

Hope academic team

## Community medicine

1-Average number of children that would be born to a woman through childbearing age in given year and locality is:

Total fertility rate (TFR)
2-Most appropriate measure in an epidemic:
Attack rate
3-Number of deaths from TB expressed in relation to mid year population:
Cause specific death rate
4-for a survey, a village is divided into 5 lanes, each lane is sampled randomly. It is an example of
a . Simple random sampling
b. Standard random sampling
c. Systematic random sampling
d. Cluster random sampling
e. Quasi random sampling answer:D

5-Experimental study includeall of the following except
a. A type of prospective cohortstudey
b.Exposure is controlled
c.Ethical consideration is important
d.RCT still considered the gold standard for producing reliable evidance
e.use participants asTheir self-controls is single blind design
answer:e
6-the rate which describes the number of potential mothers(further mother) is
a.General fertility rate
b.Fecundity rate
c.Gross reproductive rate
d.Net reproductive rate
e.Total fertility rate

Answer:C
7-A researcher wants to study natural history of silicosis in a population of industrial workers.
Which design is most useful

1. Cross sectional
2. Case report
3. Case control
4.Incidence
4. Incidence Ecological survey

Answer:4
8-The index used to show the severity of a disease is
1.Age - specific death rates
2.Prevalence rate
3. Incidence rate
4. Case - fatality rate
5. Proportional death rate

Answer:4
9-Advantages of cohort study include all of the following EXCEPT
1-Follow up of multiple exposures
2-Efficient for rare diseases
3-Calculation of the risk ratio or relative risk is possible.
4-Bias is much lower than other types of study .
5-Temporal sequence between exposure and outcome is available
Answer:2

10-limitation of case control study includes all of the following except:
inefficient in time and costs
11-prevalence measures the burden of disease in a population inclusive of old and new cases. prevalence of a disease can be obtained from :
1.cross-sectional study
2.case control
3.cohort study

Answer: 1
12-In a village of 300 population, $60 \%$ constitute Hindus, $20 \%$ Muslims, $10 \%$ Sikhs and 10 \% Christians. We want to take a sample of $10 \%$ of the population to study the eating habits of this population. The best method would be :
a . Simple random sampling
b . Stratified random sampling
c. Systematic random sampling .
d . Non - random sampling
e . Cluster sampling
answer:B
13-Residents of three villages with three different types of water supply were asked to participate in a study to identify cholera carriers because several cholera deaths had occurred in the recent past . Virtually everyone was present at the time of examination. The proportion of carriers in each village was computed and compare. This study is a ?

1. Case - control study
2. Concurrent cohort study
3. Non - concurrent cohort study
4. Retrospective cohort study
5. Cross - sectional study

Answer:5

14-Case control study includes all of the following except ?
1.Backwards direction in time

2 . Cases identified now
3.Asses cause effect relationship between occurrence and exposure
4.study diseases with a long latency period
5.Useful for the study of rare diseases

Answer:3
15-According to a study conducted by WHO the incidence of polio in a country having a total population of 20 millie during the year 2007, which type of study was this :

1. Case report
2. Cross sectional
3. Case control
4. Cohort
5. Ecological

Answer:4
16-A doctor is required to study the incidence of silicosis in a stone cutting industry, which study design should he choose

1. Longitudinal
2. Cross - sectional
3. Ecological surveys
4. Case reports
5. Case series report

Answer:A

17-Study was done to compare the lung capacity of coal miners to the lung capacity of farm workers. The researcher studied 200 workers of each type. Other factors that might affect lung capacity are smoking habits and exercise habits. The smoking habits of the two worker types are similar, but the coal miners generally exercise less than the farm workers. Which of the following is a confounding variable in this study ?

## 1. Exercise

## 2. Lung capacity

## 3. Smoking or not

## 4. occupation

## 5. Age

## Answer: 1

18-Which one of the following is the odds ratio, calculated from the given data ?

|  | case | Control |
| :--- | :--- | :--- |
| positive | 30 | 20 |
| negative | 20 | 30 |

1. 0.44
2. 1.5
3. 0.8
4. 2.25
5. 02.00

## Answer:4

19-In the Medical OPD of teaching hospital . Diastolic blood pressures of 10 patients were as follows : $80,75,81,79,71,95,75,77,84$, and 90 . The mean of this data is?

1. 80
2.81
2. 82
3. 83

## 5. 84

20-Three groups of subjects were followed over the course of five years to compare treatments for Sider analysis to determine the quantitative serologic differences resulting from these treatments would be

1. Regression analysis
2. F test ( ANOVA )
3.Correlation analysis
3. Chi - square test
4. T test

Answer:2
21-The birth weights in a hospital are to be presented in a graph. This is best done by

1. Bar diagram
2. Pie chart

## 3. Histogram

4. Line graph
5. Frequency chart

Answer:A
22-Six volunteers took a cholesterol lowering diet for 3 months and mean cholesterol levels were measured before and after. The appropriate test of statistical significance for this trial will be?

1. Chi - square test
2. odd's ratio
3. Paired $t$ - test
4. Student t - test
5. z test
answer:3

23-When the standard for accepting the difference was at P - value of 0.05 and the calculated value was 0.01 , the null hypothesis was rejected by the researcher. What do you think of results ?

1. Wrongly rejected

## 2 .Significant difference

## 3.No difference

4. Alternate hypothesis is wrong
5.Sample size was small

## Answer:2

24-A screening test is positive in the majority of cases but false positive rate is much higher than true positives this indicates

1. Low PPV
2. Low NPV
3. Low accuracy
4. High validity
5. High specificity

## Answer:A

25-The extent to which a test measures what it was originally designed to measure is described as ?

1. Sensitivity
2. Specificity
3. Validity
4. Reliability
5. True - positive value

Answer:C

26-Wilcoxon rank sum test is a non - parametric test equivalent to which of the following parametric test ?

1. One way ANOVA

2 . Paired t test
3. Student t test

## 4. Pearson's correlation

5. Two way ANOVA

## Answer:2

27-the researcher is concerned with finding out who, what, when or how much, then the study is

1. Descriptive research
2. Exploratory research
3. Empirical research
4. Causal research

## 5. Basic research

## Answer:A

28-A medical research team conducts a trial to find if high plasma level of special marker could be cancer. Out of 1600 patients included in the study, 600 demonstrated by biliary histopathology 1000 were found to be disease free. Out of the 600 demonstrated to have biliary cancer, 570 wer and Out of the 1000 were found to be disease - free, 850 were negative by the marker. Calculate ppv

1. $95 \%$
2. $97 \%$
3. $79 \%$
4. $85 \%$
5. $89 \%$
answer:3

29-Regarding screening test, all of the following is true except?

1. Identify disease in the pre - clinical phase
2. Considered accurate confirmatory tests
3. Fasting blood sugar for diabetes is an example
4. Disease screened should be serious .
5. Non - invasive and inexpensive test

Answer:b
30.Regarding population pyramid.. Age specific death rates mortality and migration are represented by:

Slope of the pyramid
31- Subjective belief in the extent of harm that can result from an acquired disease or harmful as a result of a particular disease is :

1. Perceived severity

## 2. Perceived Susceptibility

## 3. Perceived benefits

4. Cues to action
5. Perceived self - efficacy

Answer:2
32-New philosophy of health includes all of the following except:
Unisectoral
33-Method of demography concerning population composition:

## Population pyramid?

34-Relative to stages of behavioral change willing to make serious changes is considered:
Commitment "preparation* stage
35-Population growth patterns with $\mathrm{RNI}<1.5 \%$ and long life expectancy is:
Stationary

36-Mental health include all following except:
Rheumatic fever
37-Variable created by recording categorical variables that have more than two caterogies:
Dummy variable
38-Confidence a person has in their ability to pursue a behavior:

## Self efficacy

39-External event that causes someone to make behavior change is named:

## Cues to action

40-an important tool in determining the best cut-off piont based on validity of screening test is :
ROC curve
41-regarding screening test all of the following is true except :
considered accurate confirmatory tests
42-influenza pandemic occurs after every7-10 years. This kind of disease distribution in time is known as :

1. Secular trend
2. Short time fluctuation
3. Cyclical trend
4. Seasonal trend
5. Endemicity

43-The following table presents the distribution of deaths from coronary heart diseases according to the age grouped mean is :

| Age at <br> death <br> (years) | Men |
| :--- | :---: |
| $35-44$ | 20 |
| $45-54$ | 24 |
| $55-64$ | 35 |
| $65-74$ | 13 |
| $75-85$ | 4 |

1. 55.04 year
2. 38.2 year
3. 52.3 year
4. 66.3 year
5. 73 year

لقد أرسلت
44-If the normal score for a medical student I.Q is - 2.5 . Find the T - score for that student :

1. 75
2. 25
3. -25
4. -30
5. 50

## Answer:

45-A study was conducted of 30 students. By chance all of the students were found to the same height. The standard deviation of this study sample is :

1. Zero
2. 0--1
3. $0-+1$
4. $0-+2$

## 5. $0-2$

## Answer: 1

46-In one of the groups of premature infants, the maximum value for hexosaminidase A was substituted with value which is unlikely to be affected by this higher value is :

1. Variance
2. Range
3. Standard deviation
4. Median

## 5. Mean

47-In a class of 134 medical students, the mean systolic blood pressure was found to be 126 mm Hg with a standard deviation of 6 mm Hg If the blood pressures in this sample are normally distributed, what portion of the medical students will have systolic blood pressures above 132 mm Hg :

1. $0.5 \%$
2. $2.5 \%$
$3.5 \%$
3. $16 \%$
$5.32 \%$
