Annexure-I

Indian Contribution and Advancement in Science and Technology (ICAST)

SENIOR GROUP (IX, X, XI)

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 Science & Technology Institutions of India.

TOPICS FOR MCQS (15 MARKS)	
Topics	**Scope of the Topics**
• India Meteorological Department (IMD), MoES, New Delhi	• Historical background of IMD • Various departments of IMD which deal with specialized subjects • Various services offered by IMD • IMD's vision of 'Har Har Mausam, Har Ghar Mausam' • Different forecasts issued by IMD
• Central Marine Fisheries Research Institute, Kochi, Kerala	• Historical background of the Institute • Areas of research • Significant achievements of the Institute

Suggestive References:

1) https://mausam.imd.gov.in/
2) https://mausamgram.imd.gov.in/AboutMausamgram.pdf
3) https://www.cmfri.org.in/

(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 "Nanotechnology in the Indian Context". Nanotechnology is the study and use of materials and devices at the nanoscale, which is one billionth of a meter. In India, nanotechnology research began in 2001, and the government launched the Nano Mission in 2007. Experts will interact with students on "Nanotechnology in the Indian context".

Students have to study the same based on the scope mentioned.

PERSONAL INTERACTION (10 MARKS)	
Topic	**Scope of the Topic**
• Nanotechnology in the Indian Context	• Introduction to Nanotechnology • Various types of nanotechnology • Various day-to-day applications of nanotechnology • Research being carried out in India in the field of Nanotechnology • Thrust areas identified by the Working Group of Nanotechnology in India

Suggestive References:

1) https://www.meity.gov.in/content/nanotechnology-initiative-division
2) https://www.crnts.iitb.ac.in/
3) https://www.cens.res.in/en/
4) https://www.iberdrola.com/innovation/nanotechnology-applications

(Note: The above references are suggestive. Students can refer to 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
Any One G.I. Tagged Product 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 to.
   ➢ **Second Slide:** Introduction should include description of Origin/History of the selected topic.
   ➢ **Third Slide:** Importance, relevance and characteristic features should be given.
   ➢ **Fourth Slide:** Present status and the efforts made for conservation 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 **VVM 2024-25 National Camp IIT Kanpur** WhatsApp group.

3) Students are also advised to keep the printout 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