# SET - I <br> SUMMATIVE ASSESSMENT - II - 2016-2017 <br> MATHEMATICS <br> (English Medium) 

Class: VI
(Max. Marks : 80)

## PART - A <br> SECTION - I

$4 \times 2=8$

1. Given the sum of 2 Integers $=-156$ \}

First Integer $=225\}$
Second Integer $=$ Sum of two Integers - First Integer
( $1 / 2$ mark)

$$
\left.\begin{array}{l}
=-156-225 \\
=-381
\end{array}\right\}
$$

(1/2 mark)
(1mark)
2. Given digits are 7,5,3

Two different 3 digits numbers formed using them are : 735,375 ( $1 / 2 \mathrm{~m}$ )
Divisibility rule for 3 : If the sum of digits of a number is divisible by 3 then the number is divisible by $3 \quad(1 / 2 \mathrm{~m})$
735 : Sum of digits $7+3+5=15$ is divisible by 3 $\therefore 735$ is divisible by 3
375 : Sum of digits $=3+7+5=15$ is divisible by 3$\}$
$\therefore 375$ is divisible by 3
( $1 / 2 \mathrm{~m}$ )
Divisibility rule for 5 : If the digit at units place is either 'o' or ' 5 ' then the number is divisible by 5 .
$735,375$ are divisible by 5 . $\}$
( $1 / 2 \mathrm{~m}$ )
Note:- Marks may be awarded for 'any other two numbers' and for verification.
3. Expression for " 7 is added to 6 times of P " is $6 \mathrm{P}+7 \quad(1 \mathrm{~m})$

Expression for " 10 is subtracted from 2 tmes of $K$ " is $2 \mathrm{~K}-10$ ( 1 m )
4. Length of dress material bought by Mrs. Rajini for her Elder daughter $=6.25 \mathrm{mtrs}$

Length of dress material bought by Mrs. Rajini for her younger daughter $=5.75 \mathrm{mtrs}$
Total length of dress material bought by Mrs. Rajini for her two daughters

$$
\begin{aligned}
& =6.25 \mathrm{~m}+5.75 \mathrm{~m} \\
& =12.00 \mathrm{~meters} \\
& =12 \text { metres }
\end{aligned}
$$

## SECTION - I

 $5 \times 4=20$5. Given that 4 bells ring at a gap of $4,7,12,84$ minutes respectively

The time at which all the four bells ring $=8^{\prime} \mathrm{O}$ clock
The time at which all the bells ring together again $=$ L.C.M of 4,7,12,84 ( $1 / 2 \mathrm{~m}$ )
$\left.\begin{array}{l|l}2 & 4,7,12,84 \\ 2 & \frac{2,7,6,42}{} \\ 3 & 1,7,1,7 \\ 7 & 1,1,1,1\end{array}\right\}$

$$
\begin{aligned}
& =2 \times 2 \times 3 \times 7 \\
& =84 \text { minutes } \\
& =1 \text { hour } 24 \text { min } \quad(1 / 2 \mathrm{~m})
\end{aligned}
$$

$\therefore$ The time at which all the bells ring after $8^{\prime} \mathrm{O}$ clock $=9^{\prime} \mathrm{O}$ clock 24 minutes $(1 / 2 \mathrm{~m})$
6. Given expression is $2 \mathrm{P}+3$

Value of $2 \mathrm{P}+3$ at $\mathrm{P}=4$ is $2(4)+3$

$$
\begin{align*}
& =12+3 \\
& =15 \tag{1m}
\end{align*}
$$

at $P=-3$ is $2(-3)+3$ $=-6+3$
$=-3$
at $\mathrm{P}=0$ is $2(0)+3$
$=0+3$ $=3$
at $\mathrm{P}=-\frac{3}{2}$ is $\mathrm{x}\left(-\frac{3}{2}\right)+3$

$$
=-3+3
$$

$$
\begin{equation*}
=0 \tag{1m}
\end{equation*}
$$

7. (a) Game, played by most of students = cricket (1m)
(b) No. of students played Kabaddi $=6 \times 5=30$

No. of students played Volleyball $=5 \times 5=25\}$ differnce $=30-25=5$
$\therefore 5$ more students play Kabaddi than that of Volleyball ( $1 / 2 \mathrm{~m}$ )
No.of students played Kho-Kho $=3 \times 5=15$
No. of students played Cricket $=8 \times 5=40$
difference $=40-15=25$
$\therefore 25$ less number of students play Kho-Kho then that of cricket ( $1 / 2 \mathrm{~m}$ )
8. (a) No. of end points that a linesegment has $=2$
(b) No. of end points that a Ray has $=1$
(c) No. of end points that a line has $=0$
(d) No. of end points that a circle has $=0$
9. The height at which a kite was flying from the ground $=250$ metres

The height raised by kite $=+50$ metres
The height lowered by kite $=-125$ metres $\}$
Now, the height at which the kite was flying from the ground

$$
\left.\begin{array}{l}
=250+50-125 \mathrm{metres}  \tag{2m}\\
=300-125 \\
=175 \mathrm{metres}
\end{array}\right\}
$$

10-A The distance between the school and Gayatri's house $=1 \mathrm{~km} 875$ metres, $=1.875 \mathrm{~km} \quad(1 \mathrm{~m})$
Distance walked by Gayatri in one day $=1.875 \mathrm{~km}+1.875 \mathrm{~km} .=3.750 \mathrm{~km}$

$$
\begin{align*}
& 1.875  \tag{1m}\\
& \frac{1.875}{3.750 \mathrm{~km}}(2 \mathrm{~m})
\end{align*}
$$

Total distance walked by Gayatri in 6 days $=3.750 \mathrm{~km} \times 6\}$

$$
\begin{array}{llll}
\frac{3.750 \times 6}{22.500} & \begin{array}{l}
3 \varnothing \\
42+3
\end{array}=488  \tag{2m}\\
18+4=22
\end{array} \quad(2 \mathrm{~m}) \quad=22.500 \mathrm{~km} \int
$$

10-B No. of Sweet boxes bought by Ramu $=19$
No. of sweets contained in each box $=228$
$\therefore$ Total no. of sweets in 19 boxes $=228 \times 19=4332 \_2$
No. of sweets given to his friends 3456 - 1
No. of sweets left over $=$ Total no. of sweets - no.of sweets given $=4332-3456$

$$
\begin{equation*}
=876 \tag{2m}
\end{equation*}
$$

11-A Time taken by Renu to walk around the school ground $=2 \frac{1}{5}$

$$
\begin{equation*}
=\frac{11}{5} \tag{1m}
\end{equation*}
$$

Time taken by Snigdha to walk around the school ground $=\frac{7}{4}$ minutes $(1 / 2 \mathrm{~m})$
$\frac{11}{5}=\frac{11}{5} \times \frac{4}{4}=\frac{44}{20}$
$\frac{7}{4}=\frac{7}{4} \times \frac{5}{5}=\frac{35}{20} \quad[$ L.C.M of $5,4=20]$
$\frac{35}{20}<\frac{44}{20}$ i.e., $\frac{7}{4}<\frac{11}{5}$
$\therefore$ Snigdha takes less time to walk around the ground (1m)
difference $=\frac{44}{20}-\frac{35}{20}=\frac{44-35}{20}=\frac{9}{20} \quad(1 \mathrm{~m})$
$\therefore$ Snigdha takes $\frac{9}{20}$ minutes less time then that of Renu (1m)
11-B The distance that Anil supposed to walk $=10 \mathrm{~km}$

$$
=10.000 \mathrm{~km} \quad(1 \mathrm{~m})
$$

Distance travelled by Anil by Bus $=5 \mathrm{~km}, 28$ metres $=5.028 \mathrm{~km}$
Distance travelled by Anil by Auto $=2 \mathrm{~km} 256$ metres $=2.256 \mathrm{~km}$
Distance travelled by Anil by cycle $=1 \mathrm{~km} 30$ metres $\quad=1.030 \mathrm{~km}$
Total distance covered by Anil by all vehicles $\quad=\underline{8.314 \mathrm{~km}}$
Distance covered by Anil on foot = Total distance travelled - total distance travelled by all vehicles (1m)

$$
\begin{aligned}
& =10.000 \mathrm{~km}-8.314 \mathrm{~km}(1 \mathrm{~m}) \\
& =1.686 \mathrm{~km}(1 \mathrm{~m})
\end{aligned}
$$

$12-\mathrm{A}$ (i) Given sequence : $3,6,9,12, \ldots \ldots$.

| $1^{\text {st }}$ term | $2^{\text {nd }}$ term | $3^{\text {rd }}$ term | $4^{\text {th }}$ term | $\ldots .$. | $n^{\text {th }}$ term |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | 6 | 9 | 12 | $\ldots .$. |  |
| $3 \times 1$ | $3 \times 2$ | $3 \times 3$ | $3 \times 4$ | $\ldots .$. | $3 \times n$ |

$\therefore \mathrm{n}^{\text {th }}$ term of the given sequence is 3 n (1m)
(ii) Given equation is $2 Z+3=7$
L.H.S = 2Z +3 , R.H.S = 1

Value of L.H.S at $\mathrm{z}=2$ is $2(2)+3$

$$
\begin{aligned}
& =4+3 \\
& =7 \\
& =\text { R.H.S } \quad(2 \mathrm{~m})
\end{aligned}
$$

$\therefore 2$ is a solution of given equation $2 Z+3=7$ ( 1 m ) OR

12-B $\quad$ Fraction form of figure $(i)=\frac{3}{8}$
Fraction form of figure $($ ii $)=\frac{6}{8}$
Fraction form of figure(iii) $=\frac{4}{8}$
Fraction form of figure (iv) $=\frac{1}{8} \quad(4 \mathrm{~m})$
Ascending order of the fractions $\frac{3}{8}, \frac{6}{8}, \frac{4}{8}, \frac{1}{8}$ is

$$
\begin{equation*}
\frac{1}{8}<\frac{3}{8}<\frac{4}{8}<\frac{6}{8} \tag{2m}
\end{equation*}
$$

Decending order of the fractions is $\frac{6}{8}>\frac{4}{8}>\frac{3}{8}>\frac{1}{8}(2 \mathrm{~m})$


13-B (i) Adding ( -3 ),+8 on number line

(ii) Adding (-5), (-3), (+4) on number line


PART-B
SECTION-IV

| $14(\mathrm{D})$ | $15(\mathrm{~B})$ | $16(\mathrm{C})$ | $17(\mathrm{~A})$ | $18(\mathrm{~B})$ | $19(\mathrm{~B})$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $20(\mathrm{C})$ | $21(\mathrm{D})$ | $22(\mathrm{C})$ | $23(\mathrm{C})$ | $24(\mathrm{C})$ | $25(\mathrm{~B})$ |
| $26(\mathrm{~B})$ | $27(\mathrm{D})$ | $28(\mathrm{D})$ | $29(\mathrm{~B})$ | $30(\mathrm{C})$ | $31(\mathrm{D})$ |
| $32(\mathrm{~B})$ | $33(\mathrm{~B})$ |  |  |  |  |

