INDIAN SCHOOL AL WADI AL KABIR

Final Exam Revision Paper (2023-24)

Class: VII 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)

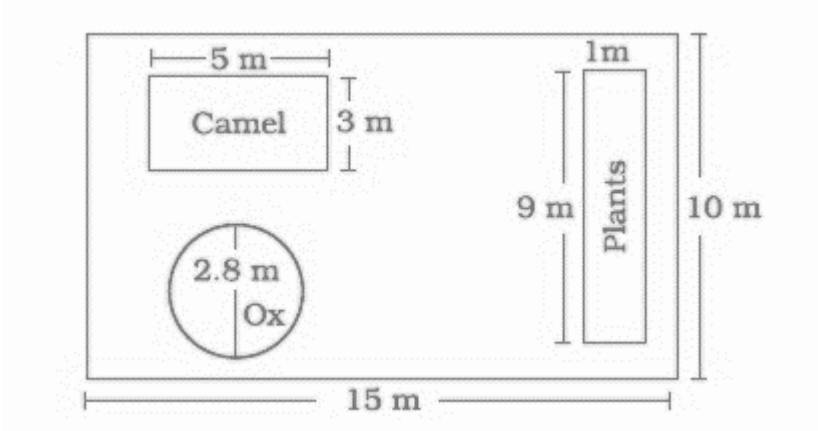
Section C: Long Answer Questions (Type – 1) of 3 marks each (Q.22 to Q.27)

Section D: Long Answer Questions (Type – 2) of 4 marks each (Q.28 to Q.33)

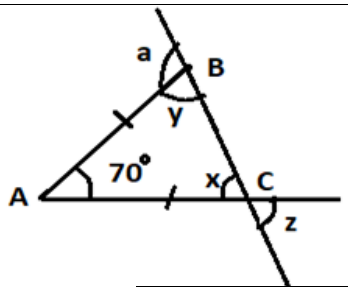
& Case study Question (Q.34 & Q.35) of 4 marks each.

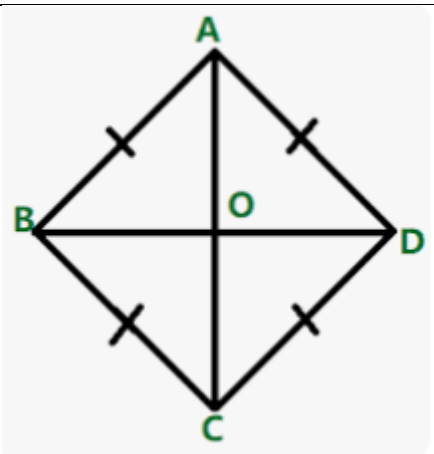
Section A: Multiple Choice Question (Q.1 to Q.15) of **1** mark each								
1.	The range of the data 12,27,85,19,16 and 22							
	A	63	**B**	73	**C**	66	**D**	85
2.	The area of the triangle whose base is 3.5cm and height is 8.8cm is:							
	A	12.3 cm	**B**	30.8 cm	**C**	15.4 cm	**D**	13.2cm
3.	Rani bought a circular disc. If the circumference of the circular disc is 154 m, its diameter is:							
	A	49cm	**B**	14cm	**C**	28cm	**D**	24.5cm
4.	The numerical coefficient of the term containing xy in the expression $-2x^2 + 5y^2 - 8xy$							
	A	-2	**B**	-8	**C**	5	**D**	8
5.	The reciprocal of $\frac{1}{7} \times \frac{21}{-5}$							

	A	$\frac{3}{-5}$	**B**	$\frac{-3}{-5}$	**C**	$\frac{-5}{3}$	**D**	$\frac{5}{3}$
6.	Two angles of a triangle are in the ratio 2:3 and the third angle is 75^0. The measure of angles are:							
	A	52^0, 73^0	**B**	42^0, 73^0	**C**	42^0, 63^0	**D**	52^0, 63^0
7.	The standard form 28510000 is:							
	A	2.851×10^7	**B**	2.851×10^4	**C**	0.2851×10^7	**D**	2.851×10^5
8.	The value of the expression $2m^2 - 3mn + 6n^2$ for m = (-2) and n = 3							
	A	27	**B**	90	**C**	26	**D**	39
9.	The standard form of rational number $\frac{48}{-42}$							
	A	$\frac{8}{-7}$	**B**	$\frac{6}{7}$	**C**	$\frac{-8}{7}$	**D**	$\frac{24}{21}$
10.	The area of a rectangle of length 12cm and diagonal 13cm is:							
	A	$60cm^2$	**B**	156 cm^2	**C**	$65cm^2$	**D**	$300cm^2$
11.	The sum of $-5abc + 3$, $7abc - 11$ and $2abc - 9$							
	A	$14abc + 17$	**B**	$9abc - 23$	**C**	$4abc + 1$	**D**	$4abc - 17$
12.	The value of $\left[\frac{7}{12} \times \frac{9}{14}\right] \div \frac{-27}{16}$							
	A	$\frac{-9}{2}$	**B**	$\frac{-2}{9}$	**C**	$\frac{-11}{12}$	**D**	$\frac{-12}{11}$
13.	The mean of first 5 prime numbers is:							
	A	3.6	**B**	6.5	**C**	6.3	**D**	5.6

14.	A shopkeeper bought a shirt for ₹ 850 and sold for ₹ 952.The profit percentage in this sale is:							
	A	12%	**B**	10%	**C**	15%	**D**	8%
15.	$-a^2b + 7pq$ can be classified as							
	A	Monomial	**B**	Binomial	**C**	Trinomial	**D**	Can't say
Q16.	Source based Question -5 Marks People of khejadli village take good care of plants, animals. They say that plants and animals can survive without us, but we cannot survive without them. Inspired by this Amrita marked some lands for her pets and plants as shown in figure. Based on the information answer the following questions (π= 3.14) 							
I	The area of the circular part marked to keep ox is:							
	A	24.64m^2	**B**	6.61m^2	**C**	6.16 m^2	**D**	12.61m
II	The cost of fencing the land at ₹ 45.5 per metre is:							
	A	₹2275	**B**	₹6825	**C**	₹5227	**D**	₹5268
III	The area marked for plants is:							
	A	15m^2	**B**	20m^2	**C**	9m^2	**D**	16m^2
IV	Amrita wants to level the land marked for plants ₹85 per m^2 is:							
	A	₹1700	**B**	₹765	**C**	₹1550	**D**	₹1275
V	The area of land not marked is:							

	A	109.44m^2	**B**	129.34m^2	**C**	239.84m^2	**D**	119.84m^2
Section B: Short Answer Questions (Type – 1) of **2** marks each (Q.17 to Q.21)								
17.	The height of 7students of class 7 are given as 148cm,151cm,146cm,152cm,146cm,155cm and 149cm.Find the median height.							
18.	Tanu bought a mobile phone for ₹36000. After two years its price reduced to ₹29520.Find the percentage of decrease in price.							
19.	At the centre of a party hall, laid a circular tile. Find the area of a circular tile, whose diameter is 80 cm (use π= 3.14).							
20.	Manu spent 23% of money he had on books and 12% for food. He was left with ₹ 3120. How much money he had in the beginning?							
21.	Simplify and evaluate: $a^3 - 3a^2b + 2$ if a = -1 and b= 2							
Section C: Long Answer Questions (Type – 1) of **3** marks each (Q.22 to Q.27)								
22.	Represent $\frac{-4}{9}$, $\frac{-1}{9}$, 0 , $\frac{7}{9}$ and 1 on the same number line							
23.	Identify the terms and their factors in the following expressions and show the terms and factors by tree diagrams. $-3x^2yz + 5xyz - 2xy^2$							
24.	The number of students 9 sections of class 7 are given: 45,42,44,40,42,43,41,39,42 1. Find the mean. 2. Find the median 3. What is the mode							
25.	Express the powers of prime factors of 256 × 108							

26.	Ria cut a circle of radius 3.2cm from an Aluminum sheet which is in the shape of a parallelogram of base 12.2cm and height 8.4 cm. Find the area of remaining sheet (take π= 3.14)
27.	Find the amount to be paid for₹56500 at 12% p.a interest at the end of 3 years.
	Section D: Long Answer Questions (Type – 2) (Q.28 to Q.33) & Case study (Q.34 &35) of **4** marks each
28.	A garden is 120 m long and 95m broad. A path 4.5 m wide is to be built outside and around it. Find the area of the path. Also find the cost of planting grass in the garden at the rate of ₹ 50.75
29.	Aditi, Anu and Aami collected money for a charity. Amount of money collected them are ₹ $(7m^2 + 5mn + 17)$ ₹$(10m^2 + 7mn - 9)$ and ₹$(5m^2 + 2mn + 3)$. Find total money collected.
30.	In ΔABC , AB = AC. find the value x, y, z and a (Give reasons) 
31.	Simplify by using laws of Exponents: $\frac{12^4 \times 9^3 \times 4}{6^3 \times 8^2 \times 27}$
32.	Insert any 5 rational numbers between $\frac{-4}{5}$ and $\frac{-5}{6}$
33.	Ramesh bought a television for ₹ 18,000 and sold it for ₹16,200. (a)Find loss and loss percent. (b) To get 12% profit with the same cost price, what would be the selling price?

34.	**Case Study-1** Mr. Kaushik has a land in the shape of a Rhombus. He planned to divide the land among his two sons, daughter and his wife equally as shown in figure AC = 80 m BD=60m. Based on the information answer the following questions I. Find the area of land each one of them will get? II. Find the cost of fencing the whole land at the rate of ₹ 105. III. The sons decided to level the land for cultivation of crops. How much they have to spend for this if it costs ₹ 112 per m^2 
35.	**Case Study-2** During the math class on algebraic expression, teacher asked to do group discussion on the topic and asked to find out the answers of few questions by each group. Based on the information answer the following questions I. Find the sum of the expressions $7a^2 + 2a - 5b + 3$ and $-2a^2 + 3a - 7b + 6$ II. What should be added $-3xy + 5y$ to get $8xy - 11y$ III. The factors of the expression $7x^2yz^3$.

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ANSWERS

Q1 B	Q2 C	Q3 A	Q4 B	Q5 C	Q6 C	Q7A	Q8 B	Q9 C	Q10 A
Q11 D	Q12 B	Q13 D	Q14 A	Q15 B	Q16. i)C, ii)A, iii)B,iv)D	Q17 149 cm	Q.18 18%	Q19. 5024cm^2	Q20. ₹4800
Q21 (-5)	Q22. Do as directed	Q23. Do as directed	Q24. 1)42 2)42 3)42	Q25. $2^{10}\times3^3$	Q26. 70.33cm^2	Q27. ₹76840	Q28. 2016m^2, ₹1,02,312	Q29. ₹ $(22m^2+14mn+11)$	Q30. $x=55°$, $z=55°$, $y=55°$, $a=125°$
Q31. 2×3^4	Q32. Any 5 rational no.s	Q33. a)₹1800,10% b) ₹20,160	Q34. i)600m^2 ii) ₹21000 iii) ₹134400	Q35. i)$5a^2+5a-12b+9$ ii) $11xy-16y$ iii)7, x,x,y,z,z,z					