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INTERNATIONAL INDIAN SCHOOL- DAMMAM
FIRST TERM EXAMINATION (JULY 2017)

CLASS:VII

SUBJECT: MATHEMATICS

SET-A

MAX. MARKS:80

TIME:3 HOURS

Instructions: -

1. All questions are compulsory.
2. The question paper consists of 29 questions divided in to 4 sections- Section A, Section B, Section C, Section D.
3. Section A contains 5 questions of 1 mark each, Section B contain 6 questions of 2 marks each, Section C contains 9 questions of 3 marks each and Section D contains 9 questions of 4 marks each.
4. There is no overall choice. However internal choice has been given in one question each in Section B, Section C and Section D.

SECTION-A (1 x 5 = 5)

1. The value of $(-1)^4$ is ____.
2. The product of two proper fractions is ____ than each of the two fractions.
3. Find the range of the given observations: 19,25,60,15,24.
4. Find 'p' if $\frac{9p}{5} = \frac{18}{5}$
5. If one of the angles of a linear pair is acute, how would you classify the other angle?

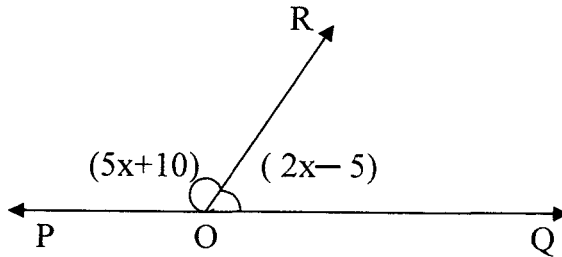
SECTION-B (2 x 6 =12)

6. A die is thrown once randomly. Find the probability of getting:
 - (i) A number greater than 2.
 - (ii) The number '0'.
 - (iii) A factor of 3.
7. One angle in a pair of complementary angles is $\frac{2}{3}$ rd of the other. Find the measure of the two angles.
8. Use appropriate sign ($<$, $>$ or $=$) : 234.5×10^6 23.45×10^7 ?
9. Construct 2 equations starting with $x = 4$
10. Find $\frac{1}{2} + 2\frac{3}{4}$.

Or
Find $3\frac{4}{5} - \frac{7}{5}$
11. Is it possible to construct triangle ABC where $AB = 3\text{cm}$, $m\angle A = 80^\circ$ and measure of $\angle B = 100^\circ$? Give reason.

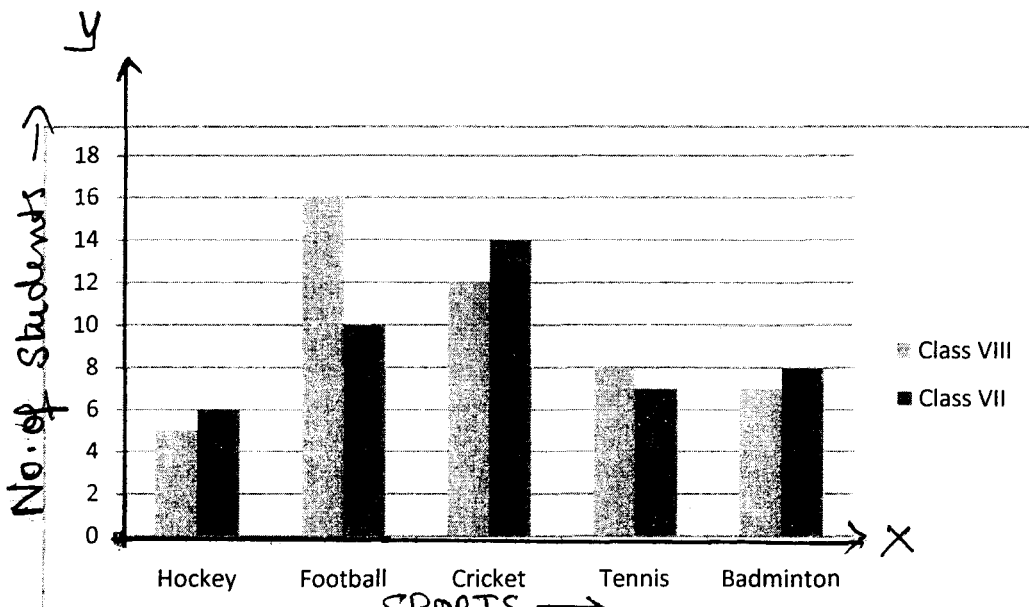
SECTION-C (3 x 9 =27)

12. Express 270×108 as product of prime factors in exponential form.
13. Construct an isosceles triangle in which the length of equal sides is 6 cm and the angle between them is 110° .
14. Find $3\frac{1}{5} \div 1\frac{2}{3}$.
15. In the figure PQ is a line. Find the measure of $\angle POR$ and $\angle ROQ$.



16. (i) Simplify and write the answer in exponential form. $[(2^2)^3 \times 3^6] \times 5^6$ Mention the laws used.
- (ii) Express 5983.52 in standard form (2marks +1 mark)
17. Frame an equation and solve it: 'Thrice a number decreased by five gives 10'. Find the number.
18. Construct triangle PQR where $m\angle Q = 90^\circ$, $QR = 8\text{cm}$ and $PR = 10\text{cm}$.
19. Solve $16 = 4 + 3(t+2)$.
- Or
- $34 = 4 + 5(p-1)$.

20. Study the double bar graph given below and answer the following questions.
- (i) How many students of class VII like badminton more than hockey ?
- (ii) Find the ratio of the students who like foot ball in class VIII to that in class VII?
- (iii) What is the total number of students who like cricket?



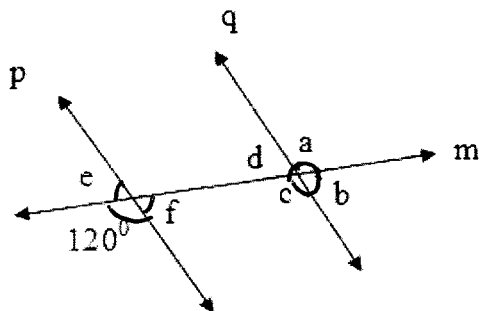
SECTION-D (4 x 9 =36)

21. (i) Divide $42.85 \div 0.02$

(ii) Find the product of the reciprocal of $1\frac{2}{4}$ and reciprocal of $\frac{4}{3}$.

22. The weight of 7 students in kilo gram are as follows. 39.5, 43, 44.5, 51, 47, 49, 41. Find the mean and median of the data. How many students have weight less than mean weight?

23. In the given figure, 'p' is parallel to 'q'. Find the measure of the angles a, b, c, d, e and f. Mention the properties used.



24. Construct a triangle ABC if $AC = 7$ cm, $m\angle A = 60^\circ$ and $m\angle B = 50^\circ$.

Or

Construct a triangle PQR if $PQ = 6.5$ cm, $m\angle P = 45^\circ$ and $m\angle R = 70^\circ$.

25. (i) A car runs 20 km using 2 liters of petrol. How much distance will it cover using 15.6 liters of petrol?

(ii) 15 meter = _____ kilo meter.

26. Manu says that he has 12 marbles more than one-fifth of the marbles Sonu has. Find the number of marbles Sonu has if Manu has 32 marbles.

27. Simplify using laws of exponents: $12 \times 5^2 \times 2^3 \times t^8$

$$\frac{\quad}{10^3 \times 5^2 \times t^5}$$

28. The table below shows the flavours of ice cream liked by children (boys and girls) of a society. Draw a double bar graph with appropriate scale to represent the given information and answer the following questions.

Flavour	Vanilla	Chocolate	Mango	Butterscotch	Strawberry
Boys	4	9	8	13	3
Girls	8	12	9	10	7

- (i) Which flavour is liked most by boys?
- (ii) How many children like mango flavour?

29. In the figure, OR is perpendicular to PQ. Indicate a pair of angles that are

- (i) Vertically opposite
- (ii) Linear pair
- (iii) Complementary
- (iv) Adjacent but not linear pair.

