

Name: _____

PSC 126, Health Psychology
Instructor: Capitano

Winter 2005
Exam 1

BE SURE THAT ALL MULTIPLE CHOICE QUESTIONS ARE ANSWERED ON YOUR SCANTRON FORM!!

Part I. Multiple Choice: Indicate on the Scantron form the single best choice for the answer (1 point ea.).

1. Which of the following statements best illustrates reporting of a sign?
 - a. I have lower back pain.
 - b. I have a fever.
 - c. I feel nauseous.
 - d. My son has a headache.

2. A health psychologist would be likely to be involved with all but which one of the following:
 - a. designing a program to encourage people to exercise more
 - b. helping an AIDS patient schedule her time to insure she takes her medications
 - c. counseling a patient with obsessive-compulsive disorder to help him reduce his hand-washing behavior
 - d. studying how coping with stress is related to physical health

3. Which of the following is NOT true regarding the relationship between helicobacter pylori and gastric ulcers?
 - a. 70-90% of patients with gastric ulcers show evidence of H. pylori infection.
 - b. About 80% of people without gastric ulcers show evidence of H. pylori infection.
 - c. Antibiotic elimination of H. pylori heals ulcers in only about 80% of cases.
 - d. All of the above are true, choose d.

4. Which of the following was likely to be the most significant cause of mortality around the turn of the 20th century?
 - a. pneumonia
 - b. kidney disease
 - c. cancer
 - d. diabetes

5. According to General Systems Theory (GST), the characteristics of living systems include all of the following except:
 - a. regulation to achieve a steady, though dynamic, state.
 - b. reproduction of themselves
 - c. hierarchical organization
 - d. emergent properties.

6. Which of the following sequences goes from the LARGEST unit to the SMALLEST unit?
 - a. chromosome, gene, triplet, base
 - b. chromosome, gene, base, triplet
 - c. protein, amino acid, polypeptide, triplet
 - d. base, chromosome, codon, gene

7. In comparison to DNA, messenger RNA:
- a. is longer
 - b. uses the sugar deoxyribose
 - c. uses uracil instead of thymine
 - d. is double-stranded
8. A protein binds to the promoter region preceding a gene on the DNA. What will happen?
- a. probably nothing, since promoter regions are unrelated to genes
 - b. the process of transcription will be initiated
 - c. the process of transcription will be inhibited
 - d. either b or c, depending on whether the protein is an activator or repressor protein
9. A _____ mutation results in the substitution of an incorrect amino acid for a correct one.
- a. missense
 - b. nonsense
 - c. horsensense
 - d. frameshift
10. Which of the following is true of 'innate' immunity?
- a. the major cell type is the lymphocyte
 - b. complement proteins are involved
 - c. innate immune responses are specific to specific antigens
 - d. innate immune responses take time to develop
11. Physician Edward Jenner noticed in the late 1700s that _____.
- a. the rate of measles had started to decline.
 - b. women who milked cows rarely got smallpox.
 - c. neurotic women sometimes experienced numbness below the wrist.
 - d. his barber was doing an awful lot of bloodlettings.
12. When the majority of the population is immune to some pathogen then the probability of a susceptible individual encountering an infected individual is very low, and so she is protected. This phenomenon is known as:
- a. vaccination.
 - b. herd immunity.
 - c. specific immunity.
 - d. humoral immunity.
13. In cell-mediated immunity, neutralization of a microbe is accomplished by
- a. cytotoxic T-lymphocytes.
 - b. complement.
 - c. antibodies.
 - d. neutrophils.
14. An animal has never been exposed to either antigen A or B. At time 1, you immunize it with antigen A. Three months later, you immunize the same animal with antigens A and B. Two weeks later, you measure the amounts of antibody to antigen A and to antigen B, and you find:
- a. more antibody to antigen A than to antigen B
 - b. exactly the same amounts of antibody to each antigen
 - c. more antibody to antigen B than to antigen A
 - d. can't tell from this example, without knowing what the antigens are
15. A helper T-cell has which surface molecules?
- a. CD20
 - b. CD16
 - c. CD8
 - d. CD4

16. When your body encounters a virus for the first time, what is the sequence of events (cell types involved, substances produced) that are involved in fighting the infection?
- first NK cells, then CTL, then antibody
 - first CTL, then antibody, then macrophages
 - first macrophages, then NK cells, then CTL
 - first antibody, then NK cells, then CD4 cells
17. The significance of the placebo effect is:
- that by reducing use of medication, health care costs can be cut dramatically.
 - that it illustrates how important it is to have a trusting relationship with a doctor.
 - that it is the clearest example of the role of mind in disease.
 - that it shows the importance of using a single-blind design to test a new drug.
18. In what proportion of diseases has it been estimated that placebo effects have been found?
- 5-10%
 - 20-30%
 - 60-90%
 - 100%
19. The placebo effect is more often found:
- among women, compared to men.
 - among older patients, compared to younger ones.
 - when it's given in a formal, medical setting, rather than an informal setting.
 - when the doctor has an arrogant, uninvolved attitude, rather than a warm attitude.
20. Of the following conceptions of illness, which was the earliest?
- imbalance in bodily humors
 - evil spirits in the body that can be released by trephination
 - punishment by God for evil-doing
 - cellular pathology
21. The study of the frequency, distribution and causes of infectious and noninfectious disease in a population is known as
- etiology.
 - epidemiology.
 - morbidity.
 - prospective research.
22. Dr. Yee has taken the medical histories of 30 women who have the symptoms of a chronic illness. She is identifying factors in these histories that these patients share that have contributed to the development of their current illness. This is an example of a(n):
- experiment.
 - prospective research.
 - retrospective research.
 - none of the above.
23. According to your text, over the past 25 years Americans' consumption of alcohol has _____ and exercise has _____.
- decreased; increased
 - increased; decreased
 - remain unchanged; decreased
 - remain unchanged; increased

24. The American female population is
- sick more frequently than the male population.
 - increasing its consumption of alcohol and cigarettes.
 - increasingly called on to become caregivers for elderly patients.
 - all of the above.
25. Pain management is gradually shifting towards _____ techniques for treatment.
- behavioral (such as biofeedback and relaxation)
 - pharmacologic
 - invasive surgical
 - electrical stimulation
26. Models of treatment that coordinate medical and psychological expertise are called
- total person models
 - medipsychological models
 - coordination therapy models
 - comprehensive intervention models
27. The largest proportion of health psychologists work in
- private practice.
 - hospitals and clinics.
 - universities and other academic settings.
 - governmental agencies.
28. The fact that many cancers run in families may be explained by:
- a genetically inherited predisposition to cancer.
 - lifestyle factors that may influence the development of cancer.
 - ethnic differences in the development of certain types of cancer.
 - all of the above.
29. Animals that are exposed to crowding in their cages show
- lower malignant tumor rates than controls.
 - higher malignant tumor rates than controls.
 - the same malignant tumor rates as controls.
 - there is no relationship between crowding and development of malignant tumors.
30. In terms of the course of cancer, a rapid course terminating in an early death has been found among _____ individuals.
- polite and unaggressive
 - combative and aggressive
 - neurotic and anxious
 - happy and boisterous
31. Psychological stress appears to adversely affect the ability of _____ cells to destroy tumors. The activity of this type of cell is also important in survival rates, especially for early breast cancer.
- B
 - T
 - natural killer
 - phagocytic
32. In terms of psychotherapeutic interventions, patients with cancer often seek therapy for
- anxiety.
 - inability to concentrate.
 - depression or suicidal thoughts.
 - all of the above.

33. Which of the following types of cells in the human body do NOT contain 23 pairs of chromosomes?
- a. gametes and mature red blood cells
 - b. gametes and neurons
 - c. mature red blood cells and epithelial cells
 - d. all of the above cell types do not contain 23 pairs of chromosomes.
34. About _____ percent of the human genome contains protein-coding sequences; the remaining percent contains intron sequences that have no coding function.
- a. 90
 - b. 50
 - c. 30
 - d. 10
35. In humans, duplication of the genome occurs in the
- a. mitochondria.
 - b. nucleus.
 - c. soma.
 - d. ribosome.
36. Transmission of microbes that occurs as the result of an agent (such as a mosquito) picking up a microbe, changing it into a form that will grow in the human body and then passing on the disease to a human, is called
- a. direct transmission.
 - b. biological transmission.
 - c. indirect transmission.
 - d. mechanical transmission.
37. The period between the time an infection is contracted and the time symptoms appear is called the
- a. incubation period.
 - b. waiting period.
 - c. silent period.
 - d. acute period.
38. The skin is an example of a(n) _____ barrier in the immune system.
- a. initial
 - b. anatomical
 - c. antigen-specific
 - d. focal
39. Which of the following are examples of advance-practice nurses who have training beyond the typical 2-4 years required of a registered nurse?
- a. certified nurse midwives
 - b. nurse practitioners
 - c. certified nurse anesthetists
 - d. all of the above
40. Patient depersonalization
- a. serves no valid medical function.
 - b. is disturbing to patients but has little effect on the patient-provider relationship.
 - c. is disturbing to patients but has no adverse medical effects.
 - d. can provide emotional protection to the provider.
41. In general, patients of lower socioeconomic class have been shown to receive _____ care than patients of higher socioeconomic class in the form of information, support and clinical performance of the physician.
- a. better
 - b. worse
 - c. the same
 - d. the relationship between class and quality of health care has not been established

42. For the most part, physicians' estimates of their patients' rates of adherence are
- a. accurate.
 - b. low.
 - c. high.
 - d. reliable.

Part II. Extra credit: Answer the following question correctly and get a free point! **ANSWER THIS QUESTION ON THE SCANTRON FORM!!**

43. Which statement is false regarding pertussis?
- a. Pertussis vaccination in Japan was discontinued in 1974.
 - b. In 1974, with 70% of the population vaccinated in Japan, 0 pertussis-related deaths were reported.
 - c. Upon discontinuance of the vaccine, the infection rate dropped 20-40%.
 - d. There are about 900,000 deaths per year due to pertussis in the developing world.

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BE SURE YOUR NAME IS ON THIS PAGE!!

Part III. Fill-ins: In the space provided, write the word or phrase that best completes each sentence (2 points each).

44. _____ refers to engaging in the behaviors and treatments recommended by a doctor.
45. According to Freud, _____ is a condition that is manifested as a physical disturbance, cannot be medically explained, and arises from unconscious conflict.
46. A _____ is composed of one phosphate group, one sugar, and one nitrogenous base.
47. Name a primary lymphoid organ: _____

IMPORTANT NOTE: This exam will be handed back in class after it has been corrected, by having it available in alphabetical piles. Your score will appear on THIS page, and will not be visible to other students. If you would rather pick this exam up in person from the TA, please indicate this by putting a check mark on this line: _____