



# NATIONAL SCIENCE OLYMPIAD

## SYLLABUS

## ROUND-I SYLLABUS

Mostly from Grade 4<sup>th</sup> to 8<sup>th</sup>, students study General Science as major subject. We recommend the students of Grade 4<sup>th</sup> to 8<sup>th</sup> to select General science Subject in Olympiad. On the other hand, From Grade 9<sup>th</sup> to Masters, students can select the subject of their choice.

Remember that MCQs paper comes from full book, so always select class with care. We recommend selecting the previous class you studied.

### General Science

General Science is a mixture of all major science subjects. The candidates who selected Physics as their subject have to follow the following pattern. Paper of National Science Olympiad for General Science will be according to the following pattern;

- Syllabus of the paper will consist on General Science
- Paper will be purely from science full book
- Test will be MCQs based from science book only
- Every student has to prepare from their respective class science book
- Paper of Bachelors & Masters students will be according to their level of education. As there is no specific book of General Science at their level

Test Pattern:

Class	Book	Total MCQs	Total Marks	Time (Minutes)
4 <sup>th</sup>	General Science	70	70	60 Minutes
5 <sup>th</sup>	General Science	70	70	60 Minutes
6 <sup>th</sup>	General Science	70	70	60 Minutes
7 <sup>th</sup>	General Science	70	70	60 Minutes
8 <sup>th</sup>	General Science	70	70	60 Minutes
9 <sup>th</sup>	General Science	70	70	60 Minutes
10 <sup>th</sup>	General Science	70	70	60 Minutes
11 <sup>th</sup>	General Science	70	70	60 Minutes
12 <sup>th</sup>	General Science	70	70	60 Minutes
O-Levels	General Science	70	70	60 Minutes
A-Levels	General Science	70	70	60 Minutes
DAE	General Science	70	70	60 Minutes
ADP	General Science	70	70	60 Minutes
IGCSE	General Science	70	70	60 Minutes
Bachelors	General Science	70	70	60 Minutes
Masters	General Science	70	70	60 Minutes

# Physics

The candidates who selected Physics as their subject have to follow the following pattern. Paper of National Science Olympiad for Physics will be according to the following pattern;

- Paper will be purely from Physics full book
- Test will be MCQs based from Physics book only
- Every student has to prepare from their respective class physics book
- Paper of Bachelors & Masters students will be according to their level of education. As there is no specific book of Physics at their level

## Test Pattern:

Class	Book	Total MCQs	Total Marks	Time (Minutes)
4 <sup>th</sup>	Physics	70	70	60 Minutes
5 <sup>th</sup>	Physics	70	70	60 Minutes
6 <sup>th</sup>	Physics	70	70	60 Minutes
7 <sup>th</sup>	Physics	70	70	60 Minutes
8 <sup>th</sup>	Physics	70	70	60 Minutes
9 <sup>th</sup>	Physics	70	70	60 Minutes
10 <sup>th</sup>	Physics	70	70	60 Minutes
11 <sup>th</sup>	Physics	70	70	60 Minutes
12 <sup>th</sup>	Physics	70	70	60 Minutes
O-Levels	Physics	70	70	60 Minutes
A-Levels	Physics	70	70	60 Minutes
DAE	Physics	70	70	60 Minutes
ADP	Physics	70	70	60 Minutes
IGCSE	Physics	70	70	60 Minutes
Bachelors	Physics	70	70	60 Minutes
Masters	Physics	70	70	60 Minutes

# Chemistry

The candidates who selected Chemistry as their subject have to follow the following pattern. Paper of National Science Olympiad for Chemistry will be according to the following pattern;

- Paper will be purely from Chemistry full book
- Test will be MCQs based from Chemistry book only
- Every student has to prepare from their respective class Chemistry book
- Paper of Bachelors & Masters students will be according to their level of education. As there is no specific book of Chemistry at their level

## Test Pattern:

Class	Book	Total MCQs	Total Marks	Time (Minutes)
4 <sup>th</sup>	Chemistry	70	70	60 Minutes
5 <sup>th</sup>	Chemistry	70	70	60 Minutes
6 <sup>th</sup>	Chemistry	70	70	60 Minutes
7 <sup>th</sup>	Chemistry	70	70	60 Minutes
8 <sup>th</sup>	Chemistry	70	70	60 Minutes
9 <sup>th</sup>	Chemistry	70	70	60 Minutes
10 <sup>th</sup>	Chemistry	70	70	60 Minutes
11 <sup>th</sup>	Chemistry	70	70	60 Minutes
12 <sup>th</sup>	Chemistry	70	70	60 Minutes
O-Levels	Chemistry	70	70	60 Minutes
A-Levels	Chemistry	70	70	60 Minutes
DAE	Chemistry	70	70	60 Minutes
ADP	Chemistry	70	70	60 Minutes
IGCSE	Chemistry	70	70	60 Minutes
Bachelors	Chemistry	70	70	60 Minutes
Masters	Chemistry	70	70	60 Minutes

# Biology

The candidates who selected Biology as their subject have to follow the following pattern. Paper of National Science Olympiad for Biology will be according to the following pattern;

- Paper will be purely from Biology full book
- Test will be MCQs based from Biology book only
- Every student has to prepare from their respective class biology book
- Paper of Bachelors & Masters students will be according to their level of education. As there is no specific book of biology at their level

## Test Pattern:

Class	Book	Total MCQs	Total Marks	Time (Minutes)
4 <sup>th</sup>	Biology	70	70	60 Minutes
5 <sup>th</sup>	Biology	70	70	60 Minutes
6 <sup>th</sup>	Biology	70	70	60 Minutes
7 <sup>th</sup>	Biology	70	70	60 Minutes
8 <sup>th</sup>	Biology	70	70	60 Minutes
9 <sup>th</sup>	Biology	70	70	60 Minutes
10 <sup>th</sup>	Biology	70	70	60 Minutes
11 <sup>th</sup>	Biology	70	70	60 Minutes
12 <sup>th</sup>	Biology	70	70	60 Minutes
O-Levels	Biology	70	70	60 Minutes
A-Levels	Biology	70	70	60 Minutes
DAE	Biology	70	70	60 Minutes
ADP	Biology	70	70	60 Minutes
IGCSE	Biology	70	70	60 Minutes
Bachelors	Biology	70	70	60 Minutes
Masters	Biology	70	70	60 Minutes

# Mathematics

The candidates who selected Mathematics as their subject have to follow the following pattern. Paper of National Science Olympiad for Math will be according to the following pattern;

- Paper will be purely from Math full book
- Test will be MCQs based from math book only
- Every student has to prepare from their respective class math book
- Paper of Bachelors & Masters students will be according to their level of education. As there is no specific book of math at their level

## Test Pattern:

Class	Book	Total MCQs	Total Marks	Time (Minutes)
4 <sup>th</sup>	Mathematics	70	70	60 Minutes
5 <sup>th</sup>	Mathematics	70	70	60 Minutes
6 <sup>th</sup>	Mathematics	70	70	60 Minutes
7 <sup>th</sup>	Mathematics	70	70	60 Minutes
8 <sup>th</sup>	Mathematics	70	70	60 Minutes
9 <sup>th</sup>	Mathematics	70	70	60 Minutes
10 <sup>th</sup>	Mathematics	70	70	60 Minutes
11 <sup>th</sup>	Mathematics	70	70	60 Minutes
12 <sup>th</sup>	Mathematics	70	70	60 Minutes
O-Levels	Mathematics	70	70	60 Minutes
A-Levels	Mathematics	70	70	60 Minutes
DAE	Mathematics	70	70	60 Minutes
ADP	Mathematics	70	70	60 Minutes
IGCSE	Mathematics	70	70	60 Minutes
Bachelors	Mathematics	70	70	60 Minutes
Masters	Mathematics	70	70	60 Minutes

# Computer Science

The candidates who selected Computer Science as their subject have to follow the following pattern. Paper of National Science Olympiad for Computer Science will be according to the following pattern;

- Paper will be purely from Computer full book
- Test will be MCQs based from Computer book only
- Every student has to prepare from their respective class Computer book
- Paper of Bachelors & Masters students will be according to their level of education. As there is no specific book of Computer Science at their level

## Test Pattern:

Class	Book	Total MCQs	Total Marks	Time (Minutes)
4 <sup>th</sup>	Computer Sci.	70	70	60 Minutes
5 <sup>th</sup>	Computer Sci.	70	70	60 Minutes
6 <sup>th</sup>	Computer Sci.	70	70	60 Minutes
7 <sup>th</sup>	Computer Sci.	70	70	60 Minutes
8 <sup>th</sup>	Computer Sci.	70	70	60 Minutes
9 <sup>th</sup>	Computer Sci.	70	70	60 Minutes
10 <sup>th</sup>	Computer Sci.	70	70	60 Minutes
11 <sup>th</sup>	Computer Sci.	70	70	60 Minutes
12 <sup>th</sup>	Computer Sci.	70	70	60 Minutes
O-Levels	Computer Sci.	70	70	60 Minutes
A-Levels	Computer Sci.	70	70	60 Minutes
DAE	Computer Sci.	70	70	60 Minutes
ADP	Computer Sci.	70	70	60 Minutes
IGCSE	Computer Sci.	70	70	60 Minutes
Bachelors	Computer Sci.	70	70	60 Minutes
Masters	Computer Sci.	70	70	60 Minutes

# Economics

The candidates who selected Economics as their subject have to follow the following pattern. Paper of National Science Olympiad for Economics will be according to the following pattern;

- Paper will be purely from Economics full book
- Test will be MCQs based from Economics book only
- Every student has to prepare from their respective class Economics book
- Paper of Bachelors & Masters students will be according to their level of education. As there is no specific book of Economics at their level

## Test Pattern:

Class	Book	Total MCQs	Total Marks	Time (Minutes)
4 <sup>th</sup>	Economics	70	70	60 Minutes
5 <sup>th</sup>	Economics	70	70	60 Minutes
6 <sup>th</sup>	Economics	70	70	60 Minutes
7 <sup>th</sup>	Economics	70	70	60 Minutes
8 <sup>th</sup>	Economics	70	70	60 Minutes
9 <sup>th</sup>	Economics	70	70	60 Minutes
10 <sup>th</sup>	Economics	70	70	60 Minutes
11 <sup>th</sup>	Economics	70	70	60 Minutes
12 <sup>th</sup>	Economics	70	70	60 Minutes
O-Levels	Economics	70	70	60 Minutes
A-Levels	Economics	70	70	60 Minutes
DAE	Economics	70	70	60 Minutes
ADP	Economics	70	70	60 Minutes
IGCSE	Economics	70	70	60 Minutes
Bachelors	Economics	70	70	60 Minutes
Masters	Economics	70	70	60 Minutes

## ROUND-II SYLLABUS

Round-II test is only for those students selected in Round-I after securing a reasonable percentage probably about 80% in Round-I Test. Round II test consists of English Grammar. The online test is always an open-book quiz, so these tests are difficult to solve. The paper pattern of English IQ tests is given below;

Round II is only for the selected students after Round I. English Grammar is the major part of all classes taught in each school. From grade 1 to grade 12, English is compulsory for all students. That's why we selected English Grammar in Round II instead of IQ Test. At the Bachelor & Master level, English Grammar is the most important and included in skills. The paper will include different types of sentences including different grammar perspectives. In the Round II Test, English Grammar may comprise;

- Parts of Speech
- All type of tense including negative & interrogative
- Sentence types
- Pronouns & its types
- Adverbs & Adjectives
- Prepositions
- Nouns
- Verbs
- Interjections
- Conjunctions
- Determiners
- Word Order
- Auxiliary Verbs
- Connectors
- Active/Passive
- Possessive

Test Pattern:

Class	Test	Total MCQs	Total Marks	Time (Minutes)
4 <sup>th</sup>	English Grammar	100	100	80 Minutes
5 <sup>th</sup>	English Grammar	100	100	80 Minutes
6 <sup>th</sup>	English Grammar	100	100	80 Minutes
7 <sup>th</sup>	English Grammar	100	100	80 Minutes
8 <sup>th</sup>	English Grammar	100	100	80 Minutes
9 <sup>th</sup>	English Grammar	100	100	80 Minutes
10 <sup>th</sup>	English Grammar	100	100	80 Minutes
11 <sup>th</sup>	English Grammar	100	100	80 Minutes
12 <sup>th</sup>	English Grammar	100	100	80 Minutes
O-Levels	English Grammar	100	100	80 Minutes
A-Levels	English Grammar	100	100	80 Minutes
DAE	English Grammar	100	100	80 Minutes
ADP	English Grammar	100	100	80 Minutes
IGCSE	English Grammar	100	100	80 Minutes
Bachelors	English Grammar	100	100	80 Minutes
Masters	English Grammar	100	100	80 Minutes

\*Minimum half-time is required to complete the paper. The paper of students completing the paper in 10 or 20 minutes will not be accepted. The minimum time to complete the paper is 40 Minutes. After less than 40 minutes, papers will not be accepted.

\*45 (03 from each class) Candidates will be selected from Round-II Test.

## ROUND-III SYLLABUS

Round-III test is only for those students selected in Round-II after securing a reasonable percentage Round-II Test. Round III test consists of General Knowledge. The online test is always an open-book quiz, so these tests are difficult to solve. The paper pattern of General Knowledge tests is given below;

Round III is only for the selected students after Round II. In the Round III Test, General Knowledge may comprise;

- Pakistan History
- Current affairs of the world
- Political history of world

### Test Pattern:

Class	Test	Total MCQs	Total Marks	Time
4 <sup>th</sup>	General Knowledge	100	100	1 Hour
5 <sup>th</sup>	General Knowledge	100	100	1 Hour
6 <sup>th</sup>	General Knowledge	100	100	1 Hour
7 <sup>th</sup>	General Knowledge	100	100	1 Hour
8 <sup>th</sup>	General Knowledge	100	100	1 Hour
9 <sup>th</sup>	General Knowledge	100	100	1 Hour
10 <sup>th</sup>	General Knowledge	100	100	1 Hour
11 <sup>th</sup>	General Knowledge	100	100	1 Hour
12 <sup>th</sup>	General Knowledge	100	100	1 Hour
O-Levels	General Knowledge	100	100	1 Hour
A-Levels	General Knowledge	100	100	1 Hour

DAE	General Knowledge	100	100	1 Hour
ADP	General Knowledge	100	100	1 Hour
IGCSE	General Knowledge	100	100	1 Hour
Bachelors	General Knowledge	100	100	1 Hour
Masters	General Knowledge	100	100	1 Hour

\*Minimum half-time is required to complete the paper. The paper of students completing the paper in 10 or 20 minutes will not be accepted. The minimum time to complete the paper is 30 Minutes. After less than 30 minutes, papers will not be accepted.

\*Top 10 Candidates will be selected from Round-II Test for final scholarship award.