

FT 211 Exam 1

1) The review for this exam was found in what section on the coursesite?

- a. Tests & Quizzes
- b. Reviews
- *c. Exams
- d. Materials
- e. None of the above

2) All of the following are topics to be covered in this course EXECPT?

- a. Aquatic habitat measurement
- b. Length, weight, and other indices
- c. Sampling commercial and recreational fisheries surveys
- *d. Remotely operated vehicles and fisheries research
- e. All of the above are topics covered in class

3) If you have a question about the course what is the best way to ask it?

- a. Email the instructor
- b. Call the instructor
- *c. Post it in the questions section of the course site
- d. wait until the next class meeting and ask then
- e. None of the above



4) Which one of the above texts is not used or recommended in this course?

- a. 1
- *b. 2
- c. 3
- d. 4

5) Biota is one of the three primary components in fisheries. Which of the following best describes Biota?

- *a. The living organisms in an ecosystem
- b. The users and competitors of water
- c. The environment in which an organism lives
- d. Microscopic organisms living on fish
- e. None of the above

Type: MT

6) Correctly match the following words with their correct definitions

- a. Fisheries management = The manipulation of the 3 interacting elements in a fishery to meet intended and desirable objectives
- b. Fisheries research = The diligent and systematic inquiry to develop methods, facts or principles to better understand the 3 elements and their connectivity

7) Planning is an essential part of fisheries research, but not necessarily management

- a. True
- *b. False

8) Improper planning will result in all of the following EXCEPT

- a. Increase safety risks
- b. Loss of time
- *c. Increase in productivity
- c. Loss of time sensitive data
- d. Waste of resources

9) Goals are narrow, precise, tangible, and concrete

- a. True
- *b. False

Type: ORD

10) Organize the following steps of a fishery investigation from start to finish (note not all steps are included)

- a. Problem Identification
- b. Prediction, Hypothesis, & Objectives
- c. Planning for sampling
- d. Data collection and processing
- e. Synthesis and inference
- f. Communication of results

11) Fishery problems are best identified by which of the following

- a. Fisheries managers
- *b. Users
- c. Fisheries researchers
- d. Graduate students
- e. None of the above

Type: E

12) List three places to get existing fisheries information or literature (be specific, Google isn't enough)

13) Which of the following statements is NOT true regarding data and data statements

- a. You can collect too much data
- b. Each hypothesis needs its own data statement and examination
- *c. Statistical review is used after the data is collected
- d. Data statements are important to understand what kind of data to collect

e. All of the above statements are true

Type: E

14) In your own words briefly define sample. (Why do we sample?)

15) All of the following would include types of biological data being collected EXCEPT

- *a. Length of a particular stream reach
- b. number of fish in a particular trap
- c. length of a fish in a reservoir
- d. number of aquatic invertebrates in pond
- e. None of the above

16) Humans are the ones that manage and studied fisheries, we do not need to collect information on people themselves

- a. True
- *b. False

17) Which of the following would you classify as the most important piece of sampling equipment

- a. Firearm/bear protection
- b. Database/data archive
- c. Computer/digital sampling
- *d. Crew/employees

18) Communicating the results of your study is important and scientific journals and conferences is the best place to get this information out to the general public

- a. True
- *b. False

19) Which of the below statements is INCORRECT

- a. These data are uniform
- *b. The data is uniform
- c. Data are uniform
- d. All of the above are incorrect

20) The collection, analysis, interpretation, presentation, and organization of data is

- a. Data analysis
- b. Calculus
- c. Data visualization
- *d. Statistics
- e. none of the above

21) Who said "There are liars, damned liars and statisticians."

- a. Huck Finn
- b. Tom Sawyer
- *c. Mark Twain

d. Earnest Hemmingway

Type: E

22) Give 3 examples of an electronic data collection device

23) Databases are all of the following EXCEPT

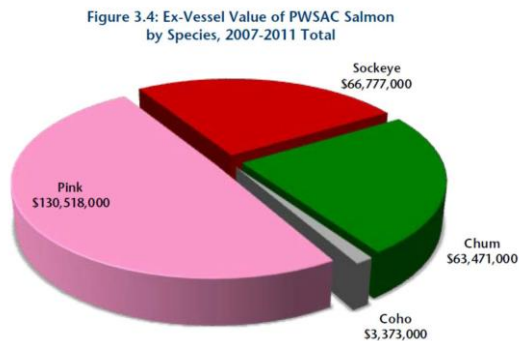
- a. Repositories of information
- b. Logically organized
- c. Facilitate retrieval of specific information
- d. Provide for customized output reports
- e. Relational
- *f. Databases are all of the above

Type: E

24) List one common type of database software

25) Sorting data and looking for outliers is a common form of quality controlling data

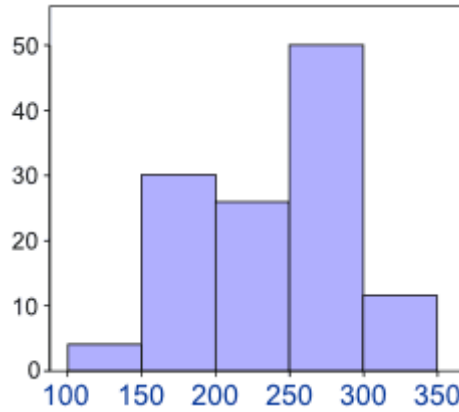
- *a. True
- b. False



26)

The above image is what kind of graph?

- *a. Pie chart
- b. Bar chart
- c. Histogram
- d. Scatter plot
- e. Line graph



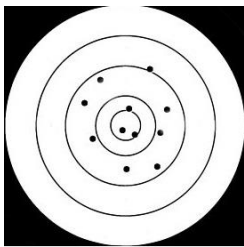
- 27) The above image is what kind of graph?
- Pie chart
 - Bar chart
 - *c. Histogram
 - Scatter plot
 - Line graph

28) What is the difference between a Histogram and a Bar chart?

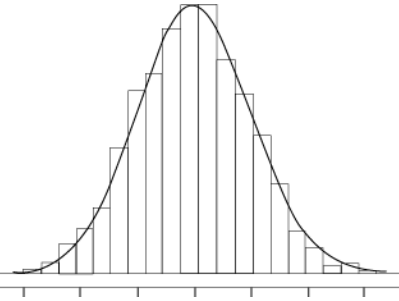
- A histogram is of historical data
- In a bar chart the bars represent the data values
- *c. A histogram depicts continuous data
- a bar chart depicts continuous data

29) All of the following are examples of qualitative data EXCEPT

- Sex of fish
- *b. Number of offspring
- Species of fish
- Life stage
- All of the above are qualitative data

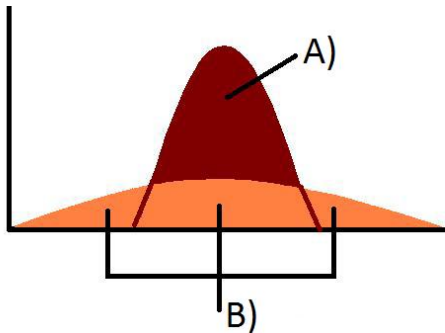


- 30) The above image is an example of
- good accuracy, good precision
 - *b. good accuracy, bad precision
 - bad accuracy, good precision
 - bad accuracy, bad precision



- 31) Which term best describes the above data distribution
- *a. normally distributed
 - b. Skewed Right
 - c. Skewed Left
 - d. Bimodal distribution
 - e. None of the above

- 32) Mean median and mode are all descriptors of
- a. Average
 - *b. Central tendency
 - c. Dispersion
 - d. Range
 - e. None of the above



- 33) In the above figure which data set has a larger Variance?
- a. A)
 - *b. B)

- 34) Breaking a population up into groups and then sampling all of the individuals in a single group is an example of which type of sampling design?
- a. Random sample
 - b. Stratified random sample
 - *c. Cluster Sampling
 - d. Systematic sampling
 - e. None of the above

- 35) Hypothesis testing belongs to which type of statistics
- a. Descriptive statistics
 - *b. Inferential statistics

- c. Null statistics
- d. Modeling
- e. None of the above

36) Regression analysis looks for relationships between two variables

- a. *True
- b. False

37) Manipulating one variable and then looking for a response is an example of a Observational study

- a. True
- *b. False

38) Of the hazards in fisheries choose the one that is most hazardous to Biologists

- *a. Airplane accident
- b. Wildlife attack
- c. Drowning
- d. Electric Shock
- e. Exposure

39) Accidents could have typically been avoided and are caused by a chain of errors that could have been broken

- *a. True
- b. False

40) Safety is the responsibility of

- a. Employee
- b. Supervisor
- c. Organization
- *d. All of the above

41) What does the SAFE acronym stand for

- a. Self, attitude, facts, equipment
- *b. Skills, attitude, facts, equipment
- c. Self, attitude, facts, environment
- d. Skills, availability, facts, environment
- e. None of the above

42) What is the law called that protects care givers from being sued if they have good intentions of helping someone

- a. Good intentions law
- *b. Good samaritan law
- c. Good caregiver law
- d. Noble first aid law
- e. None of the above

43) Survival training often focuses on improvisation and the use of modified tools to create shelter, fire, and signaling devices

- *a. True
- b. False

44) Float planning should be done

- a. When traveling offshore in a boat
- b. When going to be gone for multiple days
- c. When direct communication will be compromised
- *d. Always
- e. None of the above



45)

The above picture is an example of what kind of a safety equipment that should be carried aboard most boats

- a. Handheld signaling device
- *b. Emergency position indicating radio beacon
- c. Handheld VHF radio
- d. Aerial flare
- e. None of the above

46) The purpose of an emersion suit is to

- a. Provide additional floatation to the survivor
- *b. provide additional thermal protection to the survivor
- c. provide a highly visible wearable suit to the survivor
- d. provide an abrasion and fire resistant suit to the survivor
- e. None of the above

47) Weather is extremely important in aviation and you should let the pilot determine when it is unsafe to fly

- a. True
- *b. False

48) Heavy items such as outboard motors and fuel cans should always be stored in the tail of an airplane

- a. True
- *b. False

48) Having and knowing where all of the following safety equipment is in the aircraft EXCEPT _____ is crucial to remaining safe

- a. Fire Extinguisher
- b. ELT
- c. Survival Equipment
- d. Electrical Shutoff Switch
- *e. All of the above are crucial

50) Radio Telemetry involves using radio waves to map the ground

- a. True
- *b. False

51) When traveling in bear country the most important thing is

- a. Avoidance
- b. Keeping attractants away
- c. traveling in groups of 3 or more
- d. Understand Bear Behavior
- e. carrying a firearm
- *f. All of the above are important

52) Firearms are 50% more effective than pepper spray

- a. True
- *b. False

53) When using firearms all of the following are good rules EXCEPT

- a. Keep the barrel pointed in a safe direction
- b. Keep the firearm unloaded when not in use
- *c. Always use the safety when pointing at people
- d. Being familiar with the firearm
- e. All of the above are good rules

54) Habitat measurements include Physical, Chemical, Biological, and Economical

- a. True
- *b. False

55) What do the parallel lines with varying spacing on a topographic map represent

- a. They are for shading and give the map color
- *b. The represent areas of the same elevation
- c. They represent counties and townships
- d. They represent latitude and longitude
- e. None of the above

56) GIS Stands for

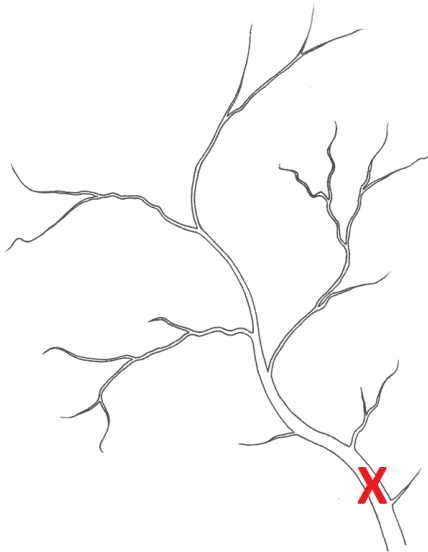
- a. Geologic information system
- *b. Geographic information system
- c. Graphics information system
- d. None of the above

57) The most accurate way to identify a specific location on the ground is with

- *a. GPS
- b. GIS
- c. Township and range coordinates
- d. Universal transverse mercator (UTM) coordinates
- e. none of the above

Type: E

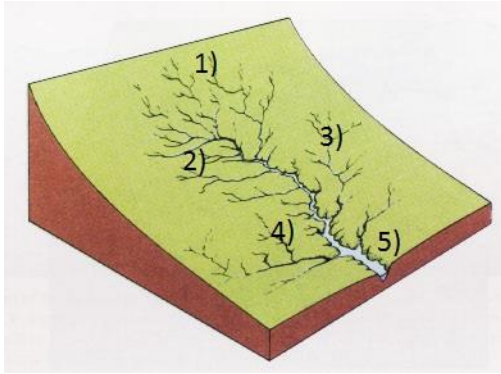
58) In your own words briefly describe what a watershed is



59)

Based on the stream order ranking we went over in class what is the order of the stream X

- a. 1
- b. 2
- c. 3
- *d. 4
- e. 5



60)

Identify the location on the above figure where there would be a steep gradient river

- *a. 1
- b. 2
- c. 3
- d. 4
- e. 5

61) What is the purpose of the above piece of sampling equipment

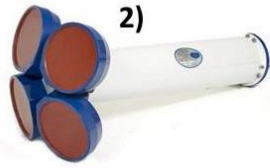
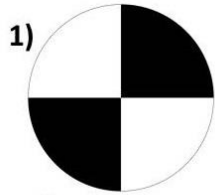
- *a. Freezing the sediment so it can be sampled
- b. Injecting dye into the water column for velocity tests
- c. Aerating the water for increased fish survival
- d. Marking of different stream reaches
- e. None of the above

62) In order to measure stream discharge you need to know

- a. flow and velocity
- b. flow and depth
- *c. velocity and depth
- d. gradient and flow
- e. None of the above

63) The Wentworth scale is a classification of

- *a. substrate size
- b. stream habitat categories
- c. erosion parameters
- d. nutrient loading
- e. None of the above



64)

Which of the above tools is used to measure water transparency

- *a. 1
- b. 2
- c. 3
- d. 4
- e. 5

65) A lake classified as being high in Phosphorus or nutrients is called

- a. Oligotrophic
- *b. Eutrophic
- c. Mesotrophic
- d. Phosphotrophic
- e. None of the above