

Strand E – Test (Data and Probability)

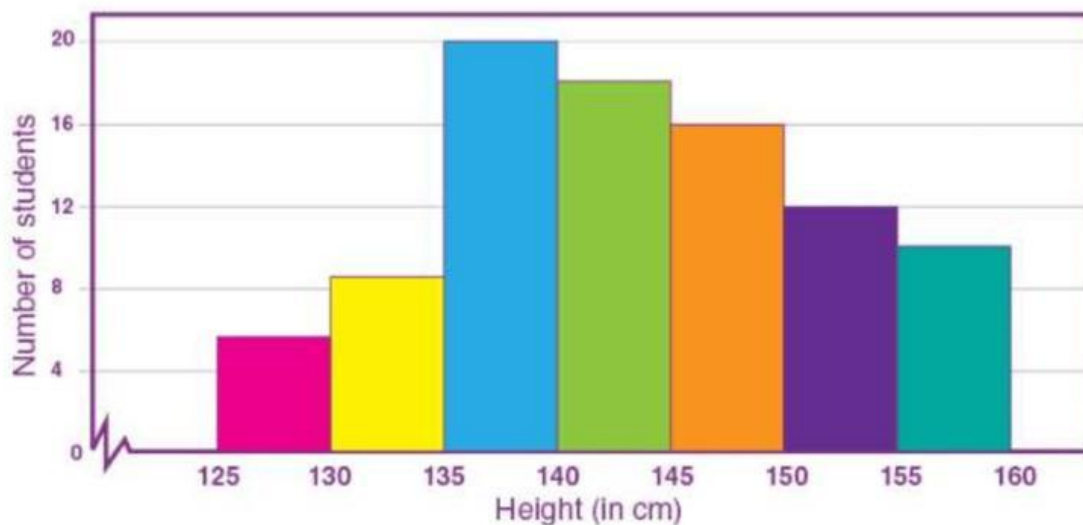
Question 1 (Answer all the questions)

1. The subset of population is
 - a) Population
 - b) Data set
 - c) Distribution
 - d) Sample
2. Which among the following is the benefit of using simple random sampling?
 - a) The results are always representative.
 - b) Interviewers can choose respondents freely.
 - c) Informants can refuse to participate.
 - d) We can calculate the accuracy of the results.
3. The following processes are used during data collection and data organization.
 - I. Identify a problem/situation
 - II. Collect Data
 - III. Generate Samples
 - IV. Formulate data collection tool
 - a) II, III, IV and I
 - b) III, II, I and IV
 - c) I, IV, III and II
 - d) I, II, III and IV
4. A survey was done among the friends, class, and neighbours to know their preference for a particular brand of cold drink. This is an example of
 - a) judgment sampling
 - b) cluster sampling
 - c) convenience sampling
 - d) stratified sampling
5. The findings from a study of training and skill development among employees of a company can be generalised to the population of:
 - a) All employees of that company
 - b) All employees in that industry
 - c) All unskilled employees in that industry
 - d) All graduate-level employees
6. The number of times an observation occurs in a data is called as
 - a) Range
 - b) Raw data
 - c) Interval
 - d) Frequency

7. Which of the following is correct about mode?
- It is central
 - It occurs most frequently
 - It lies in between the maximum and minimum observations
 - It is the average of the two middle terms
8. The stem and leaf plot shows the number of chocolates a shop keeper sold in each week. How many weeks did they sell chocolates?

Stem	Leaf
5	1 1 4
6	4 5 6
7	2 2
8	3 6 7 7

- 4
 - 12
 - 87
 - The stem and leaf plot does not say
9. The following histogram shows the height of students within a class:



The number of students having a height of less than 140 cm is

- 14
- 28
- 34
- 51

10. The mean, mode and median from the following data: 5, 7, 9, 10, 12, 12, 15, 16, 18, 20 is

- a) Mean = 12, mode = 12.4, median = 12
- b) Mean = 12, mode = 12, median = 12.4
- c) Mean = 12.4, mode = 12, median = 12
- d) None of the above

11. An event in the probability that will never be happened is called as

- a) Unsure event
- b) Sure event
- c) Possible event
- d) Impossible event

12. What will be the probability of getting odd numbers if a dice is thrown?

- a) $\frac{1}{2}$
- b) 2
- c) $\frac{4}{2}$
- d) $\frac{5}{2}$

13. The probability of getting two tails when two coins are tossed is

- a) $\frac{1}{2}$
- b) $\frac{1}{3}$
- c) $\frac{1}{4}$
- d) $\frac{1}{6}$

14. The probability is defined as

- a) The total number of possible outcomes in an event
- b) The ratio of favourable outcomes to all outcomes
- c) The chance of an event happening
- d) How certain an event will occur

15. To determine the probability of a coin landing heads up by tossing a coin several times is an example of

- a) Theoretical probability
- b) Experimental probability
- c) Sample probability
- d) Outcome probability

Question 2.

1. The following data shows the lengths, in millimetres, of the 25 earthworms.

6	11	18	19	20	23	23	25	25	26
27	27	28	29	32	33	41	42	48	52
54	59	60	77	93					

Answer the following

- I. Find range, mean, median and mode

Range:

Mean:

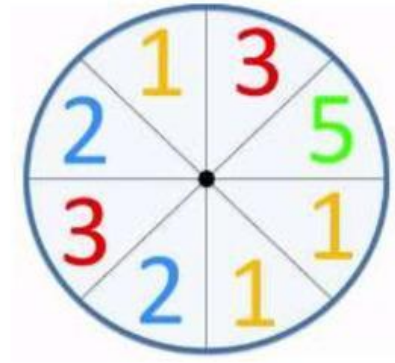
Median:

Mode:

- II. Draw stem and leaf plot and give one conclusion

- III. Draw histogram and give one conclusion

2. If you spin a spinner with 8 equal sections numbered 1 through 8, what is the probability of landing 1?



3. A standard deck of playing cards contains 52 cards. What is the probability of randomly selecting a spade from the deck?

