



2023 NATIONAL SCIENCE CHALLENGES (NSC) GUIDELINES AND REGULATIONS

1.0 BACKGROUND

The National Science Challenge (NSC) is a national science competition specifically for secondary school students. The main goal of this competition is to increase the interest of students throughout Malaysia to explore the fields of Science, Technology, Engineering & Mathematics (STEM). This competition can also foster interest in the field of technology and innovation in addition to being able to train students in the field of science communication.

Since 1999, NSC has grown from a national science quiz program to one of the premier science competitions in Malaysia that provides high-level challenges to secondary school students. In addition, NSC also challenges the minds of students in various STEM subjects and provides opportunities for them to seek direct guidance from young scientists from the Young Scientists Network-ASM (YSN-ASM).

2.0 OBJECTIVE

The NSC competition aims to **nurture, encourage and increase** students' interest in STEM-related subjects. In addition, the competition also aims to instil students' interest to choose STEM fields and careers in the future.

3.0 2023 NSC THEME

“Challenges facing the nation’s food security”

4.0 COMPETITION FORMAT

| Competition Level | Date | Description |
|--------------------------|------------------------|--|
| Registration | 1 April – 31 May 2023 | Online registration through www.nsc.my |
| Preliminary | 12 – 16 June 2023 | Online individual quiz in www.nsc.my according to zone that will be informed later. Quiz will be held in bilingual (Malay & English) |
| State Level | 28 June – 28 July 2023 | The top 80 teams with the highest scores from the preliminary level will compete at this stage. |

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| Semi-Final | 4 – 23 August 2023 | The top 20 teams from the state level will compete at this level |
| Grand Final | 13 September 2023 | The top 5 teams will compete to win the YAB Prime Minister Trophy |

1) REGISTRATION

- i. NSC is open to **Malaysian students**, Form 1 to 4, (aged between 13 to 16 years in the year of participation), from national, private, and international schools. Home-schooled students which are registered by *Jabatan Pendidikan Negeri* (JPN) are also eligible to participate in this competition.
- ii. NSC 2023 is open for registration from **1 April until 31 May 2023**.
- iii. Mentor teachers need to register the team that will compete on www.nsc.my.
- iv. Mentor teachers are required to enter all participants and school details into the system. If the school is not listed, the mentor teacher must enter the name of the school in full. For teams consisting of students who attend homeschooling, the mentor must enter "Home School" followed by the name of the Mentor (Example: Home School_ Ali) and select their respective state.
- v. **Each team** required to have **3 students and 1 mentor teacher**.
- vi. **There is no limit to the number of teams per mentor teacher**.
- vii. **There is no limit to the number of teams per school**.
- viii. **No registration fee imposed**.
- ix. For each completed team registration, each participant will be given an individual ID for the Preliminary Stage.
- x. All information can be accessed by mentor teachers through their respective NSC accounts. All participants are required to create a password when logging in for the first time.

2) PRELIMINARY LEVEL – ONLINE QUIZ

- i. All easy level questions are based on Form 1 to Form 4 syllabus, while the Higher Order Thinking Skills (HOTS) questions are based on Form 3 and Form 4 syllabi.
- ii. The Preliminary Level will be held from 12 to 16 June 2023 (conducted online according to zones that will be notified later).
- iii. A trial session for the quiz will be held on 8 – 9 June 2023 for participants to adapt to the quiz platform.
- iv. Before the competition:
 - a. Mentor teachers to share the individual ID and password to all participants.
 - b. All participants must obtain an individual ID and password that will be given by the mentor teacher to answer the quiz.
- v. During the competition:
 - a. Kindly visit the NSC website at www.nsc.my . All participants must log in using their individual ID and password to answer the online quiz.
 - b. All participants are only given 1 hour to answer the online quiz.
 - c. Online Quiz can be taken by the students at any suitable location with Internet connection within the time limit between **7 am to 7 pm** without interrupting the teaching and learning (PdP) process/ program/ school activities. All participants need to answer the quiz individually.
 - d. Quiz questions were arranged randomly.

- e. Participants can choose to either answer the quiz in English or Malay.
- vi. **80 teams will be selected from 13 states and 3 Federal Territories (five teams for each state/federal territory) to compete at the State Level.**
- vii. The states and Federal Territories are Johor, Kedah, Kelantan, Melaka, Negeri Sembilan, Pahang, Perak, Perlis, Penang, Sabah, Sarawak, Selangor, Terengganu, WP Kuala Lumpur, WP Labuan, and WP Putrajaya.
- viii. The five teams with the highest overall scores from each state will be crowned State Level winners.
- ix. The following are the criteria for selecting the winning team:
 - a. The overall score from each participant is cumulative in a **team**
 - b. The overall time taken to answer the quiz will be taken into account if there are two teams with the same overall score.
- x. All participants will be given a certificate of participation. The certificate can be downloaded at www.nsc.my after the Preliminary Level ends.

3) STATE LEVEL

The theme for 2023 NSC is “**Challenges facing the nation’s food security**”. Each team is required to produce a video based on a given topic.

i. Video Competition

- a. A briefing on the State Level guidelines will be conducted for all participants via Zoom platform on 28 June 2023 (Subject to change)
- b. All teams will be given a topic to produce one video. A period of three (3) weeks will be given for this round.
- c. All teams can use any software to produce the video. Videos should be sent to nsc@akademisains.gov.my in **.MP4 format by 20 July, 11.59pm**
- d. All videos will be uploaded to ASM’s official YouTube channel.
- e. The video will be judged by the jury according to the rubric.

ii. Interview Session

- a. After all the videos are evaluated, interview sessions with all 80 teams will be conducted by the judges via the Zoom meeting application.
- b. Each team will be assessed based on their understanding of the respective video content, basic STEM knowledge, and opinions on STI issues.
- c. Teams will be evaluated based on the rubric.
- d. The judges will choose the top 20 teams that will compete in the Semi-Final.
- e. The interview session will be held online from **25 to 27 July 2023**. Time slot and interview date for all teams will be informed later.
- f. All participants will be given a certificate of participation. The certificate can be downloaded at www.nsc.my after the State Level ends.

4) SEMI-FINAL

- i. A briefing on the Semi-Final Stage guidelines will be conducted for all participants via the Zoom platform on 4 Ogos 2023.
- ii. The **top 20 teams** that will compete in the Semi-Final (online) and participate in the virtual bootcamp from 14 to 18 August 2023.

- iii. Each team competing in the Semi-Finals will be guided by YSN-ASM members in the production of their respective prototypes.
- iv. The judges will select **five (5) teams** with the highest scores to advance to the Grand Final.
- v. All participants will be given a certificate of participation. The certificate can be downloaded at www.nsc.my after the Semi Final Level ends.

5) GRAND FINAL

- i. Five (5) teams will compete in the Grand Final (**physical**)
- ii. The Grand Final consists of:
 - a. Quiz (Individual, Team & Lightning Round)
 - b. Prototype Presentation
- iii. Certificate of Achievement based on the ranking will be emailed to each participant who competes at this level.

Note: Instructions and guidelines for each level are subject to change. Any changes will be notified to all participants and mentor teachers via official email, Telegram channel and NSC social media. Please visit the website www.nsc.my for more information.

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