

Welcome to ASMOPSS 2025 National Round!

Hosted in the Pakistan by



Global Brainy Bunch
IGNITE YOUNG MINDS

----- OUTLINE -----

This document contains the following:

- (1) Schedule
- (2) Contest mechanics
- (3) Syllabus
- (4) Concerns

GOOD LUCK and ALL THE BEST to our students!

----- START -----

1) SCHEDULE

January 6 – March 10 Registrations - National Round

May 7: 9:30am-10:30 am **National Round (Science)**

May 8: 9:30am-10:30am **National Round (Mathematics)**

2) CONTEST MECHANICS (National Round)

1. **Time Limit:** 60 - 90 Minutes for all participants.
2. There will be 20 (math) or 30 (science) multiple choice problems.
3. You are allowed to have a pen/pencil and a whiteboard or 1 sheet of blank paper for your scratch work.
4. No calculators nor any unauthorized devices, such as mobile phones, (online) books, searching on the internet, etc. are allowed during the contest.
5. This is an individual competition and the Invigilator will make sure that the student is alone while taking the test. Contestants must **NOT** leave his/her seat without permission of the Invigilator.
6. Invigilator will not entertain contestants' questions regarding test questions/problems.
7. The organizer reserves the right to disqualify a contestant in the event of malpractice, which includes any suspicious event, etc.
8. Diagrams and pictures are not drawn to scale.
9. **Scoring System:** Please note that the scoring system is different depending on the test to be taken.

	No. of Questions	Correct Answer	No Answer (blank)	Wrong Answer
Science	30	+4	0	0
Mathematics	25	+5	0	0

3) SYLLABUS

- **Science**

1. **Science skills and methodology, general health** (nutrition, common disease and how to prevent it)
2. **General environment issue** (deforestation, natural resource management, pollution, water and carbon cycles, etc).
3. **Basic ecology** (habitat, interaction, food chain, and food web, population, ecosystem, life cycle, etc).
4. **Physiology** (photosynthesis and respiration).
5. **Current technology development** (GMO, biotech, biofuel, satellite, etc).
6. **Human anatomy and function** (skeleton and movement, olfactory system, auditory system, mouth, eyes, circulatory, digestive system, skin, respiratory system) and human disease.
7. **Classification of organisms** based on their food, anatomy, systematic, reproduction system and habitat.
8. **Mechanics** (motion of object, static fluid, gas).
9. **Solar system** (member of the solar system, rotation of earth and moon, earth and moon eclipses).
10. **The earth planet** (structure, surface, process of earth formation, water cycle, renewable resources, climate, seasons, gravitation, wind).
11. **Electricity and magnetism** (application, models).
12. **Matter** (properties, phase transformation (solid-liquid-gas), physical, chemical, and biological transformation).
13. **Thermal properties** (temperature, thermometer, energy, conduction, convection, radiation).
14. **Light** (property, vision, colour).
15. **Force** (shape of material changes, magnetic, gravitation, frictional forces).
16. **Energy** (kinetic, potential, heat, sound, renewable, energy conversion).

- **Mathematics**

1. **Arithmetic:** integers, rational numbers and their representations (fraction, decimal, and percentage), (number) factorization, greatest common divisor, least common multiple, number ordering, and ratio/proportion.
2. **Geometry:** angle and its measure, area and perimeter, triangle (including triangle inequality), quadrilateral, parallelogram, trapezoid, circles, cube, parallelepiped nets, symmetry, reflection and rotation, scaling, and similarity.
3. **Data and measurement:** data representation, mean (average), median, modus, and min/max.
4. **Combinatorics:** basic counting principle and probability, simple application of pigeonhole principle, and Venn diagram.
5. **Logic:** basic logic and deduction skill.

4) CONCERNS

- a. For changes/concerns in registration details, please email info@gbbunch.org.
- b. Please call +92-42-35894050; **Cell:** +92-305-8721138, +92-321-0009388

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