The final component of the evaluation of Vidyarthi Vigyan Manthan (VVM) after the State Level Camp (SLC) is the National Level Camp (NLC). We are happy to inform you that we will conduct a National Level Camp on **May 18-19, 2024, at IISER Bhopal, Madhya Pradesh**. All the selected students for NLC have successfully cleared the first and second rounds and demonstrated their excellence in both examinations. The Team VVM congratulates all the successful candidates for their success.

The National Level Camp will be conducted physically in TWO days. The NLC will start at 09:00 AM on May 18, 2024, and the Himalayans and Zonal winners will be declared on May 19, 2024, by 06:00 PM. The program will start with registration, followed by the inauguration and will end with a valedictory and winner declaration function. There is only one National Level Camp for all the selected students.

Students will be required to reach IISER Bhopal, Madhya Pradesh latest, by the Morning (before 08:00 AM) of Saturday, May 18, 2024. They can plan to return in the evening (after 07:00 pm) of Sunday, May 19, 2023. For the remaining guidelines and the conduct of the camp, also check the other attachment. The National Level Camp will provide an opportunity for students to showcase their talent under the following Groups of activities.

All the questions in science and math will be based on the VVM Curriculum (Linkhttps://vvm.org.in/ncert syllabus) for the respective group. The students will be divided into two groups viz. Junior Group (Class VI, VII, and VIII) and Senior Group (Class IX, X, and XI). There will be separate papers for Junior and Senior Groups.

The NLC will have the components as given in the table:

S. N.	Component/Sections SCIENCE TALENT SEARCH	Duration	Weightage
1	A. Application-Oriented Scholastic Aptitude Test (AOSAT): A thought-provoking, situation-based problem of science and Mathematics based on VVM syllabus	30 minutes	10% (10 Marks)
	B. Indian Contribution and Advancement in Science and Technology (ICAST): Students will be asked MCQ type questions based on the contributions of the following Research Institutions of India-	15 minutes	15% (15 Marks)
	Institutes for Junior Group:		
	(1) National Institute of Ocean Technology (NIOT), Chennai(2) CSIR - Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow		
	Institutes for Senior Group:		
	(1) National Innovation Foundation-India (NIF-India), Ahmedabad(2) CSIR – Institute of Microbial Technology (CSIR – IMTECH),Chandigarh		
	❖ To know the Scope of Topics and Suggestive References students need to check Annexure-I.		

S. N.	Component/Sections	Duration	Weightage
	 C. Personal Interaction: The topic for the Junior Group is "History of different Forts in various parts of India" and for the Senior Group is "History of Perfumery in India". To know the Scope of Topics and Suggestive References students need to check Annexure-I. 	3 – 5 min	10 % (10 Marks)
	 D. Vocal for Local: Students needs to choose ONE of the following themes and prepare slide presentation in pdf format with FOUR slides only and upload on the given link before 30th April, 2024. Themes for Junior Group: Any one local handicraft from your state / union territory Any one traditional food of your state / union territory Themes for Senior Group: Any one language of Indian origin from your state / union territory Any one textile form from your state / union territory To know the Scope of Topics and Suggestive References students need to check Annexure-I. 	3 – 5 min	10 % (10 Marks)
2	Experimental Skill Test (EST): in Physics, Chemistry, Biology and Math, based on academic knowledge of VVM Syllabus of the respective class.	50 minutes for each subject	40% (40 Marks)
3	Creative Assembling - Junior Group Students are required to model a creative work executing a challenge selected from a few pre-defined challenges of practical relevance. Creative Mapping and Charting – Senior Group Students are required to plot a pictorial representation of the data from a database given and mind-map the practical solutions to the problem data shared.	50 minutes	5 % (5 Marks)
4	Out-of-Box Activity: Students will have to complete two different activities in the stipulated time. Junior Group - Some mathematical shapes will be given and students will be expected to arrange them on a given square / rectangle shape tray / figure in such a way that no two shape or no two colour come in same row, column and diagonal. Senior Group - Students are required to arrange a set of certain polyominoes (tetra, penta, hexa) to form a shape desired in a stipulated time. Arrangement of the different sets of polyominoes may be required on a given square or rectangle figure.	50 minutes	10 % (10 Marks)

1. Application Oriented Scholastic Aptitude Test (AOSAT) and Indian Contribution and Advancements in Science and Technology (ICAST) [45%]

It will be a combination of paper-pen and interaction based examination conducted in Four parts. Details of the examination will be as follows

- (i) **Questions on the subject (10%):** There will be two thought-provoking, situation-based problems from the application of Science and Mathematics. The problem will be based on the VVM curriculum (NCERT and Various Boards curriculum) of the respective classes.
- (ii) Indian Contribution and Advancements in Science and Technology (ICAST) (15%): This year, the topic for the junior group will be "National Institute of Ocean Technology (NIOT), Chennai" & "CSIR Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow" and for the senior group the topic will be "National Innovation Foundation-India (NIF-India), Ahmedabad" & "CSIR Institute of Microbial Technology (CSIR IMTECH), Chandigarh".
- (iii) **Personal Interaction (10%):** A 3-5 min personal interaction will be conducted under ICAST to understand the personality of students. The topic for the Junior Group is: "History of different Forts in various parts of India", and for the Senior Group, it is: "History of Perfumery in India".
- (iv) **Vocal for Local (10%):** A 3-5 min presentation based interaction will be conducted under ICAST to understand the presentation skills and the traditional knowledge of students. The topic for the Junior Group is "Any one Local Handicraft or Traditional Food from their state / union territory" and for the Senior Group, it is "Anyone Language of Indian Origin or Textile Form from their state / union territory".

SCIENCE TALENT SEARCH

Note: Please refer to Annexure-I for more details of the Topics and Broad Scope for ICAST, Personal interaction and Vocal for Local Themes.

2. Experimental Skill Test (EST) in Physics, Chemistry, Biology and Math [40%]

Hands-on Physics, Chemistry, Biology and Math experiments will be given as individual activities. Students need to perform the activity and do all necessary calculations/graph plotting within 50 minutes.

For 11^{th} class students, the weightage of Math or Biology will be doubled, and they will have to attempt only one of them, depending on their choice.

3. Creativity [5%]

Junior Group students will be assessed through an activity titled "**Creative Assembling**". Students will showcase their creativity by constructing a unique work of art using a combination of preprovided materials from daily usage/consumption/availability in the environment around us.

Students will be given pre-defined targets, each with practical relevance, that will guide their artistic vision. The evaluation will focus on their understanding of the chosen challenge (conceptualization), their ability to translate their ideas into a physical form (implementation), their resourcefulness in utilizing the provided materials, and the originality and inventiveness of their final creation.

Senior Group students will be assessed through an activity titled "Creative Mapping and Charting". This activity is designed to assess creative problem-solving skills. Students will be presented with a pre-determined dataset. The task involves utilizing their understanding of data visualization skills to create a pictorial representation of the information. This will be followed by the participant interpreting the information and formulating solutions to the problem the data represents. Evaluation will focus on the clarity and creativity employed in both the data visualization and the student's ability to translate the data into actionable solutions.

4. Out-of-Box Activities [10%]

Students will be given on-the-spot activities/puzzles/mathematical shapes to be solved during this activity. **Junior Group** students will be given some mathematical shapes and students will be expected to arrange them on a given square shape tray/figure. **Senior Group** students are required to arrange a set of certain polyominoes (tetra, penta, hexa) to form a desired shape in a stipulated time.

As mentioned, there are four sections of the evaluation. The ICAST test will be conducted just after the inauguration. There will be two evaluation sessions (4 hours each) in addition to the ICAST test. In one of the 4-hour sessions, the Experimental Skill Test (EST) will be conducted, while all other components will be conducted in another 4-hour session. A detailed evaluation schedule will be given during registration on May 17/18, 2024.

Maximum marks of NLC will be 100. Out of these, 45 marks will be given to **AOSAT, ICAST, Personal Interaction & Vocal for Local;** 40 to **EST**, 5 to **Creativity** and 10 to **Out-of-Box Activity**.

The result of the National Level Examination, i.e., Himalayans, and the list of Zonal Winners will be announced on the 2^{nd} day of the camp, i.e., around 5:00 on May 19, 2024.

Dr. Neeru Bhagat Academic Head Dr. Brajesh Pandey Controller of Examination Dr. Präshant Kodgire National Convener