INDIAN INTERNATIONAL SCHOOL ,DAMMAM
II TERM EXAM - DEC. - 2017

SUBJECT - MATHS **TIME - 3 Hrs**

CLASS - VIII **MAX. MARKS - 80**

SET A

Instructions:

I. This question paper consists of 29 questions divided into 4 sections,Section A, Section B,Section C and Section D.

II. All questions are compulsory.

III. Section A consists of 5 questions of 1 mark each ,Section B consists of 6 questions of 2 marks each,Section C consists of 9 questions of 3 marks each and Section D consists of 9 questions of 4 marks each.

IV. There is no overall choice. However internal choice is given in one question of Section B,Section C and Section D each.

Section – A **(1 X 5 = 5M)**

1. Solve: $\frac{2x}{3} = 18$
2. Write the rational number/s which is equal to its reciprocal.
3. When a die is thrown, what is the probability of getting a prime number?
4. Identify the coefficients of x and y in the following expression: $\frac{x}{2} - \frac{y}{4}$
5. Find the common factors of the following terms: $2x, 3x^2, 4$

Section – B **(2 X 6 = 12 M)**

6. Find four rational numbers between $-\frac{2}{3}$ and $-\frac{3}{4}$

Or

6. Draw a number line and represent $\frac{2}{7}, \frac{4}{7}, -\frac{2}{7}, -\frac{8}{7}$ on it
7. Solve: $\frac{15}{4} - 7x = 9$
8. Use a suitable identity to solve: (2x+5y) (2x+3y)
9. Simplify: 3x (4x-5) + 3 and find its value for x = -2
10. Factorise: 6xy - 4y + 6 - 9x
11. Check the divisibility of 15287 by 3 using divisibility rules.

Section – C **(3 X 9 = 27 M)**

12. Subtract $4y(3y^2 + 5y - 7)$ from $2(y^3 - 4y^2 + 5)$
13. The sum of three consecutive multiples of 9 is 324.Find these multiples.

14. Name the property under multiplication used in each of the following:

i) $\frac{4}{5} \times 1 = \frac{4}{5}$

ii) $-\frac{13}{17} \times \frac{2}{7} = \frac{2}{7} \times -\frac{13}{17}$

iii) $\frac{19}{29} \times \frac{29}{19} = 1$

15. The grouped frequency distribution table given below shows daily earnings of 40 Workers:

Daily earnings in Rs.	150-200	200-250	250-300	300-350	350-400
Number of workers	4	12	15	7	2

Answer the following questions based on the frequency table

i) How many workers get daily wages Rs. 300 or more?

ii) If a person getting wages less than Rs. 200 daily is considered to be in poor class then how many workers are in poor class?

iii) Write lower class limit of the class in which there are maximum workers.

16. Construct a parallelogram PQRS in which PQ=4.5 cm, QR=3.5 cm, and PR=3.5cm

OR

16. Construct a square of side 4.5cm

17. Factorise: i) $5y^2 + 2yz - 20y - 8z$

ii) $16p^2 + 40pq + 25q^2$

18. There are 100 students in a hostel. Food provisions for them is for 20 days. How long will these provisions last if 25 more students join the group?

19. On a particular day, the sales (in Rs.) of different items of a bakers shop are as Follows: Draw a Pie Chart for the below data.

Ordinary Bread	320 Rs
Fruit Bread	80 Rs.
Cakes and pastries	160 Rs.
Biscuits	120 Rs.
Others	40 Rs.

20. A train is moving at a uniform speed of 75 km./hour.
    i) How far will it travel in 20 mins?
    ii) Find the required time to cover a distance of 250 km.

Section – D

(4 X 9 = 36 M)

21. Using appropriate properties find the value of :-

$$\frac{1}{2} \times \frac{1}{4} + \left(-\frac{7}{18}\right) \times \frac{15}{7} - \frac{1}{4} \times \frac{1}{3}$$

22. The ages of Farhan and Rahul are in the ratio 3:4. Eight years from now the ratio of their ages will be 5:6. Find their present ages.

23. Construct a quadrilateral MORE where MO=OR= 4cm, ME=5.5cm, $<M=90^0$and $< O=105^0$.

24. Following are the marks of a test of 50 students of class 8.Taking group interval 20-40, 40-60, ... make a frequency distribution table .Based on the frequency distribution table draw a histogram .
    19 , 39 , 41 , 61 , 99 , 1 , 20 , 52 , 60 , 95 , 94 , 89 , 63 , 75 , 61 , 77 , 59 , 45 , 21 , 32 , 5 , 54 , 48 , 79 , 76 , 64 , 67 , 82 , 85 , 17 , 35 , 20 , 50 , 48 , 58 , 67 , 72 , 72 , 72 , 87 , 75 , 77 , 45 , 44 , 92 , 76 , 78 , 79 , 76 , 41

25. Sum of the digits of a two digit number is 8. After interchanging the digits, the resulting number is greater than the original number by 36. What is the original Number?

26. Divide as directed:- $(m^2 - 14m - 32) \div m + 2$

27. Evaluate using suitable identities:
    i) $54^2 - 46^2$ ii) 102×103

OR

27. Simplify: $(a+b)(2a-3b+c) - (2a - 3b - c)(a - 2b) - 2ab$

28. Simplify: $(4m+5n)^2 - (5m-4n)^2$

29. Factorise completely: $x^4 - (x - z)^4$

x----------x----------x----------x