





# Certificate of Participation

This certificate is awarded toAY	AAN GOEL		
Class 08	Roll no	DL016808006	
student of G.D. GOENKA PUBLIC	C SCHOOL		
SECTOR-B, POCKET 8 & 9, VASA	NT KUNJ		
NEW DELHI, DELHI			
He/She participated in SOF Inte	rnational M	athematics Olympia	ad conducted during
November 2021 - February 2022	& secured I	nternational Rank	960
Regional Rank 594 Zona	ıl Rank	180 & School F	Rank 2
He/She is also awarded a Gold the School level.	Medal of Ex	cellence for Perfor	mance Excellence at

New Delhi | Gurugram April, 2022 Mahabir Singh Founder Director

Dr. Narindra Virmani Chairman



STUDENT PERFORMANCE REPORT 2021-22

**An Indepth Analysis of Student's Subject Knowledge** 

School Code: DL0168 Class: 08

Roll No.: DL016808006 Student's Name: AYAAN GOEL

G.D. GOENKA PUBLIC SCHOOL NEW DELHI, DELHI School Name:





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#### Dear Parents,

#### **STUDENT PERFORMANCE REPORT- SOF IMO – 2021-22**

Congratulations on your child's participation in the **SOF International Mathematics Olympiad** conducted during November 2021 - February 2022. The SOF IMO is conducted annually by SOF, organizer of the World's Biggest Olympiad Exams.

Please find enclosed the Student Performance Report (S.P.R.) of your ward for SOF IMO.

This Performance Report provides the following analysis:

- It details the performance of the student in SOF International Mathematics Olympiad and provides question wise answers given by the student.
- It identifies the "LEARNING GAPS" of the student in Mathematics and shares topics/areas in which the student needs to improve domain knowledge / subject understanding.
- It compares the student's performance with peer group of students to assist in understanding her/his subject knowledge vis-à-vis other students across the school/city/state/globe and identifies topics/areas requiring focussed efforts.
- It traces the performance of the student over the past several years (during which the student has appeared in SOF Olympiads) and highlights progress made versus his/her peer group.

I wish you and your child all the best and pray that you utilize your energies and time in consonance with your mission and achieve academic success.

**With Best Wishes,**Mahabir Singh
Founder Director



### **PERFORMANCE ANALYSIS**



**CURRENT YEAR'S PERFORMANCE** 

I.M.O. 2021-22

Roll No: DL016808006 REGION: NORTH

SCHOOL: G.D. GOENKA PUBLIC SCHOOL ZONE: DELHI ZONE

NAME

CITY: NEW DELHI COUNTRY: INDIA

STATE: DELHI

Award Won: Gold Medal of Excellence

Participation Certificate and Student Performance Report

◆ Maximum Marks : 60

◆ Marks Scored : 45

Percentile Score : 90.20

♦ School Rank : 2

City Rank : 179

❖ Zonal Rank : 180

Regional Rank : 594

♣ International Rank: 960

MARKS COMPARISON

Marks Scored by You : 45

♣ Highest Marks Scored in Your Class : 51

♦ Highest Marks Scored in Your City : 60

♣ Highest Marks Scored in Your Zone : 60

♦ Highest Marks Scored in Your Region : 60

Highest Marks Scored Internationally : 60

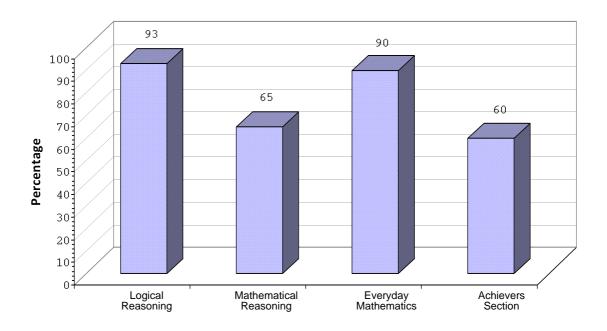
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### TOPIC WISE ANALYSIS



S.NO.	SECTION NAME	TOTAL MARKS (In Section)	MARKS SCORED (In Section)	PERCENTAGE	GRADE	DESCRIPTION
1.	Logical Reasoning	15	14	93	A+	OUTSTANDING
2.	Mathematical Reasoning	20	13	65	В	GOOD
3.	Everyday Mathematics	10	9	90	А	EXCELLENT
4.	Achievers Section	15	9	60	C+	FAIR
	Total	60	45	75	B+	VERY GOOD



Percentage	Grade	Description
91-100%	A+	Outstanding
81-90%	Α	Excellent
71-80%	B+	Very Good
61-70%	В	Good

Percentage	Grade	Description
51-60%	C+	Fair
41-50%	С	Average
0-40%	D	Needs Improvement



## QUESTION WISE ANALYSIS



Q.NO.	QUESTIONS	CORRECT ANSWER	YOUR ANSWER CORRECT/WRONG	CORRECT ANSWER %
	SECTION: LOGICAL REASONING			
1	Facing towards East, Ankit walks 4 m, then he turn left and walks 8 m, then again turn left and walks 4 m. Then, he takes a right turn and walks 7 m. After that he takes a left turn and walks 6 m. Then again turn left	А	✓	33.72
2	The given question consists of a set of four figures P, Q, R and S showing a sequence of folding of a piece of paper. Fig. (S) shows the manner in which the folded paper has been cut. Select the figure from the options	А	×	60.43
3	If in all the numbers, 3 is added to all the even digits and 1 is subtracted from all the odd digits, then which number become smallest? 465, 263, 345, 516, 732	С	✓	46.24
4	If Q is father of T and P is son of U, where U is married to T and S is the brother of T. Then, how is P related to S?	А	✓	77.06
5	In the following letter series, how many M's are immediately preceded by 'a vowel' and immediately followed by 'a consonant'? HPEMXTMRHIMRCKIMHPTLUMONUS	В	✓	57.84
6	There is a certain relationship between figures (i) and (ii). Establish the similar relationship between figures (iii) and (iv) by selecting a suitable figure from the given options, which will replace the (?) in figure (iii).	В	✓	86.19
7	Select a figure from the options which does not satisfy the same conditions of placement of the dots as in the given figure.	А	✓	41.25
8	Find the number of squares in the given figure.	D	✓	48.27
9	If ' > ' stands for 'division', ' < ' stands for 'multiplication' and '=' stands for 'addition'. Then, the value of $72 > 8 < 9 = 15 > 3$ is	D	✓	76.79
10	Group the given figures into three classes on the basis of their identical properties using each figure only once.	В	✓	60.80
11	Find the correct water image of the given figure.	D	✓	71.93
12	Find the missing figure which will replace the (?) to complete the series.	В	✓	77.84
13	In a certain code language, 'CORRECT' is written as 'HTWSZXO'. How will 'PERFECT' be written in that language?	В	✓	77.55
14	If interchange of × and – as well as 3 and 7 are made, then which of the following options will become correct?	D	✓	59.56
15	In the given Venn diagram, triangle represents teachers, circle represents child specialist doctors and square represents women specialist doctors. Which of the following numbers represent teachers who are child	С	✓	71.92
	SECTION: MATHEMATICAL REASONING			
16	Given below are the steps of construction to construct a quadrilateral ABCD, where $AB = 5.6$ cm, $BC = 4.1$ cm, $CD = 4.4$ cm, $AD = 3.3$ cm and . Which of the following is incorrect step? Step-I: Draw $AB = 5.6$ cm and	С	×	38.50
17	In the given figure (not drawn to scale), $\angle B$ and $\angle C$ are right angles and $O$ is the mid-point of $AD$ . Then, which of the following options is correct?	В	✓	70.14
18	Which of the following rational numbers does not lie on the number line between the numbers	С	<b>√</b>	48.15
19	Study the given graph carefully and answer the following question. What is the sum of the ordinates of points P, Q, R and T?	А	✓	52.43
20	A die is thrown randomly. Find the probability of getting a prime number.	А	✓	62.86
21	Find the product of R and S.	В	✓	73.45
22	Find the value of $\sqrt{\frac{2304}{256}} \div \sqrt{\frac{2916}{4096}}$ .	С	✓	47.88
23	In the given figure (not drawn to scale), I $\mid \mid$ m and p and q are intersecting lines, find the value of x.	А	×	45.66
24	Find the principal amount, if compound interest is ? 15,608 at the rate of 4% per annum compounded annually and time is 3 years.	В	×	44.36
25	Observe the given graph and answer the following question. The coordinates of P are	А	✓	65.15



### QUESTION WISE ANALYSIS



Q.NO.	QUESTIONS	CORRECT ANSWER	YOUR ANSWER CORRECT/WRONG	CORRECT ANSWER %
	SECTION: MATHEMATICAL REASONING			
26	Find the volume of the cube whose surface area is 1944 m2.	D	×	45.76
27	Divide: $(x^2 - x - 12)(x - 3)$ by $(x^2 - 9)$ .	D	×	35.85
28	The sum of the cost of a school bag and a water bottle is ? 976. If the cost of the bottle is one-third of the cost of the school bag. Find the cost of the water bottle.	D	✓	56.67
29	The numerator of a rational number is 6 less than its denominator. If numerator is increased by 1 and denominator is decreased by 2, the number so obtained is , then what is the rational number?	В	✓	55.77
30	In the given figure, (not drawn to scale)? Then, find the value of z.	А	✓	63.92
31	Which of the following is the top view of the given figure?	С	✓	91.91
32	If $x^4 + \frac{1}{x^4} = 194$ , then find the value of $x^3 + \frac{1}{x^3}$ .	В	×	39.18
33	For what value of $a$ , $\frac{(3)^a \times 15 \times (5)^{-2}}{(3)^{-6} \times (5)^2} = \frac{27}{125}$ ?	D	✓	29.11
34	If the melting point of iron rod is $204^{\circ}$ C and freezing point of aluminium rod is $-96^{\circ}$ C. Then how much the melting point of iron rod is more than the freezing point of aluminium rod?	С	✓	53.75
35	In the given figure (not drawn to scale), ABCD is a quadrilateral. The area of the quadrilateral is , then find the length of its diagonal AC.	А	×	41.04
	SECTION: EVERYDAY MATHEMATICS			
36	Niharika tossed two coins simultaneously, find the probability of getting exactly one head.	В	×	51.16
37	The total of the present ages of Jiya, Kunal and Sagar is 93 years. Ten years ago, the ratio of their ages was 2 : 3 : 4. What is the present age of Sagar?	D	✓	35.24
38	Anil buys a wire of length 24 m of cost ? 528, then how many metres of wire can he buy for ? 2640 ?	А	✓	60.13
39	A rectangular water reservoir contains 22500 L of water. If its base measures 5 m by 1.5 m, then find the depth of the water in the reservoir.	С	✓	39.87
40	Kanika has 150 picture cards. Tarun has 110 picture cards. How many cards must Kanika give to Tarun so that Tarun will have 4 times as many cards as Kanika?	D	✓	36.90
41	At the end of the 21st century, the world's population was approximately 43270000000. Express this population in standard form.	D	✓	48.76
42	Ramesh bought shirts of different colours out of which are of blue colour, are of pink colour, are of red colour and the rest are of white colour. How many shirts are of white colour, if he bought 342 shirts in total?	D	✓	39.30
43	A gardener has 4112 plants. He planted them such that the number of rows is equal to the number of plants in each row and 16 plants were left over. How many plants were arranged in each row?	В	✓	63.42
44	If ? 14,000 is divided among three friends Priya, Zeba and Jiya such that the amount Priya receives is 4 times as much as Jiya's share and is twice as much as Zeba's share, then find the amount received by Zeba.	В	<b>✓</b>	49.44
45	The principal of a school decided to divide the rectangular playground by a 2 m wide path parallel to the length of the ground and 3 m wide path parallel to its width. Find the remaining area of the ground, if the	А	<b>✓</b>	24.54
	SECTION: ACHIEVERS' SECTION			
46	Fill in the blanks and select the correct option. (i) and $(x - 18)$ are the factors of $2x2 - 35x - 18$ . (ii) If $6 - x - x2 = (A - x)(x + B)$ , then the value of $A + B$ is (iii) The HCF of $2x$ , $20x2$ and $16xy2$ is	В	✓	46.45
47	Find the value of x in each of the following.	С	✓	49.88
48	Arrange the given steps while constructing a quadrilateral PQRS, in which PQ = $3.5$ cm, QR = $4.2$ cm, RS = $5.5$ cm, Steps of construction are Step I : Draw a line segment QR = $4.2$ cm. Step II : With Q as centre, draw Step	D	×	20.83
49	The following graph shows the number of books read by Saumya in a particular week. (i) What fraction of total books Saumya read on Wednesday and Sunday together? (ii) Find the difference between the	С	<b>√</b>	45.45
50	Fill in the blanks:  (i) The family extends number and $g$ is an odd number, then sign of $g''$ is  (ii) The value of $\begin{pmatrix} 4g \\ 2g \end{pmatrix}^{-g'} + \begin{pmatrix} 2g \\ 2g \end{pmatrix}^{-g}$ .  (iv) $\frac{1}{1+g^{-g-1}} + \frac{1}{1+g^{-g-1}}$ is equal to	С	×	40.55

Total Marks: 60 Questions in Achievers section carry three marks each and all other questions carry one mark each.



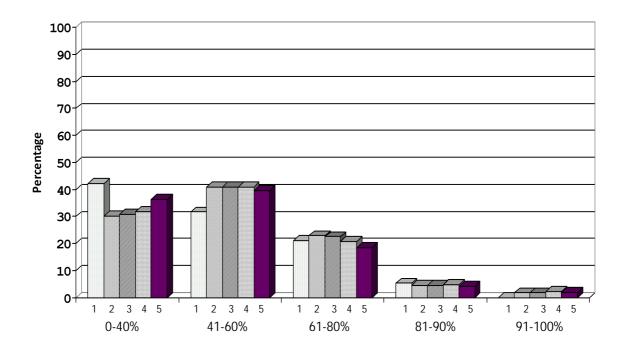
### STUDENT V/S CLASS PERFORMANCE



Maximum Marks	60
Marks Scored	45
Percentage	75.00

S.NO.	Marks Percentage Break-Up	0-40%	41-60%	61-80%	81-90%	91-100%
1.	1. % of Student In Your Class		31.58	21.05	5.26	0.00
2.	% of Student in Your City	30.08	41.00	22.83	4.45	1.65
3.	% of Student in Your Zone	30.70	40.79	22.48	4.38	1.66
4.	% of Student in Your Region	31.68	40.77	20.68	4.75	2.12
5.	% of Student Internationally	36.34	39.47	18.48	3.98	1.73



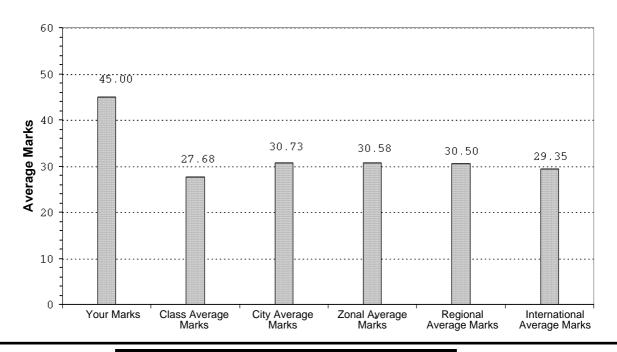




### **AVERAGE MARKS ANALYSIS**



Description	Average Marks
Your Marks	45.00
Average Marks in Your Class	27.68
Average Marks in Your City	30.73
Average Marks in Your Zonal	30.58
Average Marks in Your Region	30.50
Average Marks Internationally	29.35



#### YEAR WISE ANALYSIS

#### PAST 10 YEARS PERFORMANCE COMPARISON

Event Name: SOF-IMO (International Mathematics Olympiad)

Year	Class	School Rank	City Rank	Zonal Rank	Regional Rank	International Rank
2012-13	Not Participated					
2013-14	Not Participated					
2014-15	Not Participated					
2015-16	Not Participated					
2016-17	03	3	275	284	N.A.	2396
2017-18	04	1	70	70	N.A.	169
2018-19	05	1	193	194	N.A.	840
2019-20	06	1	186	190	N.A.	844
2020-21	07	1	340	342	1013	1779
2021-22	08	2	179	180	594	960

Data provided is for the Years' in which student appeared in IMO exam & as available in records.

#### Science Olympiad Foundation,

a brainchild of leading academicians, scientists and media persons, was set up many years ago with the objectives of promoting interest in and identifying, nurturing and rewarding young talent in different academic subjects. This is set to be achieved through competitive exams, seminars and workshops, etc.

#### SOF CONDUCTS THE FOLLOWING **SEVEN OLYMPIAD EXAMS:**

SOF International General Knowledge Olympiad

**SOF International English Olympiad** 

**SOF National Science Olympiad** 

**SOF International Mathematics Olympiad** 

**SOF National Cyber Olympiad** 

**SOF International Social Studies Olympiad** 

**SOF International Commerce Olympiad** 



SOF has been partnering with leading organizations across the globe to add value to its Olympiad exams. Some of the organizations to have partnered SOF are The British Council, Tata Consultancy Services (TCS), The Ministry of Corporate Affairs through The ICSI, Techfest IIT Bombay, Wipro, LG, EFLU, Star Sports and National University of Singapore, among others.

















