NAME OF THE STUDENT :

SUB: MATHEMATICS

CLASS : $7 \quad$ SEC : DATE : 27.11.18

TOPIC: CONGRUENCE OF TRIANGLES AND PRACTICAL GEOMETRY

| S.NO | FILL IN THE BLANKS |
| :---: | :---: |
| 1 | Construct a triangle $\mathrm{PQR}, \mathrm{PQ}=6.4 \mathrm{~cm}, \angle \mathrm{P}=75^{\circ}$, $\mathrm{PR}=6 \mathrm{~cm}$. |
| 2 | Construct parallel lines ' 1 ' and ' $m$ ' at distance of 6.5 cm |
| 3 | Write all the corresponding parts in the congruent triangles LMN and XYZ. |
| 4 | By applying congruence rule:- <br> (i) State the pairs of congruent triangles. <br> (ii) Write congruence criteria. <br> (iii) Congruence in symbolic form. <br> (b) <br> (c) <br> (d) |
| 5 | Given $\angle M \cong \angle G$ and $\angle N \cong \angle H$, find the value of $x$. |
| 6 | Construct a triangle $\mathrm{LMN}, \mathrm{LM}=6.8 \mathrm{~cm} / \mathrm{M}=100^{\circ}, \underline{L}=40^{\circ}$ |
| 7 | Construct a triangle $A B C$ given that $A B=4.5 \mathrm{~cm}, A C=5 \mathrm{~cm}, \mathrm{BC}=5.8 \mathrm{~cm}$ |
| 8 | Construct a triangle $A B C$, it is given that $A B=7 \mathrm{~cm}, \angle C A B=30^{\circ}$ and $\angle C B A=70^{\circ}$ |

11 Construct a right-angled triangle with hypotenuse 10 cm and one of its leg 5 cm long.

12 Construct a triangle $A B C$ where 3 sides measures $6 \mathrm{~cm}, 5 \mathrm{~cm}, 4.5 \mathrm{~cm}$.

13 Using the property of alternate interior angles being equal, draw 2 parallel lines.

14 Construct an isosceles right angled triangle $A B C$, where $\angle A B C=90^{\circ}$ and $A B=6 \mathrm{~cm}$. Supply the missing information for $\triangle A M N \cong \triangle P Q R$.
(i) $\triangle \mathrm{AMN} \cong \triangle P Q R$, by SAS criteria.
$\angle N=/ R$, $\qquad$ , _ـ_
(ii) $\triangle \mathrm{AMN} \cong \triangle \mathrm{PQR}$ by ASA criteria.

AN = PR, $\qquad$ , $\qquad$ .
(iii) $\triangle A M N \cong \triangle P Q R$ by SSS criteria.
$A M=P Q$, $\qquad$ , $\qquad$ .

(iv) $\triangle \mathrm{AMN} \cong \triangle \mathrm{PQR}$ by RHS criteria.
$\angle A=\angle P=90^{\circ}$ $\qquad$ .

(v) $\triangle \mathrm{AMN} \cong \triangle \mathrm{PQR}$ by AAS criteria.
$\angle A=\angle P$, $\qquad$ , _


