	INDIAN SCHOOL AL WADI AL KABIR

REVISION PAPER FINAL EXAM (2023-24)

Class: VIII   Sub: MATHEMATICS   Max Marks: 80

Instructions:

Section A: Multiple Choice Question (Q.1 to Q.15) & Source based Question (Q.16)

Section B: Short Answer Questions of 2 marks each (Q.17 to Q.21)

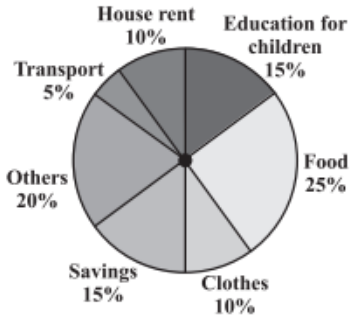Section C: Long Answer Questions (Type – 1) of 3 marks each (Q.22 to Q.27)
Section D: Long Answer Questions (Type – 2) of 4 marks each (Q.28 to Q.33)
        & Case study Question (Q.34 & Q.35) of 4 marks each.

	Section A: Multiple Choice Question (Q.1 to Q.15) of **1** mark each							
1.	If 60% people in a city like cricket, 30% like football and the remaining like other games, then what per cent of the people like other games?							
	A	100%	**B**	10%	**C**	90%	**D**	30%
2.	Find the volume of a rectangular box with $xy, 2x^2y$ and $2xy^2$ as length, breadth and height respectively.							
	A	$2x^4y^4$	**B**	$1x^3y^3$	**C**	$4x^4y^4$	**D**	$4x^3y^3$
3.	The multiplicative inverse of $\frac{-7}{4} \times \frac{1}{4}$							
	A	$\frac{7}{16}$	**B**	$\frac{4}{7}$	**C**	$\frac{-16}{7}$	**D**	$\frac{7}{16}$
4.	An item marked at ₹ 900 is sold for ₹ 792. What is the discount %?							
	A	12%	**B**	15%	**C**	10%	**D**	8%
5.	The cost of an article was ₹5000. The sales tax charged was 5%. What will be the bill amount							
	A	₹ 5200	**B**	₹ 5100	**C**	₹ 5250	**D**	₹ 5400
6.	Find the value of x, if $4x = 52^2 - 48^2$							
	A	400	**B**	4	**C**	100	**D**	16
7.	A bag has 4 red balls and 2 yellow balls. A ball is drawn from the bag without looking into the bag. What is probability of getting a white ball?							
	A	1	**B**	0	**C**	$\frac{1}{2}$	**D**	$\frac{1}{4}$

8.	The value of $[\frac{3}{5} \times \frac{-2}{7}] + [\frac{3}{5} \times \frac{3}{14}]$							
	A	$\frac{3}{60}$	**B**	$\frac{15}{14}$	**C**	$\frac{-3}{14}$	**D**	$\frac{2}{35}$

9.	Find the perimeter of a triangle whose sides are $2x^2 + 3xy - 11y$, $x^2 + 11xy + 3y$ and $-x^2 - xy - y$.							
	A	$2x^2 + 13xy - 9y$	**B**	$x^2 + 11xy + 3y$	**C**	$-x^2 - xy$	**D**	$-3xy - y$

10.	A garrison of 300 men had food for 20 days. However, 50 men leave. Now the food will last:							
	A	26 days	**B**	24 days	**C**	120 days	**D**	18 days

11.	The factorization of 12a²b + 15ab² gives							
	A	3a(4a+5b)	**B**	3ab(4a+5b)	**C**	12ab(a + b)	**D**	4ab(3a +5b)

12.	Divide: $(25p^2 - 16)$ by $(5p + 4)$							
	A	$25p + 16$	**B**	$5p + 4$	**C**	$5p - 4$	**D**	$25p + 4$

13.	Find: $(-36y^3) \div 9y^2$							
	A	$4y$	**B**	$-12y$	**C**	$-4y^2$	**D**	$-4y$

14.	If the cost of 12 books is ₹ 450, then the cost of 16 books is:							
	A	₹ 615	**B**	₹ 500	**C**	₹ 600	**D**	₹ 650

15.	The coordinate of a point at a distance of 5 units from the x-axis and 2 units from the y-axis is:							
	A	(2,5)	**B**	(5,2)	**C**	(5,5)	**D**	(2,2)

Q16.	**Source based Question (5 Marks):**								
	Adjoining pie chart gives the expenditure (in percentage) on various items and savings of a family during a month.								

I	On which item, the expenditure was maximum?						
	A	Transport	**B**	Food	**C**	others	**D**	clothes

II	Expenditure on which item is equal to the total savings of the family?						
	A	Rent	**B**	Clothes	**C**	Education for children	**D**	Transport

III	If the monthly savings of the family is ₹ 3000, what is the monthly expenditure on clothes?						
	A	₹ 5000	**B**	₹ 20000	**C**	₹ 13000	**D**	₹ 17000

IV	What is the amount spent on transport?						
	A	₹ 100	**B**	₹ 1000	**C**	₹ 7000	**D**	₹ 3000

V	Amount spend on rent and clothes together is:						
	A	₹ 1000	**B**	₹ 4000	**C**	₹ 2000	**D**	₹ 10000

Section B: Short Answer Questions (Type – 1) of **2** marks each (Q.17 to Q.21)

17.	Find the value using property: $\frac{-4}{5} \times \frac{18}{7} \times \frac{15}{16} \times \frac{-21}{9}$
18.	A table marked at ₹15,000 is available for₹14,400. Find the discount given and the discount per cent.
19.	Find interest and amount to be paid on ₹ 50000 at 5% per annum after 2 years.
20.	A truck needs 34 litres of diesel for covering 204 km. Find the diesel required by the truck to cover a distance of 300km.
21.	Find the area of a rectangle whose length is $(2x + 7)$units and breadth is $(x - 5)$units.

|	**Section C**: Long Answer Questions (Type – 1) of **3** marks each (Q.22 to Q.27)
22.	Simplify the following using suitable identities: $$\left(\frac{2}{5}p + 3\right)\left(\frac{2}{5}p + 3\right)$$
23.	Insert any four rational numbers between $\dfrac{-3}{4}$ and $\dfrac{-4}{5}$
24.	A train is moving at a uniform speed of 75 km/hour. (i) How far will it travel in 20 minutes? (ii) Find the time required to cover a distance of 250 km.
25.	The factorization of $mx + my + nx + ny$ is
26.	Jency bought an air cooler for ₹ 4400 including a tax of 10%. Find the price of the air cooler before VAT was added.
27.	Plot the following points on the graph sheet: A(0, 0), B(4, 5), C(6, 2), D(0, −2)
	Section D: Long Answer Questions (Type – 2) (Q.28 to Q.33) & Case study (Q.34 &35) of **4** marks each
28.	Represent $\dfrac{-2}{7}$, 0, $\dfrac{1}{7}$, $\dfrac{3}{7}$, 1 on a Number line.
29.	Find CI on ₹ 26100 for 2 years at 10% per annum compounded annually.
30.	If x and y vary directly find the values of A, B, C and D | x	27	A	9	C	18
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y	63	7	B	14	D	
31.	Verify that $(13ab + 4b)^2 - (13ab - 4b)^2 = 208ab^2$
32.	The number of days a city received a rainfall in different years. | Year	2004	2005	2006	2007	2008
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Days	25	20	15	10	5	 Draw the graph for the above given table of values with suitable scales on the axes. Is it a linear graph?
33.	The population of a city was 20,000 in the year 1997. It increased at the rate of 5% p.a. Find the population at the end of the year 2000.

34.	**Case Study-1**
	The adjoining graph shows the distribution of the marks obtained by 60 students in Mathematics test. Observe the histogram and answer the questions given below:
	a) What is the size of the class intervals?
	b) Which class has the highest frequency?
	c) What is the upper limit of the class interval 30-40?
	d) How many students secured marks between 20 to 40 marks?
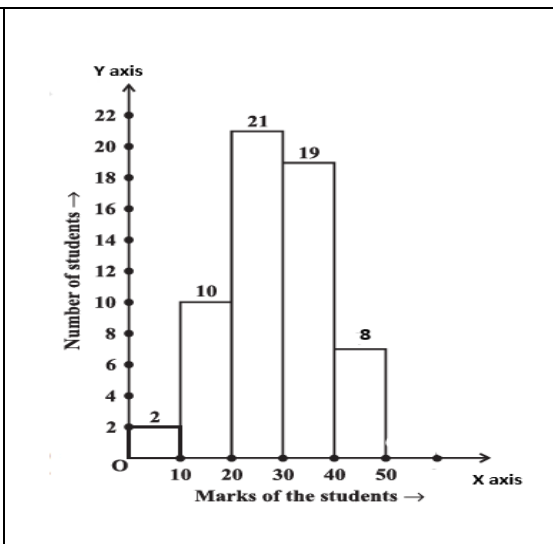
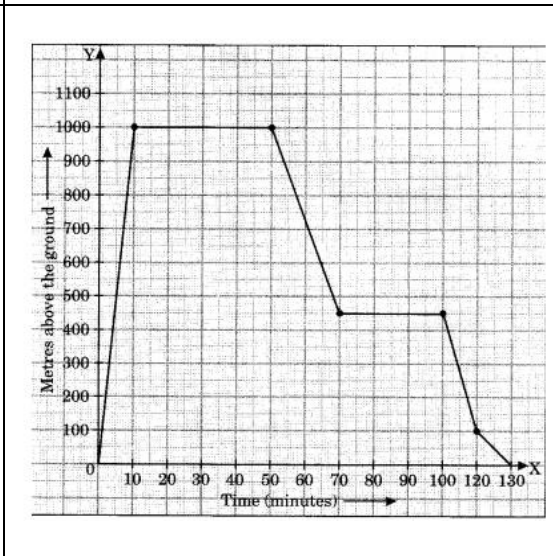| 35.	**Case Study-2**
	Holidays started, Pradeep planned a trip with his friends from Delhi to Manali.
	The given graph shows the flight of an aero plane.
	(i) What are the scales taken on x-axis and y-axis?
	(ii) How long was the plane in level flight?
	(iii) What was the speed of the aero plane while rising?
	(iv) How long did the whole flight take?

ANSWERS

1	B	2	C	3	C	4	A	5	C
6	C	7	B	8	C	9	A	10	B
11	B	12	C	13	D	14	C	15	A
16	i-B, ii-C, iii-D, iv-A, v-B	17	$\frac{63}{2}$	18	₹600, 4%	19	SI=₹5000, A=₹55000	20	50 l
21	$2x^2 - 3x - 12$	22	$\frac{4}{25}p^2 + \frac{12}{5}p + 9$	23	$\frac{-151}{200}, \frac{-152}{200}, \frac{-153}{200}, \frac{-154}{200}$	24	25km, 3hr20min.	25	$(x + y)(m + n)$
26	₹ 4000	27		28		29	₹ 5481	30	A=3, B=21, C=6, D=42
31		32		33	23153 people	34	a)10, b)20-30, c)40, d)40	35	a) x-10min., y-100m b)40+30=70 c)1000m/min d)2hrs.10min.