

- I Fill in the blanks: 10x1=10
1. For a collection of 11 items, $\Sigma x = 132$ then the arithmetic mean is
 2. The greatest value of a collection of data is 72 and the least value is 28 then the coefficient of range is
 3. Variance of the first 11 natural numbers is
 4. S.D of a collection of data is 2. If each value is multiplied by 3 then the S.D of new data is
 5. Probability of sure event is
 6. If E is an impossible event then $P(E) = \dots\dots$
 7. Probability of getting 3 heads or 3 tails in tossing a coin 3 times is
 8. The probability that leap year will have 53 Fridays or 53 Saturdays is
 9. Two dice are thrown simultaneously. The probability of getting a doublet is
 10. If S is the sample space of a random experiment then $P(S) = \dots\dots$
- II Answer the following: 5x2=10
11. A die is thrown twice. Find the probability of getting a total of 9.
 12. Two coins are tossed together. What is the probability of getting atmost one head.
 13. If A and B are two events such that $P(A) = \dots$, $P(B) = \dots$ and $P(AB) = \dots$ then find $P(A \cup B)$.
 14. Find the standard deviation of 10 natural numbers.
 15. Find the range and coefficient of range of 43, 24, 38, 56, 22, 39, 45.
- III Answer the following : 4x5=20
16. Find the standard deviation of 38, 40, 34, 31, 28, 26, 34.
 17. Find the coefficient of variation 18, 20, 15, 12, 25.
 18. A die is thrown twice. Find the probability that at least one of the two throws comes up with the number. 5 (use addition theorem)
 19. A bag contains 10 white, 5 black, 3 green and 2 red balls. One ball is at random. Find the probability that the ball drawn is white or black or green.
- IV Answer the following (Practical Geometry) : 1x10=10
20. Take a point which is 9cm away from the centre of circle of radius 3cm and draw the two tangents to the circle from that point.

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