

Name: \_\_\_\_\_

PSC 126, Health Psychology  
Instructor: Capitanio

Winter 2005  
Final Exam

**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. "I have lower back pain". This statement best illustrates the idea of a(n):
  - a. sign
  - b. symptom
  - c. disease
  - d. infection
  
2. We discussed that 'adherence' *increases* when
  - a. the patient starts to feel better.
  - b. the patient has a negative attitude toward the health care system.
  - c. the patient believes that the treatment prescribed is effective.
  - d. both a and c.
  
3. Which of the following is NOT characteristic of living systems?
  - a. Each system is a dynamic entity of components that interact constantly.
  - b. Systems are hierarchically organized and levels interact with each other.
  - c. Systems have emergent properties; that is, the whole is greater than the sum of its parts.
  - d. The individual organism is the highest level of any system.
  
4. The actual construction of the amino acid chain (which will eventually become a protein) takes place
  - a. in the nucleus.
  - b. at the ribosome.
  - c. inside the DNA strand.
  - d. all of the above
  
5. A \_\_\_\_\_ mutation results in the substitution of a base pair leading to production of an incorrect amino acid.
  - a. frameshift
  - b. downshift
  - c. missense
  - d. nonsense
  
6. Herd immunity refers to:
  - a. the fact that cowpox can protect people from smallpox.
  - b. the fact that the Japanese discontinued their pertussis vaccination campaign in 1974.
  - c. the idea that a majority of the population must be vaccinated for virtually everyone to be protected.
  - d. the type of immunity that one sees in social animals, like cows, people, and monkeys.

7. In humoral immunity, neutralization of a microbe is accomplished by
- a. cytotoxic T-lymphocytes.
  - b. complement.
  - c. neutrophils.
  - d. antibodies.
8. The following is a primary lymphoid organ:
- a. bone marrow
  - b. spleen
  - c. lymph nodes
  - d. b and c
9. When your body encounters a virus for the first time, what is the typical sequence of events (cell types involved, substances produced) that are involved in fighting the infection?
- a. first NK cells, then CTL, then antibody
  - b. first NK, then antibody, then macrophages
  - c. first macrophages, then NK cells, then CTL
  - d. first antibody, then NK cells, then CD4 cells
10. Joan is a participant in a study of a new drug. Neither she nor the person who gives her the pill knows whether she is receiving a placebo or the actual medication. The best description for this kind of study is:
- a. a single-blind study.
  - b. a double-blind study.
  - c. a correlational study.
  - d. a random study.
11. Which of the following characteristics is most closely associated with the greatest effectiveness of a placebo?
- a. the placebo looks and tastes like medicine
  - b. the patient is a female
  - c. the placebo is administered in an informal medical setting
  - d. a cold, insensitive physician administers the placebo
12. You walk into your PSC 126 classroom to take the second midterm. You feel a bit anxious about it (heart rate is up, palms are a bit sweaty), but you feel like it will probably go OK because you've read the book and studied hard. What type of appraisal have you probably made?
- a. threat
  - b. harm-loss
  - c. neutral
  - d. challenge
13. In one study by Speisman and Lazarus, four groups of individuals saw a gruesome film about genital surgery. Each group got a different soundtrack, however. The group that got \_\_\_\_\_ soundtrack showed the greatest amount of physiological arousal.
- a. the intellectualization
  - b. the denial
  - c. the trauma
  - d. no
14. Which of the following was a result from Andrew Baum's research comparing residents living near Three Mile Island nuclear reactor and other individuals living elsewhere?
- a. TMI residents had higher blood pressure.
  - b. TMI residents had levels of stress hormones that were not different from controls' levels.
  - c. TMI residents had higher numbers of NK cells in blood.
  - d. TMI residents had higher levels of perceived social support.

15. The region of the brain involved in the 'four F's' is the:
- hypothalamus.
  - pituitary gland.
  - limbic system.
  - adrenal gland.
16. 'NEUROendocrine' refers to:
- hormones secreted by neurons.
  - hormones that affect the functioning of neurons.
  - neurons that stimulate endocrine glands.
  - neurons that secrete the same substance as an endocrine gland
17. Which of the following was a result of the studies performed by Heim, looking at HPA functioning in women with early life stress and/or depression?
- Women with ELS (regardless of whether they had depression) had lower ACTH concentrations in response to a stressor, compared to controls.
  - Women with ELS (regardless of whether they had depression) had lower cortisol concentrations in response to a stressor, compared to controls.
  - Women with ELS and current depression had normal ACTH but high cortisol concentrations in response to a stressor.
  - Women with ELS and no current depression had high ACTH but normal cortisol concentrations in response to a stressor.
18. Certain cells of the immune system, like lymphocytes:
- produce ACTH.
  - have receptors for cortisol.
  - have receptors for norepinephrine
  - all of the above.
19. Which of the following is *\*not\** an in vivo measure of immunity?
- the amount of tetanus-specific antibody
  - the number of CD4+ cells in peripheral blood
  - the number of cells resulting from stimulation by a mitogen
  - antibody response to reactivation of latent herpesviruses
20. In the Laudenslager study of rats who received footshock, animals in the group that had control over the shock had a better immune response than did animals that had no control over the shock. What was the measure in this study that demonstrated better immunity in the animals with control?
- elevated number of CD4+ cells
  - a better proliferation response to mitogens
  - a stronger antibody response to tetanus toxoid
  - a lower antibody response to Epstein-Barr virus antigens
21. If you are a rhesus monkey that is challenged by a human staring into your face, responding to this challenge with \_\_\_\_\_ is associated with a worse immune response.
- affiliative gestures
  - threatening gestures
  - withdrawal
  - either a) or b)

22. The Glasers' research on antibody to Epstein-Barr virus (EBV) showed that:
- the amount of antibody increased when monkeys were challenged by staring at them.
  - students who were low in loneliness had lower antibody responses at high-stress times.
  - a better antibody response to EBV eliminated the infection.
  - antibody to EBV decreased during high stress conditions.
23. Which of the following forms of problem-focused coping may also be considered a form of emotion-focused coping?
- confrontative coping
  - seeking social support
  - planful problem solving
  - positive reappraisal
24. Which of the following is NOT a component of hardiness?
- commitment
  - control
  - challenge
  - consistency
25. In Sheldon Cohen's study of social network diversity and colds, a low score on the social integration index was associated with:
- reduced NK cell activity
  - high baseline epinephrine levels
  - poor health habits
  - all of the above
26. 'Social support is always good for one's health'. This statement characterizes the \_\_\_\_\_ model of social support.
- stress-buffering
  - main effects
  - the social reintegration
  - the perceived availability
27. Which of the following is true about the study described in class regarding the 'menopausal syndrome'?
- Vasomotor symptoms include hot flashes, tension, and irritability.
  - Asian women were most likely to get social support from a small group of family members.
  - White women tended to report more psychosomatic symptoms than did women of other ethnic groups.
  - All of the above were true.
28. Which of the following is NOT one of the seven healthy habits found in the Alameda Co. study?
- eating healthy snacks between meals
  - sleeping 7-8 hours per night
  - eating breakfast almost every day
  - drinking no more than 4 alcoholic beverages at one time
29. In the study that used the Health Beliefs Model to understand what influenced gay men's intentions to use condoms, which factor predicted the intentions of the older gay men?
- perceived severity
  - perceived benefits
  - cues to action
  - perceived barriers

30. Individuals who are planning to stop smoking within the next 30 days can be considered being in the \_\_\_\_\_ stage of change.
- a. precontemplation      b. contemplation      c. preparation      d. action
31. What is meant by 'unrealistic optimism' that many people have about health?
- a. that if they get sick, there will be adequate health care available.  
b. that illness or sickness is not likely to happen to them.  
c. that the medical community will find a cure for most diseases before they get sick.  
d. that sickness can be prevented by having an optimistic outlook on life.
32. Nicotine has which of the following behavioral effects?
- a. increased alertness      b. slower information processing  
c. decreased attention      d. both b and c
33. A recent study described in class compared the amount of DNA damage in healthy lung tissue in a variety of groups. Current smokers had the highest rates of DNA alterations, and non smokers had the lowest. Among the FORMER smokers in this study, which group had the highest rate of DNA alterations?
- a. people who had started smoking after age 20.  
b. people who had started smoking at 15-17 years of age.  
c. people who had started smoking at 7-15 years of age.  
d. \*all\* former smokers had the same rate of DNA damage.
34. Compared to dependent smokers, tobacco chippers
- a. are less likely to smoke when others around them are not smoking.  
b. report having had a more unpleasant experience (nausea, dizziness) when first starting to smoke.  
c. do not show an increase in blood pressure after smoking a cigarette.  
d. show as much craving for a cigarette as dependent smokers do after abstaining.
35. Which statement below about the dopamine transporter gene is true?
- a. This gene is responsible for the manufacture of dopamine.  
b. Smokers tend to have the more efficient form of this gene.  
c. Chippers tend to have the less efficient form of this gene.  
d. There's no evidence that the different forms of this gene are related to smoking.
36. Which statement below is true of the US AIDS epidemic?
- a. AIDS occurs among minorities at rates consistent with their numbers in the general population.  
b. More men than women are infected with HIV in the US.  
c. HIV is now transmitted primarily through heterosexual intercourse for both men and women.  
d. Among women, AIDS is transmitted primarily through their injecting drug use.

37. Which statement is true of needle exchange programs?
- a. They started in the US in 1983.
  - b. The federal government requires them in all cities of more than 100,000 population.
  - c. Very few public health agencies or administrators endorse them.
  - d. The evidence is overwhelming that they effectively reduce HIV transmission.
38. Which of the following is the most direct effect that a protease inhibitor would have?
- a. It would prevent the transcription of viral genes into mRNA.
  - b. It would prevent translation of HIV proteins at the ribosomes.
  - c. It would prevent the splicing into the host cell's DNA of the virus's DNA.
  - d. It would prevent cleaving of the long proteins into smaller pieces.
39. Worldwide, HIV is primarily transmitted
- a. through injecting drug use.
  - b. through unprotected homosexual sex.
  - c. through unprotected heterosexual sex.
  - d. from mother to fetus.
40. In our class, students who scored higher on avoidance coping also
- a. reported more hassles.
  - b. had higher blood pressure in the high stress condition.
  - c. had higher blood pressure in the low stress condition.
  - d. both b) and c).

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

41. Worldwide, approximately what percentage of adults your age are infected with HIV?
- a. 10%
  - b. 5%
  - c. 1%
  - d. 0.5%

Please be sure your name is on this page!!

Name: \_\_\_\_\_

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

42. When a health psychologist wants to know the \_\_\_\_\_ of a disease, he or she wants to know the origin or cause of the disease.
43. Circulating proteins that are part of the innate immune system, that are produced in the liver, that directly kill microorganisms like bacterial cells, and that facilitate phagocytosis are called \_\_\_\_\_.
44. Name the hormone that stimulates release of ACTH from the pituitary: \_\_\_\_\_.
45. A \_\_\_\_\_ culture is one in which the orientation of people is 'sociocentric', or oriented toward the group.
46. \_\_\_\_\_ are highly reactive molecules that steal electrons from more stable compounds, and have been implicated in smoking-induced atherosclerosis.

**IMPORTANT NOTE:** This exam will be handed back by having it available in a box outside my door (275 Young). 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 me, please indicate this by putting a check mark on this line: \_\_\_\_\_