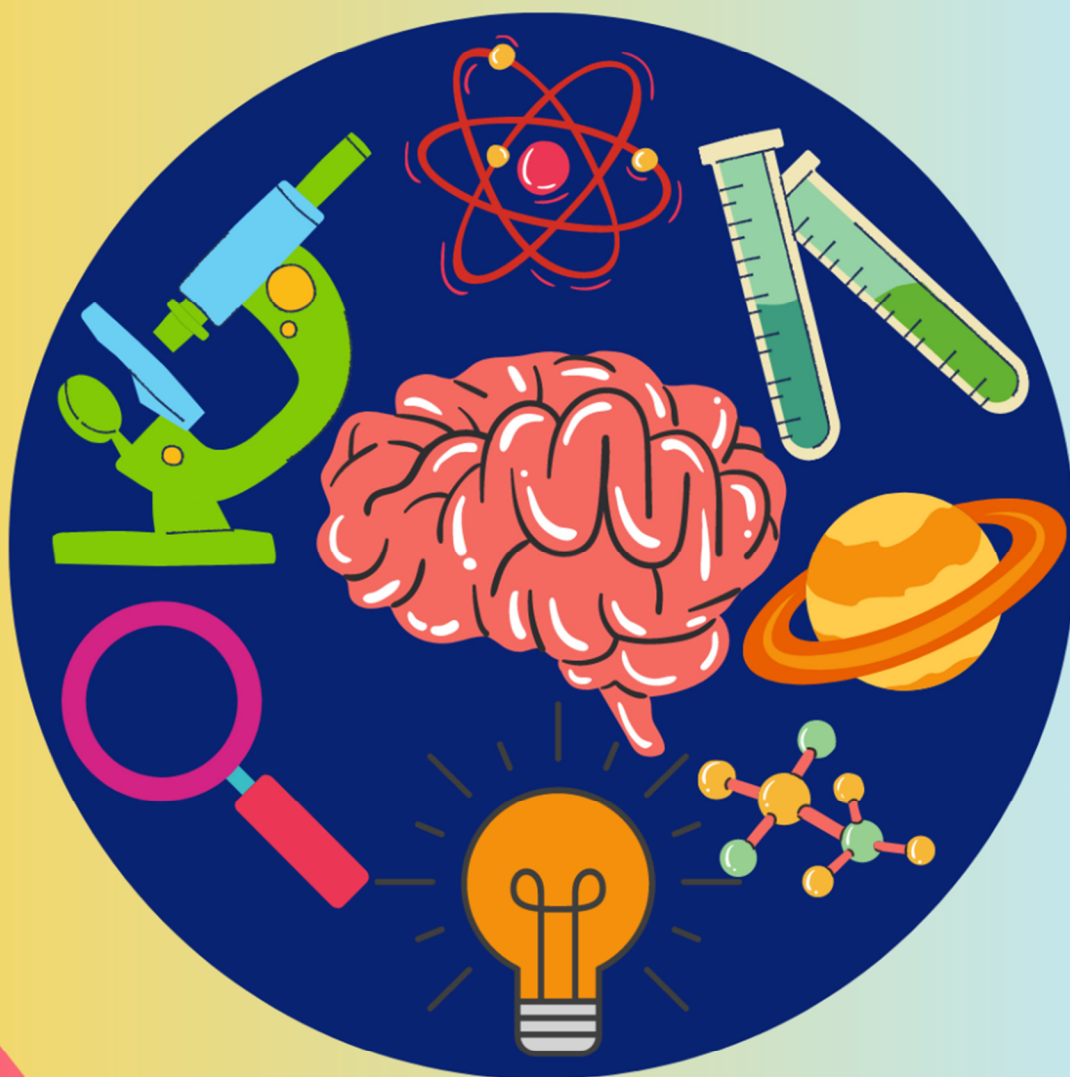


SCIENCE WORKBOOK

8

For the preparation of National
& International Olympiads



- Chapter-wise practice exercises
- Previous year paper

CREST Science Olympiad (CSO)

Science Olympiad

Exams Preparation Book

CSO | NSO | USO | iOS | NSTSE | HSO

Grade 8



#CRESTInnovator

www.crestolympiads.com

CREST Science Olympiad Workbook for Grade 8

Fourth Edition

Copyright © 2024 Loyalty Square Analytic Solutions Private Limited (hence, referred to as CREST Olympiads). Printed with the permission of CREST Olympiads. No part of this publication may be reproduced, transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright holder. Ownership of a Workbook does not give the possessor the Workbook copyright.

Disclaimer: The information in the Workbook is to give you the path to success but it does not guarantee 100% success as the strategy is completely dependent on its execution. And it is based on previous year papers of CSO exam.

Published & Distributed by: Loyalty Square Analytic Solutions Private Limited
Corporate Office: B2 -234, Spaze IT Park, Sector-49, Gurgaon, Haryana-122018, India

Website: <https://www.crestolympiads.com>

Email: info@crestolympiads.com

Contact Number: +91-9818-294-134

ISBN Number: 978-81-957950-5-5

Social Media Accounts



Facebook: <https://www.facebook.com/crestolympiads>

Instagram: <https://www.instagram.com/crestolympiads>

LinkedIn: <https://www.linkedin.com/company/crestolympiads>

Youtube: <https://www.youtube.com/c/CRESTOlympiads>

Twitter: <https://twitter.com/crestolympiads>

Visit www.crestolympiads.com/olympiad-books for buying books online.



Also Available On

amazon **Flipkart** 

Contents

1. Crop Production and Management.....	5
2. Microorganisms.....	9
3. Synthetic Fibres and Plastics	17
4. Metal and Non-Metals	21
5. Coal and Petroleum	27
6. Combustion and Flame	34
7. Conservation of Plants and Animals.....	39
8. Cell.....	43
9. Reproduction in Animals	48
10. Force and Pressure.....	54
11. Friction	61
12. Sound	66
13. Chemical Effects of Electric Current	73
14. Some Natural Phenomena	80
15. Light.....	86
16. Stars and the Solar System.....	97
17. Pollution of Air and Water.....	103
18. Previous Year Paper (2023-24).....	108
19. Answer Key.....	116

Preface

We are pleased to launch a thoroughly revised edition of this workbook. We welcome feedback from students, teachers, educators and parents. For improvements in the next edition, please send your suggestions at info@crestolympiads.com. Our team will make an effort to work on those suggestions. The status of the improvements can be checked at <https://www.crestolympiads.com/corrections-class8-026>

CREST Olympiads is one of the largest Olympiad Exams with students from more than 60 countries. The objective of these exams is to build a competitive spirit while evaluating students on conceptual understanding of the concepts.

We strive to provide a superior learning experience, and this workbook is designed to complement the school studies and prepare the students for various competitive exams including the CREST Olympiads. This workbook provides a crisp summary of the topics followed by the practice questions. These questions encourage the students to think analytically, to be creative and to come up with solutions of their own. There is a previous year's paper given at the end of this workbook for the students to attempt after completing the syllabus. This paper should be attempted in 1 hour to get an assessment of the student's preparation for the final exam.

Publishers

Chapter 1

Crop Production and Management

Crop Production and Management

Plants of the same kind that are grown in large quantities in fields and cultivated as a source of food are called crops.

Basic Practices of Crop Production

1. Preparation of soil:

- The soil is prepared for sowing the seeds of the crop by ploughing, levelling and manuring.
- Ploughing (or tilling) loosens and turns the soil
- The ploughed soil is levelled by pressing it with a wooden leveller to prevent the soil erosion.
- Manure is added to the soil. Sometimes, manure is added before the soil is ploughed.

2. Sowing:

- Seeds are put in the ground soil for growing the crop plants.
- Seeds are put at appropriate depths and distances
- Good variety of seeds are selected.
- Sowing of seeds are done by seed drill or by hand.

3. Adding Manures and Fertilisers

- Manures and fertilisers are the substances that are added to the soil to increase their fertility.
- Manures are natural substances and provide a lot of organic matter like humus to the soil.
- Fertilisers are the inorganic compounds containing nutrients such as nitrogen, potassium and phosphorus. These are made in factories.

4. Irrigation

- Irrigation is the supply of water to crops at appropriate intervals.
- Sprinkler system and drip system are two modern methods of irrigation.



Sprinkler System



Drip Irrigation

5. Protection from Weeds

- Weeds are the unwanted plants that grows along with the crops.
- Weeds compete with the crops by absorbing all the water, nutrients, space and light.
- Weeds can be removed by hand or trowel.
- Weeds can also be destroyed by spraying special chemicals called weedicides.

6. Harvesting

- Cutting and gathering of the matured crop is called harvesting.
- Harvesting can be done manually or by machine called harvester.
- After harvesting, threshing is done. Threshing is the process of loosening the grains from the chaff.
- The process of separation of grain seeds from the chaff using the help of the wind is called winnowing. The chaff being lighter flies away and the heavier grains fall down.



Threshing



Winnowing

7. Storage

- After harvesting, the crops are stored.
- Grains are stored in granaries or silos.
- Moisture content in the grain promotes the growth of fungus and moulds hence they should be dried before storing.

Animal Husbandry

- When animals are reared at a large scale to obtain food (milk, egg or meat) from them, it is called animal husbandry.
- It includes feeding of animals, providing shelter and care.

Practice Questions

1. Consider the following statements and choose the correct option:
Statement 1: Excessive use of fertilisers does not harm the soil texture.
Statement 2: Fertilisers are natural organic substances.


a. Statement 1 is correct but statement 2 is incorrect.
b. Statement 1 is incorrect but statement 2 is correct.
c. Both the statements are correct.
d. Both the statements are incorrect.

2. Which of the following statements is/are correct?
 - I. Sowing of seed with seed drill is better than broadcasting.
 - II. In crop rotation method, crops are rotated to 90 degrees.
 - III. Crops are dried before storing to remove the extra moisture.
 - IV. Weeds are the unwanted plants that grow along with the main crop.
 - a. Only I
 - b. Only IV
 - c. I, II and III
 - d. I, III and IV
3. Complete the following statement:
The first step before growing crops is _____.
The cutting and gathering of a food crop like wheat or paddy is called _____.
 - a. I – sowing of seed, II – harvesting
 - b. I – preparation of soil, II – harvesting
 - c. I – sowing of seed, II – winnowing
 - d. I – removal of weed, II – threshing
4. Which of the following is/are correctly matched with its most suitable irrigation system?
 - a. Uneven land – Sprinkler system
 - b. Sandy soil – Drip irrigation
 - c. Watering fruit plant – Drip irrigation
 - d. All of the above
5. Consider the following statements and choose the correct option:
Statement 1: Intercropping is the practice of growing two or more crops simultaneously in the same field in rows.
Statement 2: Manures are organic substances obtained from dead plants and animals.
 - a. Statement 1 is correct but statement 2 is incorrect.
 - b. Statement 1 is incorrect but statement 2 is correct.
 - c. Both the statements are correct.
 - d. Both the statements are incorrect.
6. Which of the following is correctly matched?
 - I. Honeybee culture – Apiculture
 - II. Cultivation of silkworms – Pisciculture
 - III. Fish farming – Sericulture
 - a. Only I
 - b. Only II
 - c. II and III
 - d. I, II and III
7. Which of the following is not the correct method to protect stored grains from insects and fungus?
 - a. Adding small quantity of vegetable or mineral oil to grains of legumes.
 - b. Keeping neem leaves with grains.
 - c. Spraying storage area regularly to kill pests.
 - d. None of the above

8. Identify the correct order of agricultural practices that are undertaken by the farmers:
- Preparation of soil → Sowing → Adding manure and fertilisers → Irrigation → Protecting from weeds → Harvesting → Storage
 - Preparation of soil → Adding manure and fertilisers → Sowing → Harvesting → Irrigation → Protecting from weeds → Storage
 - Adding manure and fertilisers → Sowing → Preparation of soil → Harvesting → Irrigation → Protecting from weeds → Storage
 - Sowing → Preparation of soil → Harvesting → Irrigation → Storage → Protecting from weeds
9. Which of the following is/are the advantages of drip irrigation system?
- High availability of water and nutrients
 - No saturation and good soil aeration
 - Avoids high salinity caused by excessive fertiliser application
 - All of the above
10. A farmer sows turnips in his fields after harvesting a crop of wheat. The agricultural practice he is following is _____.
- mixed cropping
 - crop rotation
 - multiple cropping
 - Both a and c

CREST International Spell Bee (Summer & Winter)

For Grades 1-8



#CRESTInnovator

www.crestolympiads.com/registration

Exam Highlights

- ✓ Online proctored Spell Bee exam
- ✓ Focus on evaluating spellings, meanings and pronunciation.
- ✓ **Exam Pattern: MCQ type questions + Audio Round**
(Students need to hear the question & write the spelling of the word asked)
- ✓ Get to attempt **2 Free Practice Tests**



+91-98182-94134