by
- blocking pain signals from nerves in the head
  - blocking the transmission of nerve signals normally carried by serotonin
  - selectively stimulating the transmission of nerve signals normally carried by serotonin
  - inhibiting the action of cyclooxygenase, thus reducing prostaglandin production
  - blocking the metabolism of serotonin in the brain
29. Many foods are associated with toxic headaches. Which one of the following does not cause toxic headaches
- aged cheese containing tryptamine
  - red wines containing histamines
  - processed foods containing MSG
  - ice cream containing vanillin
  - coffee containing caffeine
30. Which of these statements about the common cold is true?
- cold weather is responsible for the higher incidence of colds in winter
  - in general, men are more susceptible to colds than women are
  - the incidence of colds decreases with age
  - colds are most frequently transmitted by coughing and sneezing
  - moderate alcohol consumption likely increases the incidence of colds
31. The best way to cure a common cold is
- take massive doses of vitamin C
  - take a combination of a decongestant and an antitussive
  - keep warm, drink plenty of fluids, and take Aspirin
  - take natural source medications such as ColdX
  - there is no cure for the common cold
32. Decongestants make it easier to breathe by opening up nasal passages. The way that this happens is that
- decongestants decrease the production of mucin, resulting in less mucus
  - decongestants cause vasodilation, resulting in the transport of mucin away from the nasal cavity
  - decongestants cause vasoconstriction, resulting in reduced water supply for mucus production
  - decongestants cause vasodilation, resulting in increased water supply thus thinning out mucus and removing it from the nasal cavity
  - decongestants increase the production of mucin thus making nasal secretions less runny
33. The decongestant PPA (phenylpropanolamine) was removed from all cold medications in 2000 because
- the toxicity of PPA was producing hallucinations and strokes in patients taking cold medications
  - PPA is an amphetamine derivative and is used in the manufacture of methamphetamine. To restrict access to PPA, it was removed from the market
  - PPA is an amphetamine derivative and is used in diet pills as an appetite suppressant. Misuse of diet pills produced hallucinations and strokes in patients taking diet medications
  - the toxicity of PPA was producing hallucinations and strokes in persons working in plants that manufactured cold remedies
  - PPA is unstable, and is readily converted by the liver into a toxic metabolite thus producing liver damage
34. Some medications do not require a prescription, but are not available on the shelf of a drugstore. They are sold this way because
- the high toxicity of these substances make them dangerous to sell without advice from a pharmacist
  - these medications are very expensive and drug stores try to limit shoplifting losses by keeping them behind the counter
  - the high potency of the drugs makes them dangerous for children to handle
  - they contain amphetamines that are used to make illegal drugs
  - they contain amphetamines and are highly addictive
35. Antihistamines produce which of the following combinations of effects?
- clear up runny eyes and runny nose, appetite suppression
  - reduce nasal secretions and appetite suppression
  - reduce coughing and induce drowsiness
  - clear up runny eyes and runny nose, induce drowsiness
  - reduce coughing and suppress appetite

36. You have a **productive cough** and want to treat it. The drug store sell's the following cough syrups, whose labels you read. Based on the ingredients list, which product should you buy?

Product	Ingredients	description
Buckley's Complete	Acetaminophen	Analgesic
	Dextromethorphan	Antitussive
	Pseudoephedrine	Decongestant
	Chlorpheniramine	Antihistamine
Buckley's Mixture	Ammonium Carbonate	Mucolytic
	Menthol	Analgesic
Benylin DM	Dextromethorphan	Antitussive
Benylin Extra Strength	Guiafenesin	Expectorant
Buckley's Cough and Cold	Acetaminophen	Antipyretic
	Menthol	Analgesic

- a) Buckley's Complete
- b) Buckley's Mixture
- c) Benylin DM
- d) Benylin Extra Strength
- e) Buckley's Cough and Cold

37. Tobacco is the leading cause of lung cancer. Which of the following substances, found in tobacco, is not a significant cause of cancer?

- a) Polonium-210
- b) combustion by-products
- c) nicotine
- d) benzopyrenes
- e) nitrosamines

38. Cancer drugs are able to selectively poison cancer cells because

- a) cancer drugs selectively act on cancer cells
- b) cancer cells are mutated and are more susceptible to metabolic inhibitors than normal cells
- c) cancer cells grow much faster than normal cells and cannot repair genetic damage caused by cancer drugs
- d) cancer drugs are selectively transported to cancer cells
- e) cancer cells have unique chemical elements that make them susceptible to cancer drugs

39. The three major causes of fatal cancers are

- a) pesticides, dioxin and radiation
- b) tobacco, pesticides and sunlight
- c) tobacco, poor diet and obesity
- d) viruses, tobacco and pesticides
- e) pesticides, dioxin and industrial chemicals