SUBJECT: CBSE SCIENCE EXHIBITION/FAIR 2019-20

Science is inexplicably linked with our lives and helps us to understand the world around us better. Scientific and technological developments contribute to progress and help improve our standards of living. It thus becomes imperative, to encourage our students to think, learn, solve problems and make informed decisions. The Central Board of Secondary Education has been taking many initiatives to generate curiosity and develop scientific attitude amongst learners. Such initiatives encourage learners to create, innovate and invent and also to become more responsible in the use of Science and Technology. The organization of Science Exhibition/ Fair at Regional and National levels every year is one such initiative. The activity aims at providing a platform to students to demonstrate such learnings that encourage construction of knowledge by connecting new ideas to existing concepts as well as enriching one’s understanding from other’s experiences and perspectives.

The CBSE Science Exhibition/Fair for the academic session 2019-20 would be organized in different parts of the country at Regional Level in the month of October – November 2019. The National Level Exhibition/Fair would be conducted after the completion at the Regional Levels and dates for the same will be notified later.

Theme and Sub–Themes for the Science Exhibition/Fair for 2019-20

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<th>THEME</th>
<th>SUB-THEMES</th>
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| **Science and Technology for Sustainable Development with a Thrust on Water Conservation** | 1. Sustainable Agricultural Practices  
2. Cleanliness and Health  
3. Resource Management  
4. Industrial Development  
5. Future Transport and Communication  
6. Educational Games and Mathematical Modelling  
7. Others. |

The Board invites students of affiliated schools (Class VI to XI) to prepare research based science projects that are original, innovative exhibit/model on any of the above listed six sub-themes of the main theme “Science and Technology for Sustainable Development with a Thrust on Water Conservation”. The students may register to showcase their projects, with the help of their schools.

GUIDELINES FOR PARTICIPATION

1. All schools willing to participate need to apply online before the closing date. The last date for filling the online registration form is **12th October 2019** and for payment confirmation from bank is **18th October 2019**.

2. The registration fee as per the details given below must be submitted through online payment gateway.

<table>
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<tr>
<th>For Indian Schools</th>
<th>Rs. 1500/- per registering team</th>
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<tr>
<td>For Foreign Schools</td>
<td>Rs. 3000/- per registering team</td>
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3. A School Team for an exhibit will be represented by
   a. either an individual student or two students; and
   b. one mentor Science teacher.

4. The students studying in classes VI to XI in the current academic session i.e. 2019-20 are eligible to participate.

5. A participating school can register for a maximum of two exhibits/projects/models/teams.

6. The names of the students and the mentor teacher, once registered online, will not be changed at any stage of the exhibition.

7. The school team participating at Regional Level and National Level must remain the same.

8. The sub-theme once selected cannot be changed. Similarly, the title of the Project cannot be changed.

9. The project may include:
   - investigation based study;
   - an indigenous design of a machine/device or a technique;
   - application of basic principles of Science and Technology;
   - scheme/design of a device or machine to reduce production cost;
   - effective innovative and sustainable practice for environment conservation.

10. Care should be taken that eco-friendly materials are used in the preparation of exhibits.

11. The exhibits will be assessed by a team of experts as per the following criteria:
   a. Creativity and imagination 20%
   b. Originality and scientific and mathematical innovation 15%
   c. Scientific thought/principle/approach 15%
   d. Technical skill, workmanship, craftsmanship etc. 15%
   e. Utility for society, scalability/educational value 15%
   f. Economics/ viability (low cost), portability, durability, scope of its applicability in future etc. 10%
   g. Presentation – aspects like effectiveness, demonstration, display and relevant explanations 10%

   The decision of the expert team would be final.

12. The participating school/team would bear all expenses related to participation in the event.

13. The participating teams would make their own lodging/boarding arrangements at the venue city of Exhibition/Fair.

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Keypoints related to the conduct of the Exhibition/Fair

- The first stage of exhibition will be held at different venues across the country. The information regarding the venues will be circulated/notified later.

- **The selected best twenty four exhibits** (the number may increase or decrease depending on the quality of the exhibit) at each regional level venue will be eligible to participate in the National Level Exhibition/Fair.

- The actual dates for the Regional Level will be communicated to individual schools and details would also be available on CBSE website [www.cbseacademic.in](http://www.cbseacademic.in).

- Certificates will be awarded to the participants of the selected best entries at the National Level along with a cash award.

- The names of the winners of the CBSE National Science Exhibition/Fair will be forwarded to NCERT for consideration as entries in 47th Jawaharlal Nehru National Science Mathematics and Environmental Exhibition for Children in 2020 to be organized by NCERT. The confirmation for the participation in the exhibition/fair is subject to their selection for the same. Winners may also get a direct entry to participate in the Science Fair organized by Initiative for Research & Innovation in Science (IRIS) subject to their selection for it.

Guidelines for students are detailed in Annexure I. For any other information in this regard, you may contact at Tel. No. 011-23233227 or email at cbsescienceexb19@gmail.com

(Dr. Joseph Emmanuel)
Director (Academics)

Encl: As stated above.

Copy to the respective Heads of Directorates, Organizations and Institutions as indicated below with a request to disseminate the information to all the schools under their jurisdiction:

1. The Commissioner, Kendriya VidyalayaSangathan, 18-Institutional Area, Shaheed Jeet Singh Marg, New Delhi-16
2. The Commissioner, Navodaya VidyalayaSamiti, B-15, Sector-62, Institutional Area, Noida-201309
3. The Director of Education, Directorate of Education, Govt. of NCT of Delhi, Old Secretariat, Delhi-110 054
4. The Director of Public Instructions (Schools), Union Territory Secretariat, Sector 9, Chandigarh-160 017
5. The Director of Education, Govt. of Sikkim, Gangtok, Sikkim –737101
6. The Director of School Education, Govt. of Arunachal Pradesh, Itanagar –791 111
7. The Director of Education, Govt. of A&N Islands, Port Blair – 744101
8. The Director of Education, S.I.E., CBSE Cell, VIP Road, Junglee Ghat, P.O. 744103, A&N Island

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9. The Director, Central Tibetan School Administration, ESSESS Plaza, Community Centre, Sector 3, Rohini
10. The Additional Director General of Army Education, A – Wing, Sena Bhawan, DHQ, PO, New Delhi-110001
11. The Secretary AWES, Integrated Headquarters of MoD (Army), FDRC Building No. 202, Shankar Vihar (Near APS), Delhi Cantt-110010
12. The Under Secretary (EE-1), MHRD, Govt. of India, Department of SE&L, Shastri Bhawan, New Delhi-01
13. All Regional Directors/Regional Officers of CBSE with the request to send this circular to all the Heads of the affiliated schools of the Board in their respective regions
14. All Joint Secretaries/ Deputy Secretaries/ Assistant Secretaries/ Analysts (Academic, Training and Vocational Unit), CBSE
15. In charge IT Unit with the request to put this circular on the CBSE Academic website
16. The Senior Public Relations Officer, CBSE
17. PPS to Chairperson, CBSE
18. SPS to Secretary, CBSE
19. SPS to Director (EDUSAT, Research and Development), CBSE
20. SPS to Director (Information Technology), CBSE
21. SPS to Director (Academics), CBSE
22. SPS to Controller of Examinations, CBSE
23. SPS to Director (SE & T), CBSE
24. SPS to Director (Professional Exams), CBSE

Director (Academics)
Annexure I

Guidelines for Students: -

- You can participate individually or in a team of two.
- Select a topic of your interest from the suggested themes.
- Think of an idea that is original and innovative. It may be a research based project or an improvement of the existing product, process or a solution to a problem/challenge.
  Ensure availability of resources for your project and their cost effectiveness. You are advised to use materials that are eco-friendly and low cost.
- Once you select an idea: -
  I) Source information on your topic and make a plan.
  II) Your plan must specify you purpose, hypothesis, the constant (control) and changing variables, the procedure of conducting the experiment and a time line. In case your project focuses on improvisation or providing a solution, specify the various steps it would be tested and verified before recommendation.
  III) Conduct the survey and record your observations and dates.
  IV) Analyze your data to arrive at conclusions. Display your work in an attractive manner. The display must be organized, neat and must clearly reflect title of your project or improvement; stages of the work; and conclusions drawn. You can use colourful headings, photographs, diagrams, tables, charts and graphs to highlight important facts/data. You can augment the important phases of your project or solution with audio and videos. Make sure it is simple and sturdy and not cumbersome and unwieldy.
  V) Consult your Mentor teacher at various stages.