EPIDEMIOLOGY & BIOSTATISTICS

Coronary batch final exam questions

Number of questions in total: 37/40 collected

:: (1) A long case, sampling students or individuals, with the following final results: (Mean = 260, Median = 226, Mode = 194).
The answer: Since the mean > median it will be " Positively skewed "
Other options were mentioned like Negatively skewed, Bimodal, Bell shape, Normal distribution

:: (2) How many mode in this values : 10 , 16 , 12 , 66 , 12 , 10 , 66 , 10 , 99 , 12.
The answer is : 2 (its 10 and 12)

:: (3) …………… is the difference between observed value and true value.
The answer: Error
Other options were mentioned like Variation, Distribution, Etc…

:: (4) Increasing the sample size will …………… the power of the study:
The answer: Increase
Other options were mentioned like Increase, decrease, no change, none of the above

:: (5) Households were randomly selected, and then all individuals within each selected household were included in the sample.
The answer: Cluster sampling
Other options were mentioned like (simple random sampling, systematic sampling, & stratified sampling)

:: (6) A sample of infants were taken, all weight 2.8kg. The SD of the sample equals to:
The answer: 0
Other options were mentioned like 12, 10, and just random numbers

:: (7) All Describe the key system attribute for surveillance performance, except:
The answer: Specificity
Other options were mentioned like simplicity, sensitivity, flexibility, etc…

:: (8) Which of the following best describes the role of the Clinician and the Epidemiologist:
The answer: The Clinician is concerned with treating the individual, while the Epidemiologist is concerned with the group and epidemic outbreaks.

:: (9) What is the definition of sensitivity:
The answer: Ability of the test to correctly identify those who have the disease

:: (10) All of the following generate hypotheses, except:
The answer: Cohort studies
Other options were mentioned like Case reports studies, Cross-sectional studies,
Correlational studies & None of the above

:: (11) Which of the following is not correct regarding the advantages of cohort studies:
The answer: Well suited for common exposure
Other options were mentioned like Understandable by non-epidemiologists, Can study multiple effects (risks and benefits) of an exposure, Can measure incidence of disease, & Clear temporal sequence of exposure and disease

:: (12) A TB patient, they ordered and did 2 tests (chest c ray for his lungs and sputum analysis), at the same visit or exploited criteria this is a type of:
The answer: Multi-phasic screening (confirmed by dr mais)
Other options were mentioned like target, mass, & opportunistic screening

:: (13) A survey on hypertension on 1/1/2020 was done on a 20,000 population, 2500 were found to have hypertension. Another survey was done on the same population 1/1/2021 and 700 new cases were found. Whats the prevalence of the first survey:
The answer: 12.5/100

:: (14) A survey on hypertension on 1/1/2020 was done on a 20,000 population, 2500 were found to have hypertension. Another survey was done on the same population 1/1/2021 and 700 new cases were found. Whats the cumulative incidence:
The answer: 4/100

:: (15) Which of the following type of surveillance where complete case counting is not important:
The answer: Sentinel surveillance
Other options were mentioned like Passive, active, population and syndromic surveillance.

:: (16) If there is a medicine that does not cure the disease but delays death, (note that the drug also doesn't shorten the recovery of the disease), this will:
The answer: Increase the Prevalence of the disease
Other options were mentioned like incidence will decrease, incidence will increase, prevalence and incidence will decrease and etc……

:: (17) According to Yield of screening program ,which of the following is correct:
The answer: The amount of previously unrecognized disease that is diagnosed and brought to treatment as a result of screening
Other options were mentioned exactly the same definition above but they replaced the word "unrecognized" with "symptomatic", "diagnosied", and words that refer to providing a treatment, procedure to the diagnosed disease, and an option that said "all of the above"

:: (18) A case about smoking and stroke with a 2by2 table shown
, and required the odds ratio of that exposure for the development of that disease:
The answer: (?) (forgot the numbers)

:: (19) + (20) + (21) + (22) a 2by2 table was shown like the following:

	Diabetes Present	Diabetes Absent
Post. Test	75	15
Neg. Test	10	25

And each question asked about the following, respectively:
The sensitivity, specificity, PVP, PNV:
The answer: 75/85, 25/40, 75/90, 25/35 respectively. (Final answers were showed in a percentage form, and an option that says none of the above)

:: (23) Surveillance steps correct order:
The answer: Collection /tabulation /analysis /interpretation /dissemination.
Other options were mentioned like (Collection /tabulation /analysis / interpretation / data linkage) & (Collection /interpretation /tabulation / analysis /dissemination) & (Data linkage /tabulation /analysis /Collection/ interpretation) & etc…

:: (24) A case about a new drug, they tried on patients, but the patients and the providers didn't know who is taking teh new drug:
The answer: Double blinded
Other options were mentioned like single, triple blinding, and other unrelated options

:: (25) An investigator wanted to examine the relationship between income levels and infant mortality in his country. He accessed annual records, analyzed income per capita, and conducted a study. The results showed that as income increased, infant mortality decreased. What type of epidemiological study is this:
The answer: Correlation study (ecological study)
Other options were mentioned like case control, cross sectional, cohort study, and kne of the above

:: (26) A relationship about the consumption of high fat diet has a higher relative risk of those who consumes low fat diet. This is a:
The answer: Strength of the association
Other options were mentioned like Dose-Response relationship, Consistency of the association, Temporality, and Coherence

:: (27) A phosphate factory wanted to assess the impact of phosphate exposure on the health or whatever. In 2015, they contacted the factory and requested records from 1950 and 1952. They tracked the prevalence of deaths or other outcomes due to phosphate exposure up until 2015. What type of study is this:
The answer: Retrospective cohort study
Other options were mentioned like Concurrent cohort study, Case-control study, Cross-sectional study

:: (28) If a screening test is applied to a different population, which aspect of the screening program would change:
The answer: Predictive value
Other options were mentioned like Specificity, Sensitivity, Validity

:: (29) An investigator wants to estimate the magnitude of a health problem in a population, the investigator will most likely use which of the following measures:
The answer: Prevalence
Other options were mentioned like incidence, case fatality, etc……

:: (30) A masking or blinding is necessary in which of the following:
The answer: when the out come is passed on subjective experience
Other options were mentioned like "based on objective lab results", "if the out come is death" and "none of the above"

:: (31) The influenza in the cold months is an example of:
The answer: seasonal trends
Other options were mentioned like cyclic, secular trends and others……

:: (32) The lead time bias is the time between:
The answer: The time between the screeinging and self referral diagnosis

:: (33) A suitable screening test has all of the following characteristics, except:
The answer: Invasive
Other options were mentioned like Relatively sensitive and specific, Detects disease at latent or early symptomatic stage, Simple and inexpensive, Acceptable to population and providers

:: (34) A cardiologist re-evaluated a screening test for valvular disease for the same person. What aspect of the screening test would change:
The answer: Increased specificity (? Not sure)
Other options were mentioned like Increased sensitivity, Decreased sensitivity and specificity, Decreased specificity

:: (35) In a case of an outbreak where several dishes were suspected, including veggie salad, steak, ice cream, and chocolate cake, and it was determined that the chocolate cake was not associated with the outbreak, if the relative risk was estimated for each dish, what is the relative risk for the chocolate cake:

The answer: 0.5
Other options were mentioned like 1.5, 6.0, 3.5 and etc…

:: (36) A case talked about so many cases of TB in a specific old age, the most possible reason for that is:

The answer: Elderly individuals lived through time periods when TB was more common (birth cohort effect)
Other options were mentioned like (increased immunity with older age) or options related to young individuals and long latency periods

:: (37) The primary objective of screening is:

The answer: To identify apparently healthy individuals or a high risk group for unrecognized diseases
Other options were realted to diagnostic purposes/identification of symptomatic diseases in a population, and an option about providing treatment for the individuals, and an option says all of the above

:: (38) + (39) + (40) Were most likely calculations, and long cases related to the relative risk and odds ratio topics

The answer: (?)