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Dear Reader,
Welcome to another issue of the AllCareerGuru newsletter.
We continue our regular columns of upcoming deadlines and a puzzle, and we discuss an important 21 st century skill, "Estimation". We would like to draw readers' attention to an interesting international test called the Bebras Challenge, targeting students in grades 3 to 12 . Please see our detailed article about it in this issue. All Career Guru team would be happy to assist and train students interested in registering for the test. We will continue with our interview column in the coming issues.

As always, we welcome answers to the puzzle and any feedback.
Please write to newsletter@allcareerguru.com

## Bebras Challenge: An opportunity to test your logical skills

A sharp knife when sharpened and honed becomes sharper and more effective with regular use, and so are children's minds, which are inherently sharp, and becomes sharper as they hone more. One of the best methods to sharpen one's mind is to challenge it with logical problem solving. Well, is there any good resource for this? One such is the Bebras Challenge, an international educational competition conducted across 54 countries and encourages young students to think computationally and solve problems. It consists of a series of interactive tasks and puzzles designed to engage participants in logical and algorithmic thinking and requires no pre-requisite knowledge of computational thinking. Students are presented with a variety of problems that require them to analyse, deduce, and find creative solutions using computational concepts.

The Bebras India Challenge is conducted by CSpathshala, an ACM India initiative and $5,00,000$ students have participated since 2018 . It aims to inspire computational thinking among students of all ages, from primary to high school, to prepare them for the challenges of the digital age.

Bebras India Challenge 2023 will be held from 20th November to 9th December, 2023! This is a boon for puzzle enthusiasts, as it scarcely requires any academic knowledge. Furthermore, registration is completely free.

Registration: There is no individual student registration. A coordinator registers on behalf of a school, organisation or a group. Once registered, they have to accept your registration which takes ONE DAY to do this. You can register via All Career Guru (newsletter@allcareerguru.com).

Categories (age 8-18):
(1) Grades 3 \& 4
(2) Grades 5 \& 6
(3) Grades 7 \& 8
(4) Grades 9 \& 10
(5) Grades $11 \& 12$

English, Hindi, Marathi, Gujarati, Kannada, Odia, and Telugu.

There are 15 questions for any category. Marking and other specific details can be found in the website.

20th November - 9th
December 2023 (can be taken anytime in this window under the coordinators supervision).

Duration: 45 min

Note:

Rank 1 in each category will be inducted into Bebras, Hall of fame.
Every participating student gets a certificate.
Useful links:

- Challenge details: https://www.bebras.in/results
- Blog: https://www.bebras.in/blog
- Hall of fame: https://www.bebras.in/hall-of-fame
- Practice challenges: https://bebras.cspathshala.org
- Past challenges: https://www.bebras.in/booklets

Click here to read more.

## Paths to success through 21st century skills Estimation

Have you seen people who are always rushing late for a class or a meeting or to catch a train or flight? There are also other types of people, most likely from your parents' generation, who arrive at the station or airport several hours early. Both these sets of people suffer from the lack of an estimation skill. Are you one of those who maintain a list of 10 things to do over a weekend but find that you finish only half of them by Monay? This is due to the lack of an estimate of how much can be done in a given time period. Given that Chennai and Bangalore are roughly about 350 kms apart, would you be able to estimate how long it will take to reach Bangalore? Of course, it depends upon your mode of transport. What if you travel by train? by air? by car? You must be aware of the average speed of each of these modes to make an accurate estimate. And the last one also depends on the road and traffic conditions.

Estimation is one of the important 21 st century skills. When you make a commitment to your boss, or to anyone else, regarding when you will finish a task, you should be able to calculate a reasonable estimate of how long it will take, taking into account potential bottlenecks that may occur. Your commitment and words are at stake here.

Other instances when you undoubtedly need estimation skill is planning for an event or creating a study plan for an upcoming exam.

In olden days when we were all stitching new clothes for Deepavali, you would have seen a queue outside the tailor shop asking when their pants and shirts will be done. The tailor without blinking an eye will say 'Tomorrow'. He is content with handling you at that moment and is not concerned about having to handle you again the following day. Corporate world doesn't work this way. Numerous factors depend on your commitment. It is better to estimate correctly rather than defaulting on an ambitious commitment.

Specifically, if you expect to be roughly twenty minutes late for a meeting, it is preferable to let people know well in advance (rather than right at the beginning of the meeting). Remember that people who are busy typically have a full calendar, thus your meeting's delay could cause them to have multiple scheduling conflicts.

Let's understand by an example of when to leave home to take a train leaving at 8 pm from a central station. How do you decide when to leave? Suppose you are taking an auto rickshaw to the train station from home and normally it takes 40 minutes. Most people will jump and say that then you need to leave at $7: 20 \mathrm{pm}$. Is that accurate? Well, maybe not. Let's accomodate a buffer of 15 minutes for traffic delays. So, leave at $7: 05 \mathrm{pm}$ ? Again, may not. Are you comfortable reaching the station at 8 pm to catch a train starting at 8 pm ? You need to navigate into the station, find the platform, and walk to your coach on the platform. Give yourself 20 minutes for that. So leave at $6: 45 \mathrm{pm}$ ? Not enough again, as you may want to sit in your coach and relax for 15 minutes. So leaving at $6: 30 \mathrm{pm}$ will give you enough time to cover for traffic delays, reach your coach, and be there 15 minutes early. Some of you may feel comfortable reaching the coach half an hour before, in that case leave at $6: 15 \mathrm{pm}$ or 6 pm . If you encounter any delay in leaving, and you notice traffic snarl, you can anticipate that you are going to miss the train (or the meeting) and might as well make alternative plans.

You will lose time at the station if you leave too early, and you won't have enough time to account for traffic delays if you leave later. Of course, there may be a procession that causes an hour-long traffic wait; either you learn about it and plan for it, or just take the risk. Although it can be preferable to arrive early and wait, doing so could have additional drawbacks, such as difficulty finding a decent restaurant or restrooms.

Estimation is one of the important 21st century skills.

It is said that while good planning may not necessarily lead to success, poor planning will always result in failure.

If you do intend to take the bus to the station, then account for the duration of the bus ride, the time you will need to wait at the bus stop, and make sure you depart at the appointed time. The majority of us underestimate this, therefore we either arrive extremely early or really late. It is the same process when you plan study time for your exam. Rather than saying that 'I will do this tomorrow', try to schedule a time to complete the task. This will help you to realise if you can complete within timeline or you are being over ambitious. In the latter case, you may need to cut down your other tasks to find room for the new work you plan to do, or be realistic and extend the schedule. Overstretching your work schedule without taking your fitness and health into account is pointless.

It is said that while good planning may not necessarily lead to success, poor planning will always result in failure.

Click here to read more.

## Upcoming Deadlines

Here, we provide links and deadlines for various entrance exams and scholarships. More details are in our website
(https://allcareerguru.com/exams)

## 1. JEE (Joint Entrance Exam):

Purpose: Primarily for admission to IITs, IISc, NITs and other top engineering colleges
Application Deadline: 13 November 2023
Eligibility Criteria: $10+2$ with Math, Physics and Chemistry
Exam Date: 10th December 2023
Exam Date: Main between 24th January - 1st February.
For details: https://nta.nic.in

## 2. NEET (National Eligibility cum Entrance Test):

Purpose: For admission to MBBS, BDS and paramedicals
Application Deadline: March 2024
Eligibility Criteria: $10+2$
Exam Date: 5th May 2024
For details: https://neet.nta.nic.in

## 3. CUET

Purpose: Centralised entrance exam for admission to over 240 universities across India
Application Deadline: Third week of April 2024
Eligibility Criteria: Must have passing grades in class $10+2$
Exam Date: 15th - 31st May 2024
For details: https://cuet.nta.nic.in/
4. Certificate program in International Business Consultancy

Indian Institute of Foreign Trade, www.iift.ac.in, a Deemed University (Department of Industry and Trade, Govt of India)
Deadline for application: Nov 15th
Essential qualification: Any graduation with $50 \%$ marks +3 years work experience or Any Master's + 2 years work experience

Exam application deadline:

1. JEE - 13th Nov 2023
2. NEET - 5th May 2024
3. CUET - 3rd week of

April 2024
4. IBC - 15th Nov 2023

## Previous Puzzle - Solution

## Previous Puzzle:

Arjun has recently learnt about averages, and he says the following two sentences:
A: The average age of ten of his coaching class students is 15
B: After one student left, the average has become 17
Roshan who hears this says the following
C: No it can't be true, you must have made a mistake.
D: When someone leaves, the average will only decrease
Explain which of the following statements is correct and why!

1. C is correct, but Roshan's reasoning in D is incorrect
2. Both C and D are correct.
3. Both C and D are incorrect.

## Answer:

## Solution:

Since the average age of ten students is 15 , their total age is 150 .
After one student left, if the average is 17 , then their total is $17 * 9$ $=153$ which is NOT possible. So Roshan's observation in C is correct.

Let's see Roshan's argument in D. Can the average be 16 ? If so the total is $16 * 9=144$

And so the person who left has age 6 , which is eminently possible. So his argument that when someone leaves, the average only decreases is WRONG, as it CAN increase to 16 for example. So D is wrong, and so the correct answer is

C is correct, but Roshan's reasoning in D is incorrect.

## Previous Puzzle Winner

## Congratulations To Our Contest Winner Harini Narayanan!!!

Harini Narayanan has won an annual subscription for Jantar Mantar Children's Magazine
Grade: 8th std
Age: 13 years
School: Sri Sankara Senior Secondary school, Chennai Jantar Mantar is a children's magazine published by Tamilnadu Science Forum
Checkout the website for more details: https://tnsf.co.in/
You can also be the winner of this edition. All you have to do is solve the puzzle and send us your answer with a clear explanation.
A mathematician ordered a $9^{\prime \prime}$ pizza in a restaurant. The waiter came back with two $5^{\prime \prime}$ pizzas saying that they had run out of $9^{\prime \prime}$ pizzas, and by giving her two $5^{\prime \prime}$ pizzas instead of one 9 " pizza they were giving her more than what she asked for.
But, the mathematician argued that she will lose out even if they give her three $5^{\prime \prime}$ pizzas in
place of one 9 " pizza and so to get a real offer, she said she should get at least four.
Can you explain her logic?

## PUZZLE CORNER

Send your correct answers latest by midnight of 30th November 2023 for lucky draw on 1st December 2023 for selecting the winner

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