



Techn^{owl}thon

the international school championship

.....Inspiring Young minds!

PAPER THEME

Aladdin

JUNIOR SQUAD

Team Details

Name of the participants

Time: 2hrs 30min
Maximum marks: +102
Minimum marks: -23

1. _____

2. _____

Roll No.: _____

School Name: _____

Instructions

(Please read the instructions carefully)

General Instructions

1. Fill the Team Details in the space provided, before attempting the paper.
2. Verify that the question paper contains 19 pages and 22 Questions.
3. All the answers must be marked in the OMR provided separately which has to be submitted at the end of 2hr 30 min from the start of the examination.
4. The question paper can be taken back home.
5. All answers must be clear and legible. In case of any ambiguity, the decision of evaluator is final.
6. No queries regarding the correctness of the questions shall be entertained.
7. Blank papers, clipboards, log tables, slide rulers, calculators, cellular phones, pagers and any other electronic gadgets are not allowed.
8. No additional sheets will be provided for rough work.

Selection Criteria and Result

1. The ranking will be based on the total marks obtained in all the sections.
2. The result will be declared on or before August 8th, 2019 on our website technothlon.techniche.org. To check your result, login with roll number and password provided in your admit card.
3. The top 50 teams will be invited to IIT Guwahati for the Mains and will be awarded Gold certificates. The next 200 will be awarded Silver certificates. The city toppers will be awarded with medals.

OMR Instructions

1. DO NOT TAMPER WITH THE OMR.
2. Darken the bubbles properly with BLACK ball point pen only.
3. Fill all the details in the OMR sheet properly. Follow the correct method as shown in the figure to fill in the OMR Sheet.

Wrong				
1.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Correct				
1.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Instructions for Integer Type Questions

For integer type questions, write the answer in the boxes provided and darken the corresponding boxes. For example, if the answer is 27, shade 2 in the first column, and 7 in the second column. If you get a single digit answer, darken 0 in the first column and your answer in the second column. For example, if the answer is 7, darken 0 in the first column and 7 in the second column.

Marking Scheme

(PLEASE READ THIS SECTION CAREFULLY)

- **Power Scheme:**

- For consecutive correct answers, you will be awarded $2^0, 2^1, 2^2, 2^3$ and so on. However, if you give a wrong answer, the sequence is broken and you will start from 2^0 again on the next correct answer. If unattempted, the sequence repeats from the previously scored value.
- Example :
 - For 5 correct: $1 + 2 + 4 + 8 + 16 = 31$
 - For RRWRR: $1 + 2 + 0 + 1 + 2 = 5$
 - For RRURR: $1 + 2 + 0 + 2 + 4 = 9$

(R => Right answer, W => Wrong answer, U => Unattempted)

- **Fibonacci Sequence:**

- A Fibonacci Series is a series of numbers in which the n^{th} term is the sum of the $(n-1)^{th}$ and $(n-2)^{th}$ terms. The series goes like 1, 1, 2, 3, 5, 8 ...
- For correct answers, the sequence starts from 2 and increases according to the sequence. For example, for 3 consecutive questions correctly, the marks you will get for the first question is 2, the second question is 3 and the third question is 5. However, if you leave a question or answer a question wrong, the sequence is broken, and you will start again from 2.
- Wrong answers have negative marks and the sequence starts from the first term. If you get four wrong answers consecutively, you get -1, -1, -2 and -3 respectively.

- **Proximity:**

- For the correct answer, you get 3 marks and if your response differs by 1, then you get 1 mark. For any other answer, you get -1 marks.
- Example: If the Correct answer to a question is "15",

Your response	<=13	14	15	16	>=17
Marks obtained	-1	+1	+3	+1	-1

Note: If your answer exceeds 99, take the remainder with 100 and fill in OMR.

- **Boomerang**

- If a question is solved correctly, you will be awarded 4 marks. If you do not attempt then Zero, otherwise, if wrong, then -1.

There are two BONUS questions in the Question Paper. Answering those questions correctly earns you a better marking scheme for that section.

Section A: Diamond in the Rough

Type of Questions: MCQ

Max Marks: 20

Marking Scheme: Boomerang

Min Marks: - 4

Jafar has managed to trick Aladdin into his evil and vicious plan of obtaining the power of the Genie by sending him inside the Cave of Wonders. Unaware of Jafar's plan, Aladdin promises to bring him the magic lamp. To get the magic lamp the Cave of Wonders or Tiger's Cave test the intelligence of the person that enters in it. Going further into the cave Aladdin finds himself surrounded by various challenges from time to time. Let's see whether Aladdin survives the cave's test or not.



Q1: Aladdin is searching for the lamp and during his search, he comes across a door guarded by a spirit. In order to get past the door, the spirit challenged Aladdin in a game of chess. The chessboard being old is broken into 4 pieces each of size 3 by 3. Apart from that, some squares are of the wrong colour with j -th square of the i -th row of k -th piece of the board has colour $a_{k,i,j}$. The spirit wants Aladdin to change the colour of some squares in such a way that he recolours the minimum number of squares and the obtained pieces form a valid chessboard. Every square has a different colour from each of the neighbouring side by side squares in a valid board. Its size should be 6 by 6. Aladdin can move the pieces but he cannot rotate and flip them.

What is the minimum number of colours Aladdin should recolour to obtain a valid chessboard and get past the door?

1ST



2ND



3RD



4TH



A)17

B)16

C)15

D)14

Q2: Abu is Aladdin's pet monkey and above all is his best friend. On their way to find the lamp and were passing over a Lava lake through a wooden bridge. Abu, mischievous as always started jumping on the bridge side-ropes and suddenly his foot slips and he landed onto a 5×5 square matrix \mathbf{B} floating on the lava. In order to keep his balance, Abu transforms the given matrix to another matrix \mathbf{A} using an operation T: Choose any two neighbouring numbers and add the same integer (x) to them. If matrix \mathbf{B} is transformed from matrix \mathbf{A} , find the number x ?

8	9	7	1	2
0	5	4	8	3
4	2	8	6	7
1	5	0	7	9
10	8	3	6	7

A

7	2	6	2	3
3	2	0	1	6
8	x	9	1	0
5	3	3	9	2
6	7	8	1	7

B

[Note: Two squares are neighbours if they have a common boundary.]

A) 5

B) 14

C) 4

D) 7

Q3: Aladdin after surviving the last two challenges thrown at him has reached the final and the trickiest task of all. The lamp is in front of him but it is cursed with some dark magic. In order to remove the Curse, the person seeking the lamp must solve a puzzle. According to the puzzle two matrices, **A** and **B** are given each of size **5x4**. Aladdin can perform the following operations on the matrix **A** unlimited number of times:

- take any square *sub-matrix* of **A** and transpose it (i.e. the elements of the sub-matrix which was in the *i*-th row and *j*-th column of the sub-matrix will be in the *j*-th row and *i*-th column after transposing, and the transposed sub-matrix itself will keep its place in the matrix **A**).

6	3	2	11
5	9	4	2
3	3	3	3
4	8	2	2
7	8	6	4



6	3	2	11
5	9	3	8
3	4	3	2
4	2	3	2
7	8	6	4

Example of the operation

Aladdin task is to count the number of distinct matrices that could be formed by transforming the matrix **A** (including **A**) so that he can get the lamp.

A) 41472

B) 13824

C) 20736

D) 55296

For Q4 and Q5:

After receiving the lamp, Aladdin and Abu are on their way to get out from the cave when they found a statue of Sir Hussain, one of the most powerful Royal General to walk on Earth. Below the statue is written a real life problem that Sir Hussain solved and in order to get out of the cave one must solve this riddle. Aladdin out of options starts reading the riddle-

Once upon a time in the Kingdom far far away lived Sir Hussain, the chief Royal General. He was very proud of his men and he liked to invite the King to come and watch drill exercises which demonstrated the fighting techniques and tactics of the squad he was in charge of. But time went by and one-day Sir Hussain had a major argument with an old witch (there were rumours that the argument occurred after the general spoke badly of the witch flying techniques. That seemed to hurt the old witch very deeply).

As the result of the argument, the witch put a rather strange curse upon the general. It sounded all complicated and quite harmless: "If the squared distance between some two soldiers equals to 5, then those soldiers will conflict with each other!"

The drill exercises are held on a rectangular $n \times m$ field, split into nm square 1×1 segments for each soldier. Thus, the square of the distance between the soldiers that stand on squares (x_1, y_1) and (x_2, y_2) equals exactly $(x_1 - x_2)^2 + (y_1 - y_2)^2$. Now not all nm squad soldiers can participate in the drill exercises as it was before the old witch curse. Unless, of course, the general wants the soldiers to fight with each other or even worse. For example, if he puts a soldier in the square $(2, 2)$, then he cannot put soldiers in the squares $(1, 4), (3, 4), (4, 1)$ and $(4, 3)$ — each of them will conflict with the soldier in the square $(2, 2)$.

Q4: Find the sum of maximum number of soldiers that can be simultaneously positioned on this field for each of the following cases

- I) 1002 2
- II) 451 2
- III) 780 2
- IV) 121 2

- A) 2357 B) 2358 C) 2354 D) 2360

Q5: Find the sum of maximum number of soldiers that can be simultaneously positioned on this field for each of the following cases

- I) 53×81
- II) 2×103
- III) 1×104

- A) 2301 B) 2302 C) 2355 D) 2356

Space for Rough Work

Section B: The mysterious city of Agrabah

Type of Questions: **Integer**

Max Marks: **+15**

Marking Scheme: **Proximity**

Min Marks: **- 5**

Agrabah, the city of mystery, enchantments and the finest merchandise located on the side of the river Jordan. It is under the rule of the king named Sultan. Aladdin lives in a hovel with his monkey Abu where he has spent most of his childhood. Now it's time to explore more about this mysterious city!



For Q6 and Q7:

Festival season is going in Agrabah and the people are going crazy to see various sorcerers, craftsmen etc. who are visiting the city to showcase their magic. A large crowd has gathered around a Card-master who is asking a logical riddle to the crowd. Whosoever succeeds in solving the riddle gets a reward. He arranges the cards of first 20 natural numbers and **lists** down the difference between two consecutive numbers (value on right card minus value on the left card) of the arrangement, which are 19 in number. The difference is given as

-11 8 -7 -2 11 -4 12 -15 11 3 -13 9 -1 -3 6 -10 -3 5 9

Q6: What is the first number of his arrangement of cards from the left?

Q7: Find the sum of the numbers at odd places of the arrangement of the cards?

Q8: The city is beautifully lightened up with candles and diyas and the vibes of happiness and joy were coming from all the directions. Aladdin and Abu are also enjoying the festival when they find a very interesting game of balloons. Inflated balloons are arranged in a straight line and are marked with English Upper case letters. The player can perform the following action any number of times (including zero): Choose any one of the balloons from the straight line and replace the letter on it with any other Uppercase English letter.

Note that even if the replaced letter occurs S multiple times, only the chosen occurrence of this letter is replaced.

Find the sum of the minimum number of operations required to convert the given balloon line to balanced ones. Let's call a balloon line *balanced* if all characters that occur in this balloon line occur the same number of times.

Line 1: ABAAACDHIAACKIOA (16 letters)

Line 2: BBCABCDFAHABNAJHDYWGEJA (23 letters)

Line 3: ABSDJAHSABDJAMDHANDHASAKIABCHD (30 letters)

Q9: Jasmine, the princess of Agrabah is enjoying the festival with her father. Since childhood, Jasmine has been very fond of shooting games and she has become really good at it. After hitting at various shops she finally found a shooting place. The shopkeeper is smart and has changed the rules of the game. The shopkeeper has placed a sequence of n water balloons each with an integer written on it. The rules of the game are that the shooter can choose any balloon of the sequence (let's denote on it as a_k) and remove it by shooting. During this step, all elements equal to $a_k - 1$ and $a_k + 1$ should also be shot down and removed from the sequence. This step will give the player a_k score. At each step, only one occurrence of a_k is deleted. The player should apply this step, again and again, to get as much score as possible.

Example Seq: 1 2 3

In the first step choose element 3, delete it and delete $3-1=2$ and $3+1=4$ (4 not available). The remaining array contains element only 1. now pick this and the array becomes empty now. therefore, maximum score obtained is $3+1=4$

Given seq: 1 2 2 2 3 4 5 1 2 2 5 4 6 3 2 9 9 8 8 2 3 3 5 1 5 2 4 3 2 1 2 6

Find the maximum score that Jasmine can get?

Q10: While most of the town is engaged in the festival Jafar is busy crafting vicious and evil ideas to eliminate Sultan from his way and become King himself. Jafar has laid his hands on an ancient scroll that contains a very powerful magic spell. The characters in the spell have been jumbled so that no ordinary magician can access that power. Jafar has to remove some characters from the statement to make it good. To make the statement good he should follow some instructions written on the scroll. Each character in the statement has some weightage, initial total weightage being zero. A statement is good if it does not contain a subsequence 'pika' after removal of each character its corresponding weightage is added to the total weightage.

Paijaska, piika, poikola are *bad statements*;

Whereas ipka, ikasjd, ikpaikj are *good statements*.

If Jafar follows the mentioned instruction in the scroll, then what is the minimum total weightage he should get to make a good statement?

p	k	a	i	k	i	a	x	k	a	s	h	p	p	k	k	i	i	k	a
9	3	4	5	9	2	7	11	2	1	3	4	7	8	7	8	7	10	6	12

Space for Rough Work



Section C: Enroute to Paris

Type of Questions: MCQ

Max Marks: +18

Marking Scheme: Fibonacci

Min Marks: - 7



Aladdin, Jasmine, Genie and Abu are ready for a vacation and are heading towards Paris to spend the next few days. Their magic carpet is coming handy during their travel. On their way to Paris, they are mesmerised by the immense beauty of nature, large waterfalls, snow-capped mountains, large forest cover and lots of amazing views. Paris beauty takes their breath away and they stand still to embrace its beauty. Let's see what are they up to in Paris.

Q11: Walking down the alluring streets of Paris Jasmine gets attracted to a Vintage shop. The squad enters the shop and they found out a lot of amazing vintage stuff and decided to buy some. The shopkeeper offered them to take the products for free if they are able to solve his riddle.

He stated that a person has 2 cubes on his desk. Every day he arranges both the cubes so that the front faces show the current day of the month. Different faces of both the cubes are coloured in 6 different colours. What can be the maximum possible sum of the product of numbers appearing on the same coloured face?

- A)132 B)116 C)124 D)156

Q12: Aladdin has read on a pamphlet about a mind-reading competition which is going to start in a short time and they are going there to participate in it. The host of the show starts the game and after some thinking, decides two integers. He tells the sum of the integer to person S and product of those number to P. Now the following conversation takes place between S and P.

S: I don't know what the numbers are

P: Neither do I

S: Now, I know what the numbers are

P: Hey me too

The host also mentions that S and P to be very wise and good in mathematics. Help the visitors from Agrabah to win the game by finding out the two integers.

What is the difference between the two numbers?

- A. 0
B. 2
C. 4
D. 3

Q13: Sitting on the banks of the river, Aladdin and his friends see a group of sailors preparing their boat to sail south. Genie had never been to the south and this makes him interested in their sail and he wants to know where they were heading. Using his magical powers, he gathers everyone together and places a magical hat on some of the sailor's head (i.e at least one person has a hat). The hat is magical as it can be seen by other people, but not by the wearer of the hat himself. The sailors find out about the hat and in order remove the hat, those (and only those who have a hat) must dunk themselves underwater at exactly midnight.

If a_i number of sailors dunk their hats on i -th day, find the sum of $a_i \times i$ for all the days till all the hats are removed. If there are 50 men and 7 hats find the sum.

- A. 350
- B. 49
- C. 28
- D. 7

Q14: Someone in the city has committed a crime and it is found n people are involved in this mess. Aladdin and Genie are inquiring the accused to find out the truth. Both of them know that more than half of the people are good people. A good person will always tell the truth but the bad one always lies. They ask the question in a step. A step consists of asking one person at a time of what he thinks about other people is good or bad.

Find the minimum number of steps required to find at least one good person if n is 89

- A. 46
- B. 87
- C. 47
- D. 88

Space for Rough Work

Section D: Life of the Chosen One

Type of Questions: MCQ

Max Marks: +23

Marking Scheme: Power

Min Marks: 0

Aladdin's life is sorted. He is with the girl he loves. He is happy being with his friends and enjoys doing mischiefs in the streets. He has a powerful magic lamp alongside him from which he can summon a Genie. After looking at all this Aladdin seems to be the luckiest man alive. Let's see how his daily life goes.



Q15: It's almost mid of July and the temperature has hit a record high of 46° and reports have indicated that still, 2 weeks are remaining for monsoon showers. *Aladdin, Genie and Jasmine* decided to participate in a Swimming competition to get some relief from this scorching heat. They have a bib placed on their back with positive integers written on it and the 3 integers being different. Every time they reach the end of the pool a round is completed and the bib is removed. The same bibs are shuffled and are again placed on their backs. The sum of the numbers on the bib after a number of rounds ($>=2$) is 20 for Aladdin, 10 for Genie and 9 for Jasmine. It is given that during the last round Genie carries the blip with the biggest number.

Find out total number of rounds.

- A. 3
- B. 5
- C. 9
- D. 13

Q16: After spending a lot of time with Aladdin, Jasmine has finally told his father Sultan that she is in love with him and she wants to marry him. Sultan invited his future Son in Law to his palace to have a conversation with him. After a long conversation, they both started feeling hungry. Sultan has a habit of testing the appetite of his guest and the same is going to happen with Aladdin. This time he decides to have a candy eating competition and orders his servant to place n candies on the table. Both of them alternately take the candies. A move of taking a candy consists of eating one candy or half of the candies on the table (the “lesser half” if there are an odd number of candies). At least one candy must be eaten in each move. The loser is the one who eats the last candy. for what n , the player has a winning strategy?

- A. 27
- B. 41
- C. 64
- D. 39

Q17: Wherever Aladdin goes mischief follows! This time Aladdin along with his three other friends has stolen some fruits from a fruit vendor. Knowing of whose doing this is, the vendor called the kings guards and tells them to capture Aladdin and his friends. To make things easy for them he gives them their house numbers. Aladdin and his friends after knowing this are busy changing their house number. They are following 3 simple steps to change their house number.

1. If the house number n has at least two digits, erase the last digit and subtract that digit from the remaining number (for example, from 358 we get $35 - 8 = 27$).
2. If the last digit is different from 0, change the order of the digits in the opposite one (for example, from 123 we get 321).
3. They can multiply the number n by a number from the set $\{1, 2, 3, \dots, 2019\}$.

They are converting the listed house numbers to the corresponding listed numbers.

Find out which of the following can be converted into one another?

- A. 72 to 38323
- B. 341 to 9241
- C. 1002 to 11022
- D. 9614 to 7205427

Q18: [BONUS QUESTION] Aladdin is feeling bored as he has no work to do right now. He decides to visit some nearby towns on his Magic Carpet. While flying over a city he notices that the town has 2009 houses. Assuming that the houses represent distinct points in a plane, each coloured in blue or red. He finds out that on a unit circle drawn with a blue house as the centre there lies exactly two red houses. Find the greatest possible numbers of blue points and the sum of digits of the number of blue points.

- A. 7
- B. 15
- C. 17
- D. 20

[NOTE: Q18 is a bonus question and if you solve this then the total positive marks scored in this section will be doubled and if you get this wrong then it will be halved. No marks will be deducted if you don't attempt the question.]

Space for Rough Work



Section E: The 3 Wishes



Type of Questions: MCQ

Max Marks: 26

Marking Scheme: Fibonacci

Min Marks: - 7

It's been a long time since Aladdin had got the Magic lamp. He had heard a legend about that lamp and knows that it contains immense power. He finally decides to summons the Genie from the lamp and makes him grant his wishes. The choice to make a wish is not that easy and Aladdin should think properly before making a wish. Let's see what wish Aladdin will make.

Q19: Aladdin is a traveller and he wants to explore what is in the west. On his way to the west, he must pass the common lands shared by 3 powerful kingdoms. He will be allowed to pass through if all the 3 kingdoms allow him. Initially, all 3 kingdoms have a peace treaty and Aladdin is sure that none of them agreed to let him pass. Hopefully, on that day the soldiers of all 3 kingdoms gather on a large ground and make a **$2n + 1$ sided polygon** on the ground. Along any side of the **$2n+1$ sided polygon** soldiers of only 1 kingdom are standing. As the kingdoms are friendly, all soldiers are wearing the same dress. Now Aladdin stands on the ground somewhere far away for soldiers so that no soldier can see him. Aladdin makes his first wish and asks Genie to get past the common land. Aladdin follows every step Genie tells him. He shoots an arrow towards every soldier he can see so that wherever he be on the ground he will shoot soldiers of maximum 2 kingdoms. The kingdoms whose soldiers are dying declare the war against the kingdoms whose soldiers haven't died because they think this as a violation of their peace treaty. Aladdin takes the side of that kingdom whose soldiers haven't died yet and helps them to win the war. [Aladdin will pass the land no matter where he stands on the ground.]

Aladdin can win the war if he has at least 1 kingdom on his side while the remaining 2 against. If he has killed soldiers of at most 2 kingdoms he will have at least 1 kingdom by his side and he will win. But if in any case, he kills the soldiers from all 3 kingdoms he will taste defeat and will not be able to fulfil his dream. It is irrelevant for Aladdin who wins the war as only the opinion of only one kingdom will matter and he will pass the common land with it. For what value of n Aladdin will be able to get pass the common land?

A) 2

B) 1

C) 4

D) 3

Q20: Agrabah never sleeps peacefully! A robbery has taken place at Agrabah's palace the previous night and one of the most precious treasures, a rare diamond is missing. Information received from the sources has pointed out that Essos, an allied nation is behind this robbery. Aladdin and Genie left for Essos as soon as they heard the news. On reaching there they find out that the diamond is guarded by a two-level cage, each having 9 sections. The guards placed there have to occupy 16 sections, 8 on the upper level and 8 on the lower. (The two central sections are set aside for storing weapons).

There are 4 conditions for placing guards:

1. All 16 sections must be occupied.
2. No section can hold more than 3 guards.

3. Each of the four outer sides (total of both levels) must hold 11 guards.
4. The whole upper level must hold twice as many guards as the whole lower level.

Although the cage facility received 3 fewer guards than expected. The facility placed the guards in conformity with these four conditions. The Aladdin asked Genie to bring back the diamond but in order to do so, Genie needs some information.
He needs to find out how many guards were expected?

- A) 60 B) 30 C) 90 D) 120

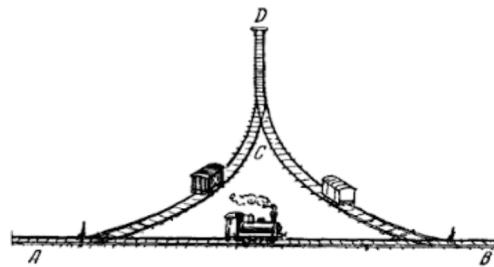
For Q21 and Q22:

Aladdin is remaining with his last wish. Being very generous he wants to set Genie free by giving him his freedom. But there are certain conditions that are placed on the lamp before one can set Genie free. The lamp asks a riddle and if Aladdin is able to solve this riddle then Genie will be free. Aladdin knowing the risk involved is ready to solve the puzzle.

The lamp asks

Q21) Main track AB and two small branches AD and BD form a railroad triangle. When a locomotive goes from A to B, backs into BD, and moves forward out of AD, it has reversed its direction on AB. In how many moves does the engineer move the black car to BD and the white car to AD, and return the locomotive to face right on AB. The dead end beyond the switch at C can only hold the locomotive or 1 car. Each coupling or uncoupling is 1 move.

- A) 12 B) 10
C) 8 D) 6



Q22) [BONUS QUESTION] If the engineer is willing to reverse the final position of his locomotive on AB he can solve the problem in How many moves.

- A)12 B)10 C)8 D)6

[NOTE: Q22 is a bonus question and if you solve this then the total positive marks scored in this section will be doubled and if you get this wrong then it will be halved. No marks will be deducted if you don't attempt the question.]

We hope that you might have helped Aladdin to fulfil his wishes. So let's see whether your wish to come to IIT Guwahati will be fulfilled or not. See you in Mains.

Space for Rough Work

Space for Rough Work

A word from the organisers of Technothlon 2019

Hello,

We hope that you enjoyed the last two and a half hours, brainstorming your way through what happens to be one of the most challenging exams for school students. We know that hundreds of thoughts like, "What is the point of giving such questions?", "The level is unnecessarily high!" and "Who made such questions?" occurred to you throughout the examination. But we, as a team, can proudly state that making these questions was one of the most enjoyable experiences we've had till date.

The big question which perhaps still lurks in your minds is, "What does Technothlon want to achieve through this question paper?". Believe us, when we say that this was the first question that came to our minds when we started making the question paper. But the fact is that Technothlon has grown exponentially over the years, and so have the expectations regarding the exam. 'Being Ordinary' is the last thing you would expect from a Technothlon question paper. Our question papers are expected to be challenging, logical and most importantly, enjoyable. Even this year, we have tried not just to match the expectations, but to cross them all. A lot of time, hard work and sleepless nights have gone into the making of the question paper. Do not feel sad if you weren't able to solve the questions during the exam. Our motive is not just to test your mental prowess, but to help you better it. We hope that you will keep your spirits high, even after the exam and keep trying until you've solved the complete paper, a feat very grand in itself. Our aim was not just to select the brightest minds in the country but to inspire one and all. We hope that our grand prizes – A trip to NASA or ISRO and the chance of visiting IIT Guwahati were motivating enough to help deliver your best in the exam. We hope to see you at IITG and wish you all the very best for your future.

Hope you enjoyed the entire experience!

Chief Organising Team

Milan Rayat

P. Suhas

Vaibhav Singh

Sparsh Dutta

Karthik Ganne

Aniruddh Bakshi

An open invitation for a lifelong association with Technothlon

Before you feel that you have come to the end of your association with Technothlon, we should remind you that this is just the beginning. You have become an inseparable part of the Technothlon community. Regardless of whether you make it to the second round or not, we enjoy every moment of our interaction with you all. Our Facebook page is our means of reaching out to the student community. Be connected, Stay updated! We are eager to help through counselling of any kind required by utilizing the experienced pool of IITians and highly qualified faculty of IIT Guwahati. And finally, we will appreciate any constructive feedback about the question paper or any general issue that you would like to discuss with us. After all, your feedback is the only way we come to know about our performance.

Contact Us-

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Techniche

Just like a rainbow gets its grandeur from the balanced blend of seven colours, each edition of Techniche promises to be a perfect blend of creative ideas, innovation and selfless efforts. It has the vision of motivating the youth of the country to think out of the box and be responsible for the inception of such ideas that boost the growth of the techno-management sphere. Techniche brings forth a medley of remarkable events, be it the inspiring keynotes of prominent personalities in The Lecture Series or the opportunity to interact with eminent industrialists in The Industrial Conclave. From thrilling Robotics competitions to knowledge enhancing Workshops, every bit of Techniche will be a wonderful experience. With innovative ideas like Technothlon -the International School Championship and the Guwahati Half Marathon as well as other outstanding initiatives, Techniche stands proud as one of the best techno-management festivals of the country.

TECHEXPO

Techniche's latest undertaking, the TechExpo has been initiated with the cardinal aim of bringing to light the technological advancements made by the youth of this country and to provide an opportunity to showcase their innovations on a larger platform. It provides for a platform for the participants to showcase the projects undertaken by them in front of a mass multitude of people which includes but isn't restricted to Professors from various fields, notable personage including Nobel Laureates and Students from the nation.

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