## Set Worksheet - 2

$P=\{1,2,3,4,5,6,7\} \quad Q=\{a, e, i, o, u\} \quad R=\{10,12,14,16,18\}$

1. $3 \in R$, mark True / False.
a) True
b) False
2. $e \in Q$, mark True / False.
a) True
b) False
3. 14 $\qquad$ R
a) =
b) $\quad=$
c) $\in$
d) $\notin$
4. 5 $\qquad$ R
a) =
b) $\neq$
c) $\quad \in$
d) $\notin$
5. $7 \notin P$, mark True / False.
a) True
b) False
6. Write the below mentioned set in Roster form.

The set of prime numbers less than 15.
a) $\quad\{2,3,5,7,11,12,13\}$
b) $\quad\{2,3,5,7,11,13,17\}$
c) $\quad\{2,3,5,7,11,13\}$
d) None of these
7. Write the below mentioned set in Roster form.

The set of multiples of 4 less than 25 .
a) $\{4,8,12,20,24\}$
b) $\quad\{4,8,12,16,20,24,28\}$
c) $\quad\{4,8,12,16,20,24\}$
d) None of these
8. Rewrite the following set in Roster form.
$A=\{x \mid x$ is an even number greater than 10 and less than 20$\}$
a) $\{12,14,16,18,19\}$
b) $\{12,14,16,18\}$
c) $\{12,16,18,20\}$
d) $\quad\{10,12,14,16,18,20\}$
9. Write a set whose members are perfect square natural numbers and each element is less than 40.
a) $\quad P=\{1,4,9,16,25,36\}$
b) $\quad P=\{1,3,9,16,25,36\}$
c) $\quad P=\{4,9,16,25,36\}$
d) $\quad P=\{1,4,9,16,25,36,49\}$
10. A set of $A$ of all 2-digit numbers, the sum of whose digits is 8 .
a) $\quad A=\{17,26,44,53,62,71,80\}$
b) $\quad A=\{17,26,35,44,53,62,71,80\}$
c) $\quad A=\{17,26,35,44,53,62,71\}$
d) None of these
11. Write the following set in the set builder form.

$$
P=\{a, e, i, o, u\}
$$

a) $\quad P=\{x \mid x$ is a vowel of English alphabet $\}$
b) $\quad P=\{x \mid x$ is a letter of English alphabet $\}$
c) $\quad P=\{x \mid x$ is a consonant of English alphabet $\}$
d) None of these
12. Write the following set in the set builder form.

$$
\text { A = \{January, March, May, July, August, October, December }\}
$$

a) $\quad A=\{x \mid x$ is a month of the year having 30 days $\}$
b) $\quad A=\{x \mid x$ is a month of the year having 31 days $\}$
c) $\quad A=\{x \mid x$ is a month of the year having 28 days $\}$
d) None of these
13. Write the following set in the set builder form.

$$
R=\{0,1,2,3,4,5,6,7,8,9\}
$$

a) $\quad R=\{x \mid x$ is a natural number less than 10$\}$
b) $\quad R=\{x \mid x$ is a natural number less than 9$\}$
c) $\quad R=\{x \mid x$ is a whole number less than 10$\}$
d) none of these
14. Write the following sets in a Roster form. $P=\{x \mid x$ is number of dots on a dice $\}$
a) $\quad P=\{1,2,3,5,6\}$
b) $\quad P=\{1,2,4,5,6\}$
c) $\quad P=\{1,2,3,4,5,6\}$
d) None of these
15. Write the following sets in a Roster form.
$Q=\{x \mid x$ is prime factor of 30$\}$
a) $\quad \mathrm{Q}=\{1,2,3,10,15,30\}$
b) $\quad Q=\{1,2,3,5,6,10,15,30\}$
c) $\quad Q=\{2,3,5,6,10,15\}$
d) None of these

