KERALA PUBLIC SCHOOLS

HOME ASSIGNMENT (22nd June to 4th July 2020)

CLASS	SUBJECT	TOPIC / CHAPTER	MODULE / ASSIGNMENT	REFERENCE LINKS
VII	MATHS Ch - 5 : Sets	Introduction of sets	MODULE 1 Representation of sets	
		Exercise 5.1	MODULE 2 Ex 5.1 Q1(i),(iv),(vi),(viii);Q2(ii),(iv)(vi);Q3(ii)	
		Exercise 5.1	MODULE 3 Ex 5.1 Q4(ii),(ii),(iv);Q5(ii),(iii),(iv)	
		Exercise 5.1	MODULE 4 Ex 5.1 Q6(ii),(iv),(vi);Q7(ii),(iv),(vi);Q8	
		Types of sets	MODULE 5 Types of sets	
		Exercise 5.2	MODULE 6 Ex 5.2 Q1(ii),(v),(viii),(x);Q2(ii),(iv),(v)	
		Exercise 5.2	MODULE 7 Ex 5.2 Q3;Q4;Q5(ii),(iv)	
		Exercise 5.2	MODULE 8 Ex 5.2 Q6,Q7,Q8	

			ANSWER KEY
			
			Q1.(i) All states of India – set
			    (iv) Four colours of a rainbow – not a set
			    (vi) All clever people of Lucknow – not a set
			
			Q2. A = {a, e, i,o ,u}
			(ii) {a} є A False[because {a} is a set and not an element]
			(iv) True
			(vi) False	

Q3. (ii) {2,3,5,7,11,13,17,19}
W= {prime number less than 20}

Q4.(ii) Y ={January, march ,may ,july,august, October,December}tabular form
   Y = {x:x is month of a year having more than 30 days} set builder form

   (iv)F = {1,2,3,4,6,9,12,36} tabular form
     F = {x:x is a factor of 36} set builder form

Q5 (ii) n= 1,2,3…..7
   $x = n^2$
when n= 1; $x = 1^2 = 1$
     n= 2; $x = 2^2 = 4$
     …………………….
     n= 7; $x = 7^2 = 49$
so in, roaster or tabular form
{1,4,9,…..,49}
And in description form
{ square of first seven natural numbers}
   (iii) roaster form {-1 , 1, 3, 5, 7}
Description form {The set of odd integer which lie between -2 and 8 }
   (iv) roaster form {U,L,T,I,M,A}
Description form {set of letters of the word ULTIMATUM}

Q6(ii) p ={-2,-1,0,1,2}
     x = 6p
   when p= -2, x= 6×(-2) = -12
   when p= -1, x= 6×(-1) = -6
   …………………………………….
   when p=2,x= 6×2=12
   So, x = {-12,-6, 0, 6, 12}

   (iv) {1}

   (vi) {0,1,5,6,7}

Q7(ii) {x:x is a prime number and x < 30}
   (iv) {x:x = 1/n , n∈N and 5 ≤ n ≤ 20}
   (vi) {x:x is a month of a year which begins with   the letter J}
Q8 (i) {vowels in the word COMPETITION}
    (ii) {x:x is a vowel in the word COMPETITION}
(iii) {o, e, i}

EXERCISE 5.2

Q1.(ii) empty set
   (v) finite set
   (viii) finite set
   (x) finite set

Q2 (ii),(v) are same set and (iv) is different from other sets

Q3
   A, B and E are equal
   C, F and H are equal
   D and G are equal

Q4
A, C, E and G are equivalent as they have 7 elements

B and D are equivalent as they have 3 elements

I and J are equivalent as they have 52 elements.

Q5 (ii) A is a subset of B but B is not a subset of A
  (iv) neither A is a subset of B nor B is a subset of A

Q6 (i) False
    (ii) False
    (ii) True because there is 5 elements in each.

| | | | Q7 (i) φ
(ii) φ,{3},{5},{3,5}
(iii) φ, {2},{4}, {6}, {2,4},{4,6},{2,6},{2,4,6}

Q8 (i) £ = N
   A = {2,4,6,8}

(ii) £ = W
   A = {0,2,4,6,8,}

(iii) £ = I
   A = {……,-4,-2,0,2,4,6,8} | |

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