

## ONE MARK TEST

P. ELANGOVAN, B.T. Assistant (Mathematics)  
GOVERNMENT HIGHER SECONDARY SCHOOL  
KOLIYANUR – VILLUPURAM DISTRICT



ENGLISH MEDIUM

LESSON – 8

TEST - 2

- 1 Variance of first 20 natural numbers is  
(A) 32.25      (B) 44.25      (C) 33.25      (D) 30
  
- 2 Which of the following is incorrect?  
(A)  $P(A) > 1$       (B)  $0 \leq P(A) \leq 1$       (C)  $P(\emptyset) = 0$       (D)  $P(A) + P(\bar{A}) = 1$
  
- 3 The standard deviation of a data is 3. If each value is multiplied by 5 then the new variance is  
(A) 3      (B) 15      (C) 5      (D) 225
  
- 4 If a letter is chosen at random from the English alphabets  $\{a, b, \dots, z\}$ , then the probability that the letter chosen precedes  $x$   
(A)  $\frac{12}{13}$       (B)  $\frac{1}{13}$       (C)  $\frac{23}{26}$       (D)  $\frac{3}{26}$
  
- 5 The probability a red marble selected at random from a jar containing  $p$  red,  $q$  blue and  $r$  green marbles is  
(A)  $\frac{q}{p+q+r}$       (B)  $\frac{p}{p+q+r}$       (C)  $\frac{p+q}{p+q+r}$       (D)  $\frac{p+r}{p+q+r}$
  
- 6 A purse contains 10 notes of 2000, 15 notes of 500, and 25 notes of 200. One note is drawn at random. What is the probability that the note is either a 500 note or 200 note?  
(A)  $\frac{1}{5}$       (B)  $\frac{3}{10}$       (C)  $\frac{2}{3}$       (D)  $\frac{4}{5}$

7 A page is selected at random from a book. The probability that the digit at units place of the page number chosen is less than 7 is  
(A)  $\frac{3}{10}$       (B)  $\frac{7}{10}$       (C)  $\frac{3}{9}$       (D)  $\frac{7}{9}$

8 The range of the data 8, 8, 8, 8, 8... 8 is  
(A) 0      (B) 1      (C) 8      (D) 3

9 If the standard deviation of  $x, y, z$  is  $p$  then the standard deviation of  $3x + 5, 3y + 5, 3z + 5$  is  
(A)  $3p + 5$       (B)  $3p$       (C)  $p + 5$       (D)  $9p + 15$

10 Which of the following is not a measure of dispersion?  
(A) Range      (B) Standard deviation  
(C) Arithmetic mean      (D) Variance