VIDYARTHI VIGYAN MANTHAN 2022-23 NATIONAL LEVEL CAMP EXAMINATION (20-21 MAY, 2023)

INDIAN INSTITUTES OF SCIENCE EDUCATION AND RESEARCH THIRUVANANTHAPURAM

Annexure-I

JUNIOR GROUP (CLASS VI, VII & VIII)

Indian Contributions and Advancement in Science and Technology (ICAST):

(i) Multiple choice questions (MCQ's):

20 Marks

(ii) Personal Interaction:

15 Marks

Details of the Topics and their scope are as follows:

Top	Topics For MCQs (20 Questions - 1 Mark Each)		
No.	Topics	Scope of the Topics	
1	Millets - An important	What are millets? What is their importance in diet?	
	component in our diet	The types of millets grown in India. Indigenous	
		varieties.	
		 Economic advantages 	
		 Challenges in growing millets 	
2	Maritime (Naval)	• Mention in vedic literature (the proven oldest	
	history of India	literature in the world)	
		 Knowledge of seafaring 	
	/ S'/	 Route finding by position of planets and stars 	
	7	 Countries visited by Indian seafarers for trade 	
		Ship building science in ancient India	
		• Ports in India, examples from Saraswati Sindhu	
		civilization	

Ton	Topics For Personal Interaction (15 Marks)		
No.	Topics	Scope of the Topics	
1	Ecotourism in the Indian	Definition, concept, and content of ecotourism	
	Context	 Possible areas that can support ecotourism – for e.g. world heritage sites (Cultural and natural) Protected areas such as national parks and wildlife sanctuaries, sites of community conserved areas of importance – e.g. turtle nesting beaches protected by communities, agro-forestry based sites, hills and mountains Types of ecotourism – agrotourism, wildlife tourism, low impact accommodation and sustainable minimalist living experiences, community-based tourism for benefits to the local communities Advantages of ecotourism Negative impacts of ecotourism 	
2	Pharmacy in Our Kitchen	 Use of several spices and herbs for medicinal purposes. Spices to increase our immunity and cure certain acute and chronic diseases Nutritive values and medical benefits of vegetables and fruits. 	

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Top	Topics For Personal Interaction (15 Marks)		
No.	Topics	Scope of the Topics	
		 Use of spices, herbs, vegetables and fruits as a traditional medicines according to Ayurveda, Unani, etc. 	
		 Properties of bioactive constituents in spices, herbs, vegetables and fruits such as anti-inflammatory, anti-carcinogenic or antioxidants, lower glucose or cholesterol level, or ability to affect cognition and mood. Traditional treatments or practices using substances in the kitchen. 	

Suggestive References:

Students can refer following links for the preparation. However, these are just the sample links. Students should also refer other web sites and reference material like books, periodicals and Science articles related to the topics.

For the topic Millets - Important component in our diet

- https://static.pib.gov.in/WriteReadData/specificdocs/documents/2022/feb/doc202222418
 701.pdf
- https://pminewyork.gov.in/MilletYear2023
- https://www.icrisat.org/tag/international-year-of-millets/

For the topic Maritime (Naval) history of India

- http://www.maritimetraining.in/documents/Indias Maritime heritage.pdf
- https://www.joinindiannavy.gov.in/en/about-us/maritime-heritage.html

For the topic Ecotourism in Indian context

- International Ecotourism Society (https://ecotourism.org/)
- National Strategy for Ecotourism in India https://tourism.gov.in/sites/default/files/2022-09/National%20Strategy%20for%20Ecotourism%202022.pdf

For the topic Pharmacy in our kitchen

- http://www.indianspices.com/spices-development/properties/medicinal-other-valuesspices.html
- http://www.indianspices.com/sites/default/files/medicinal%20 other values spices.pdf
- https://dirhorti.assam.gov.in/sites/default/files/swf utility folder/departments/horticultur e medhassu in oid 5/portlet/level 1/files/Health%20benifit%20of%20fruits%20%26%20v egetable.pdf
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5750606/

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Annexure-I

SENIOR GROUP (CLASS IX, X & XI)

Indian Contributions and Advancement in Science and Technology (ICAST):

(i) Multiple choice questions (MCQ's):

20 Marks

(ii) Personal Interaction:

15 Marks

Details of the Topics and their scope are as follows:

Top	Topics For MCQs (20 Questions - 1 Mark Each)		
No.	Topics	Scope of the Topics	
1	Indian Textile Industry	 Different types of Indian textiles and their specialities Region wise special textiles in different parts of the country India as a sole exporter of different textiles in rest of the world 	
2	Temple Architecture in India	 Temples in carved caves, Temples carved out of single rock, Temples built from stones. Different parts of the temple and constructions methodology Different styles like Nagara, Dravidian, Vesara, Buddhist, Gandhar, Hemadpanti, etc. Different material used in making of Idols of deities 	

Topics For Personal Interaction (15 Marks)		
No.	Topics	Scope of the Topics
1	Robotics in India	Multidisciplinary nature of robotics
		Robotic activities and its potential
		Future of robotics in India
	62	 Challenges in front of us in the field of robotics
	90	 Research and Training Institutes of Robotics in India
2	Antimicrobial Resistance	What is Antimicrobial resistance (AMR or AR)
		• Effect of increasingly impenetrable armour of
		antimicrobial resistance, Effects of overuse of
		antimicrobials for the purpose other than medical
		requirements.
		Prevention and treatment of an ever-increasing range
		of infections caused by bacteria, parasites, viruses and
		fungi.
		Household overuse of antibacterial cleaning products
		and its effects.

Suggestive References:

Students can refer following links for the preparation. However, these are just the sample links. Students should also refer other web sites and reference material like books, periodicals and Science articles related to the topics.

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For the topic Indian textile industry

- https://cbseacademic.nic.in/web-material/Curriculum/Vocational/2018/Traditional%20In-dian%20Textiles%20XII 777.pdf
- https://ncert.nic.in/textbook/pdf/kehc108.pdf

For the topic Temple architecture in India

- https://ncert.nic.in/textbook/pdf/kefa106.pdf
- http://ccrtindia.gov.in/temple-architecture/

For the topic Robotics in India

- https://indianinstituteofrobotics.co.in/
- https://www.drdo.gov.in/labs-and-establishments/centre-artificial-intelligence-robotics-cair#nolink
- https://nielit.gov.in/aurangabad/content/short-term-course-robotic-process-automation

For the topic Antimicrobial resistance

- https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance
- https://www.who.int/publications/m/item/india-national-action-plan-on-antimicrobial-resistance-(nap-amr)-2017-2021

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