



INTERNATIONAL
CATS CONTESTS
COMPETENCE & APTITUDE TESTING SERVICES
FASTEST GROWING CONTESTS IN PAKISTAN

2022
QUESTION
BOOKLET

GRADE 5 & 6
JUNIORS

Time Allowed: 90 Mins.
Maximum Marks: 90



ICATS
MATHEMATICS
CONTEST 2022

ICATS MATHEMATICS CONTEST 2022

JUNIORS (GRADE 5 & 6)

TIME ALLOWED : 90 MINUTES, MAXIMUM MARKS : 90

TOTAL QUESTIONS : 30 MCQS

INSTRUCTIONS

1. DON'T START ATTEMPTING THE PAPER UNTIL INSTRUCTED BY THE INVIGILATORS.
2. INSTRUCTIONS FROM THE EXAMINATION INVIGILATORS MUST BE CARRIED OUT PROMPTLY.
3. CAREFULLY RECHECK YOUR NAME, FATHER NAME, SCHOOL NAME, ADDRESS ETC AT THE BUBBLE SHEET / ANSWER SHEET.
4. RECORD ALL ANSWERS ON THE BUBBLE SHEET ONLY. SELECT BEST ANSWER FROM THE FOUR GIVEN OPTIONS AND MARK ONLY ONE OPTION IN EACH QUESTION.
5. USE BLUE / BLACK INK TO FILL UP THE CIRCLES FOR YOUR ANSWERS ON THE BUBBLE SHEET. USE OF LEAD PENCIL IS NOT ALLOWED.
6. USE OF ANY HELPING MATERIAL INCLUDING CELL PHONES AND ELECTRONIC DEVICES IS STRICTLY PROHIBITED.
7. EVERY CORRECT ANSWER EARNS THREE POINTS. THERE WOULD BE NEGATIVE MARKING. ONE POINT WOULD BE DEDUCTED FOR EVERY INCORRECT ANSWER.
8. CANDIDATES MAY NOT LEAVE THE EXAMINATION ROOM UNESCORTED FOR ANY REASON, AND THIS INCLUDES USING THE WASHROOM.
9. NO MATERIALS OR ELECTRONIC DEVICES SHALL BE BROUGHT INTO THE ROOM.
10. THERE ARE FIVE CATEGORIES OF THE CONTEST AS UNDER:
 - A. TODDLERS (GRADE 1 & 2)
 - B. KIDS (GRADE 3 & 4)
 - C. JUNIORS (GRADE 5 & 6)
 - D. JUVENILES (GRADE 7 & 8)
 - E. ADOLESCENTS (GRADE 9 & 10 / O-LEVELS)
11. REGISTERED STUDENTS CAN PARTICIPATE IN THE CONTEST.
12. NO CANDIDATE SHALL TAKE OUT OF THE HALL ANY ANSWER BOOK(S) OR PART OF AN ANSWER BOOK, WHETHER USED OR UNUSED, OR OTHER SUPPLIED MATERIAL.
13. IF A PARTICIPANT DOES NOT UNDERSTAND A WORD OR PHRASE ON THE EXAM PAPER, NEITHER EXAMINER NOR INVIGILATOR IS PERMITTED TO ANSWER.
14. FOR INFORMATION ABOUT UPCOMING CONTESTS OR PROVIDING VALUABLE FEEDBACK, PLEASE VISIT WWW.CATSCONTESTS.ORG
15. ANY ACADEMIC MISCONDUCT OR MALPRACTICE MUST BE REPORTED TO INTERNATIONAL CATS CONTESTS AT INFO@CATSCONTESTS.ORG

Q1. If you add 1 to the greatest 7-digit number, which number will you get?

A 10,000,000

B 10,000,00

C 100,000

D 100,000,000



Q2. What is the answer to the question below?

$$645 \div 645 - 645 \div 645 = ?$$

A 645

B 0

C 1290

D 322.5



Q3. Which of these is NOT a unit of length?

A centimeter

B mile

C milliliter

D kilometer



Q4. What are the three positive numbers that give the same result when multiplied or added together?

A 1,2,3

B 2,3,4

C 3,4,5

D 4,5,6

Q5. Find the sum of the greatest and the smallest numbers formed by the digits 6, 1, 5, 3 and 4 without repeating any digit.

A 78887

B 87778

C 77888

D 88877



Q6. Meena made this pattern with balls:



Which of the following uses a rule most different from Meena's pattern?



Q7. In an examination, a student attempted 23 questions and got 45 marks. If for every correct answer 3 marks were awarded and for every wrong answer 1 mark was deducted, then how many answers were wrong?

A 4

B 6

C 3

D 9

Q8. Ajay is at 10th position from the top. In the class of 50 students, there are 26 students between Sunil and Ajay. How many students are there in between Sunil and the last student in the class?

A 10

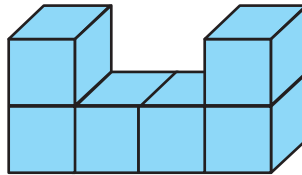
B 12

C 15

D 16



Q9. How would the given block model look from the top?



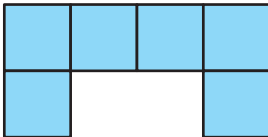
A



C



B



D



Q10. If 'Square' means 'Circle', 'Circle' means 'Triangle' and 'Triangle' means 'Rectangle', then what is the shape of Sun?

A Circle

B Square

C Rectangle

D Triangle

Q11. Find the values of **P** and **Q** respectively.

$$\begin{array}{r}
 9 \text{ P } 2 \ 6 \\
 - 5 \ 9 \ 4 \ 8 \\
 \hline
 3 \ 1 \ 7 \ \text{Q}
 \end{array}$$

A 1, 8

B 8, 1

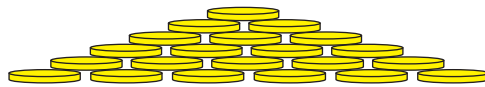
C 1, 9

D 9, 1



Q12. Leena stacked some checkers in a triangular shape as shown below:

Each row has 1 less checker than the previous row.
 Leena made another stack using the same pattern starting with 8 checkers in the bottom row. How many total checkers were there in her new stack?



A 19 checkers

B 21 checkers

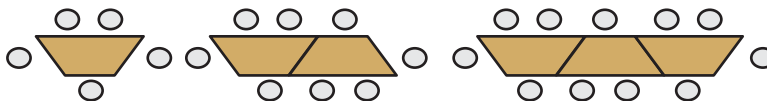
C 29 checkers

D 36 checkers



Q13. At a restaurant, chairs and tables are put together in the pattern shown below.

How many chairs would fit around 6 tables that are put together in the same pattern as shown below?



A 20

B 22

C 24

D 30

- Q14.** Mr. and Mrs. Khan took their 3 children to one of the sporting events shown in the given table. To which sporting event did the Khan family go if the total cost of the tickets was more than Rs. 70.00 but less than Rs. 90.00?

Ticket Price

Sporting event	Adult	Child
Baseball	Rs.30.00	Rs.10.00
Basketball	Rs.35.00	Rs.15.00
Football	Rs.25.00	Rs.10.00
Soccer	Rs.20.00	Rs.5.00

A Baseball

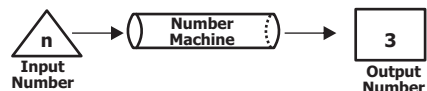
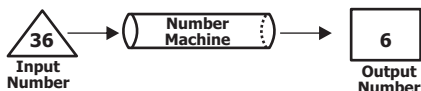
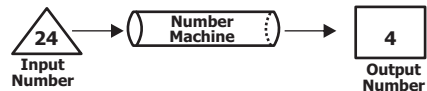
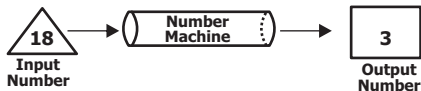
B Basketball

C Football

D Soccer



- Q15.** Jaya used the number machine shown to create output numbers from input numbers. The number machine used the same rule each time to create the output number.



If n is the input number, which expression could be the rule the machine used to create each output number?

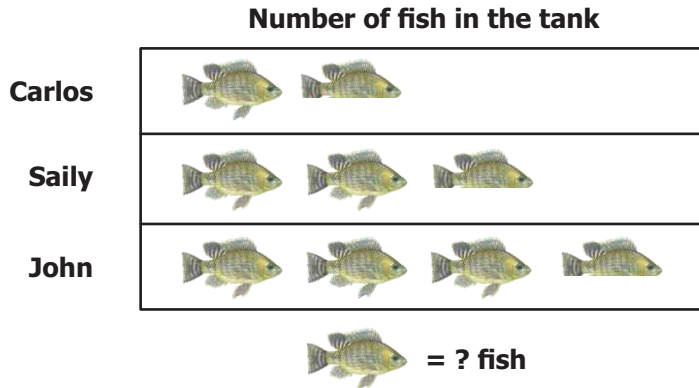
A $n + 6$

B $n - 6$

C $n \div 6$

D $n \times 6$

- Q16.** The following pictograph represents the number of fish each child has in the family's fish tank. If there is a total of 30 fish in the tank, then how many fish does each fish symbol represent?



A 3

B 4

C 5

D 6



- Q17.** The table shows the rate for developing and printing films at a shop. Mehak sent 6 rolls of film for developing and printing. She paid Rs. 71 altogether. How many photographs did she print?

Developing	Rs. 3 per film
Printing	25 Paise per photograph

A 208

B 212

C 216

D 220

Q18. In a quiz each student is required to answer 40 questions. 5 marks are given for every correct answer and 3 marks are deducted for every wrong answer. If Raj answered 35 questions correctly and Rahul answered 32 questions correctly of all the attempted questions, what is the difference in the total marks obtained by them?

A 15

B 24

C 160

D 175



Q19. A school bus travels from Delhi to Palwal. There are 4 children, 1 teacher and 1 driver in the bus. Each child has 4 backpacks with him. There are 4 dogs sitting in each backpack and every dog has 4 puppies. What is the total number of eyes in the bus?

A 256

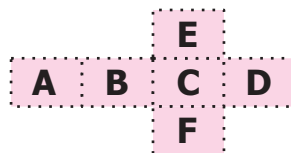
B 128

C 657

D 652



Q20. Manoj folded the pattern shown in figure along the dotted lines to form a cube. When folded, which letter will be on the opposite side of letter C?



A B

B E

C A

D F

Q21. Amna and Arfa are playing a game called "Guess My Number". Amna gave Arfa the following clues:

The number has four digits.
The thousands digit is twice the hundreds digit.
The ones digit is divisible by five.
The sum of the digits is 13.
What could be Amna's number?

A 4225

B 3005

C 4135

D 6205



Q22. Which set of letters can be placed in the box?

BEH, ILO, ADG,

A LOI

B NQT

C ZMY

D CPR



Q23. Aalia has one week to read a book for school. She knows that she can read about 20 pages per day. She wants to determine how much time she should spend reading each day. What additional information does Aalia need?

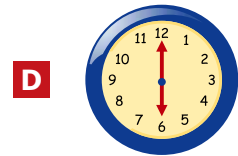
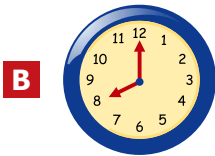
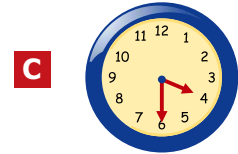
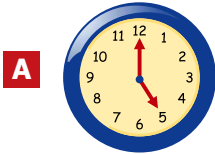
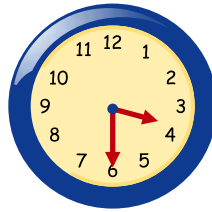
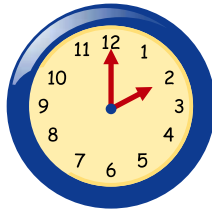
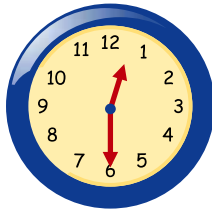
A The numbers of chapter in the book

B The number of pages in the first chapter

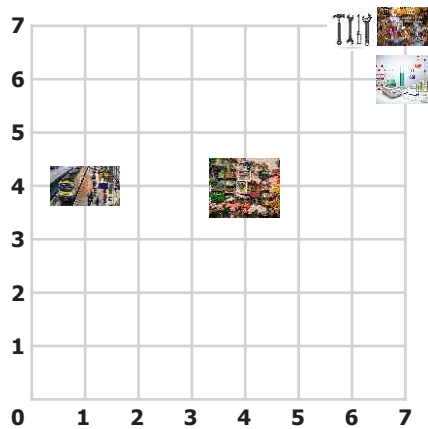
C The date the book was published

D The number of pages in the book

Q24. Which is the missing time?



Q25. Where is the train station?



Flower shop



Science lab



Gift shop



Hardware store



Train station

A 7,7

B 7,6

C 6,7

D 1,4

Q26. 40 is subtracted from 60% of a number, the result is 50. Find the number?

A 150

B 140

C 130

D 110



Q27. Stuart's watch loses two minutes every hour.
Adam's watch gains one minute every hour.
They both set their watches from the radio at 6:00 a.m. then start their journeys to the airport. When they arrive (at the same time) their watches are 10 minutes apart.

At what time (the real time) did they arrive at the airport?

A 9:00am

B 9:20am

C 9:40am

D 10:00am



Q28. On a digital 24-hour clock, at certain times, all the digits are consecutive (in counting order). You can count forwards or backwards.

12:51

For example, 1:23 or 5:43.

How many times like this are there between midnight and 7:00?

A 8

B 9

C 10

D 11

Q29. In the forest there is a Deca Tree.

A Deca Tree has 10 trunks,



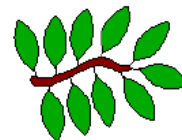
and on each trunk there are 10 branches,



and on each branch there are 10 twigs,



and on each twig there are 10 leaves:



- One day a woodcutter came along and cut down one trunk from the tree.
- Then he cut off one branch from another trunk of the tree.
- Then he cut off one twig from another branch.
- Finally he pulled one leaf from another twig.

How many leaves were left on the tree then?

A 9009

B 8909

C 8899

D 8889

- Q30.** Use the calendar to answer this question. John cleans his book almirah every 3rd day and his brother's almirah every 5th day. If this pattern continues, how many times during the month of July will he clean both almirahs on the same day?

JULY						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

A 1

B 2

C 6

D 9

National Toppers
ICATS
Art Contest
2022

Student Name	Father Name	Grade	School
HUMNA NADIR	M. NADIR IKRAM	1	FOUNDATION PUBLIC SCHOOL
HAIDER ALI	ALI MUSHTAQ	2	ARMY PUBLIC SCHOOL & COLLEGE
MUHAMMAD YOUSAF	KAMRAN ASHRAF	3	KOHSAR CHILDREN'S ACADEMY
MUHAMMAD ZAID	M. SOHAIB NIZAMI	4	GENERATIONS SCHOOL
HANIA ABID	MRS. ASMA LATIF	5	FATIMA FERTILIZER SCHOOL
RUQAIYAH ALI ASGHER	ALI ASGHER KHAMBATWALA	5	MSB EDUCATIONAL INSTITUTE
RAMISHA ALI	ABID ALI MUGHAL	6	GOVT. QUEEN MARY GRADUATE COLLEGE
SYEDA FATIMA SURIYA	SYED TAHIR HUSSAIN	7	BEACONHOUSE SCHOOL SYSTEM
MANAL ARSHAD	MUHAMMAD ARSHAD	8	HABIB GIRLS SCHOOL
MARYAM SHAHID	SHAHID IQBAL	9	BAHRIA COLLEGE
AREEBA KHAN	DURAZ KHAN	10	PRESENTATION CONVENT HIGH SCHOOL

Congratulations

National Toppers
ICATS
Creative Writing
Contest
2022

Student Name	Father Name	Grade	School
HASSAN WASEEM	M. WASEEM	1	PAKISTAN INT'L PUBLIC SCHOOL
M. AFNAN SUFDER	SUFDER HUSSAIN	2	ARMY PUBLIC SCHOOL AND COLLEGE SYSTEM
FATIMA NOOR	BILAL YOUSAF	3	LAHORE GRAMMAR SCHOOL
M. ABDULLAH HASSAN	RIZWAN AHMAD	3	LAHORE GRAMMAR SCHOOL
SHANZAY ADNAN	ADNAN FAROOQ	3	ARMY PUBLIC SCHOOL
PRAKASH PARKASH	PARKASH LAL	4	THE CITY SCHOOL
DANIYAL SHAHZAD	SHAHZAD ASLAM	5	LAHORE GRAMMAR SCHOOL
HASSAN ALI	IMRAN ALI SHAH	6	ARMY PUBLIC SCHOOL & COLLEGE
MAIDA SOHAIL	SOHAIL AKRAM	7	BEACONHOUSE SCHOOL SYSTEM
ATIYA ATIF	MUHAMMAD ATIF NAZAR	8	ROOTS IVY INTERNATIONAL SCHOOL
AYESHA HAFEEZ	CH. GHULAM HAFEEZ	8	ISLAMABAD COLLEGE OF ARTS & SCIENCES
PARTHAM KUMAR	DOULAT RAM	9	AGA KHAN HIGHER SECONDARY SCHOOL
AMNA HUSNAIN	SYED ALI ZAFAR	10	AES SCHOOL FOR GIRLS
RASIKH JAVED	M JAVED	10	BAHRIA FOUNDATION COLLEGE

Congratulations

Compete
if you are the best