

VIDYARTHI VIGYAN MANTHAN (VVM) 2024-25
24-25 MAY, 2025 (NATIONAL LEVEL CAMP)
IIT KANPUR, UTTAR PRADESH

Annexure-I

Indian Contribution and Advancement in Science and Technology (ICAST)

JUNIOR GROUP (VI, VII & VIII)

COMPONENT 1: ICAST MULTIPLE CHOICE QUESTIONS

Students will be given 15 minutes to attempt 15 Multiple Choice Questions (1 Mark Each) based on the contributions of the following Research Institutions of India.

TOPICS FOR MCQS (15 MARKS)	
Topics	Scope of the Topics
<ul style="list-style-type: none">Indian Institute of Pulses Research, Kanpur, Uttar PradeshCSIR - Physical Research Laboratory, Ahmedabad, Gujarat	<ul style="list-style-type: none">Historical background of the InstitutesAreas of researchSignificant achievements of the Institutes

Suggestive References:

- 1) <https://iipr.icar.gov.in/>
- 2) <https://www.prl.res.in/prl-eng/home>

(Note: The above references are suggestive. Students can refer to other materials also)

COMPONENT 2: PERSONAL INTERACTION

Students will be invited for Personal Interaction (5 to 10 minutes) on “Science behind Indian String Musical Instruments”. Many musical instruments are used in Indian classical music. Experts will interact with students on the Science behind the below-mentioned Indian string musical instruments.

Students have to study these based on the scope mentioned.

TOPICS FOR PERSONAL INTERACTION (10 MARKS)	
List of Musical Instruments	Scope of the Topic
<ol style="list-style-type: none">1) Tanpura2) Saraswati Veena3) Sitar4) Sarod5) Sarangi6) Santoor	<ul style="list-style-type: none">• History of the instruments• Materials used, and how are the instruments made?• How is the instrument played? How do the pitch, loudness, and sound quality change?• Comparison between the string instruments listed.

Suggestive References:

1. <https://scienceindiamag.in/harmonies-unveiled-exploring-the-science-of-indian-music/>
2. <https://repository.ias.ac.in/69870/1/69870.pdf>

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3. <https://nadsadhna.com/indian-music/indian-instruments/>
4. <https://www.remosciano.com/musical-instruments-of-india>
5. <https://chitrasrikrishna.com/2020/10/01/stringed-instruments-of-india-a-quick-guide/>

(Note: The above references are suggestive. Students can refer other materials also)

COMPONENT 3: VOCAL FOR LOCAL

‘Vocal for Local’ is a concept that urges students to support indigenous traditions, customs, products, and skills, stimulating economic advancement and self-reliance. This component will sensitise them to study and present local skills, specialities, and Indian knowledge systems (IKS). Each student will be invited to present his/ her topic within **3 minutes**. Students should prepare slide presentations in PDF format on the following theme -

VOCAL FOR LOCAL (10 MARKS)
THEME
Biological Hotspot in My Region


Guidelines for preparing slides:

- 1) **Maximum 4 Slides** are to be prepared without any form of *Animation, Gif, and Audio-Video*.
 - **First Slide:** Students should mention the theme along with their Student ID, Name, Class, and Name of the State or Union Territory to which they belong.
 - **Second Slide:** The introduction should include a description of the Origin/History of the selected topic.
 - **Third Slide:** Importance, relevance, and characteristic features should be given.
 - **Fourth Slide:** The present status and the efforts made for conservation/preservation or promotion should be described.

Note: *On slides 2 to 4, the source of information should be mentioned in one line at the bottom of each slide.*

- 2) All the students should submit their presentations in PDF format (**Name of the file should be your Username/ID e.g. DLXXXXXX**) through Google Form on or before the 20th April 2025. **The link to upload the file will be provided in the WhatsApp group of VVM 2024-25 National Camp IIT Kanpur.**
- 3) Students are also advised to keep the printouts of the same while travelling for the National Camp.


Dr. Neeru Bhagat
Academic Head


Dr. Brajesh Pandey
Controller of Examination


Dr. Prashant Kodgire
National Convener