INDIAN SCHOOL DARSAIT

HALF YEARLY EXAM, 2017-2018

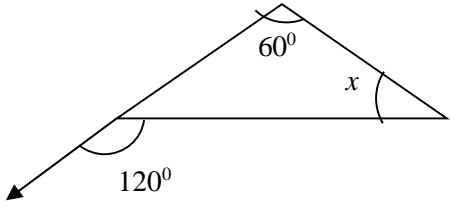## MATHEMATICS

Date: Class: VII
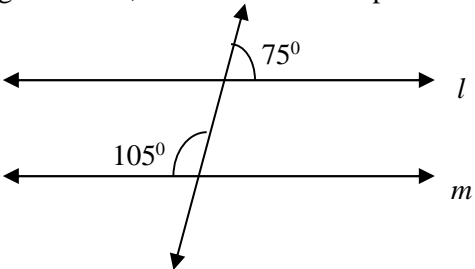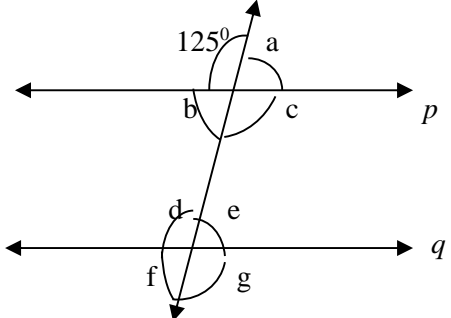
Time: 3 hours   Max Marks: 80

	General Instruction: *(i) All questions are compulsory* *(ii) Calculations should be shown in a working column on the right hand side.* *(iii) Section A : Questions 1- 6 carry 1 mark each* * Section B : Questions 7- 12 carry 2 mark each* * Section C : Questions 13 - 22 carry 3 mark each* * Section D : Questions 23 - 30 carry 4 mark each*	
	Section A	
1.	Find the supplement of 55^0	1
2.	Coefficient of b in $-102ab^2c$	1
3.	Find the median of 24, 36, 46, 17, 18, 25, 35	1
4.	How many medians does a triangle have?	1

5.	Find the value of
	     (a) $(-12) \times (-11) \times 10$
	     (b) $50 \div (-5)$
		1

6.	Find $\frac{5}{6}$ of a year	1
	Section B	
7	Find the value of the unknown interior angle *x* in the following figure. 	2
8	Verify the following $18 \times(7 + (-3)) = (18 \times 7) + (18 \times -3)$	2
9	Identify terms and factors in the expression given $0.2p^2 – 0.1q^2 + 1.6r$	2
10	A cricketer scores the following runs 76, 58, 35, 40, 46, 45, 0, 100. Find the mean score	2

11	A two wheeler covers a distance of $18\frac{1}{5}$ km in one litre of petrol. How much distance will it cover in 9 litres of petrol?	2
12	Identify (1) Five pairs of adjacent angles (2) Three linear pairs (3) Two pairs of vertically opposite angles E C A O B D	2

Section C

13	Subtract 24ab −10b − 18a from 30ab + 12b + 14a	3
14	Using suitable properties find (a) $625 \times (-35) + (-65) \times (625)$ (b) $(-17) \times (-29)$	3
15	Find the mode, median, range and mean of the following data 13, 16, 12, 14, 19, 12, 14, 13, 14	3
16	Find the value of the following expression when x = −1 $4x + x - 2x^2 + x - 1$	3
17	In the given figure <P : <Q : <PRQ = 3:2:1. Find the value of <PRS P Q R S	3
18	A dress requires 2.25m cloth. How many dresses can be made from 40.5 m of cloth?	3
19	Solve the following equations (a) $5(p - 2) = -4$ (b) $16 = 4 + 3(t + 2)$	3
20	Find <AOC, <COD and <BOD. C D $(x + 39)^0$ x^0 $(x - 21)^0$ A O B	3
21	The heights of 10 girls are given below 15, 150, 139, 128, 151, 132, 146, 149, 143, 141 (a) What is the height of tallest and shortest girl (b) What is the range of the data (c) What is the mean height of the girls?	3

22	In the given figure below, decide whether l is parallel to m or not	3

	Section D	
23	In the adjoining figure p parallel to q, find the unknown angles a, b, c, d, e, f, g	4

24	Laxmi's father is 49 years old. He is 4 years older than 3 times Laxmi's age . Set up an equation and solve.	4
25		4
26	PQR is a triangle, right angles at P. If PQ=10 cm and PR =24 cm, find QR?	4
27	Sale of English and Hindi books in the years 1995, 1996, 1997 and 1998 are given below:	4

Years	1995	1996	1997	1998
English	350	400	450	620
Hindi	500	525	600	650

Draw a double bar graph and answer the following:
(a) In which year was the difference in the same of the two language books least?

28	Simplify the following	4

(a) $\dfrac{2}{5} \div 1\dfrac{1}{2}$

(b) 11.2×0.15

(c) $44.53 \div 1000$

(d) $\dfrac{5}{6} \times 2\dfrac{3}{7}$

29	Divya appeared in a competitive exam containing 100 questions in which 3 marks are given for every correct answer, 1 mark is deducted for each incorrect answer and 0 marks are awarded for unattempted questions.	4

(a) Find Divya's score if she did not attempt 16 questions and got 70 correct and 14 incorrect answers.
(b) If rank secured at 200 mark is 500th, will she be ranked above or below

	500?	
30	From the sum of $2y^2 + 3yz$ and $-y - 11$, subtract $3y^2 - z^2$	4