

**Dr. Virendra Swarup Education Centre, Jajmau, Kanpur**  
**Summer Holiday Homework (2025-26)**  
**Class 11th**

**BIOLOGY:**

1. Do the following in biology notes copy:

Chapter 4: animal Kingdom notes as directed in class.

2. Practical record work as directed in class.

3. Ncert exemplar questions of chapter 1, 2, 3 and 4.

**CHEMISTRY**

1. Prepare an investigatory project file on any of the following topics:

- Chemistry in everyday life
- Food Preservatives (types and their effects)
- Cosmetic Chemistry

2. Do all the numericals from chapter 1 Some Basic Concepts of Chemistry (from NCERT) in chemistry note book.

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**PHYSICS**

Do the following in practice copy of Physics :

- All the dimensional formulae given in NCERT.
- Worksheet (attached along with Holiday Homework )

1. State the principle of homogeneity of dimensions. State the limitations of dimensions.

2. Discuss the main type of errors in a physical measurement.

3. Name two Physical quantities which have same dimensions and different units and two physical quantities having different dimensions and same unit.

4. Do the significant figures change if the physical quantity is measured in different system of unit? Give example

5. A ball is thrown vertically upwards with a velocity of 20 m/s from the top of a building. The height of a point from where the ball is thrown is 25m above the ground.

1. How high the ball will rise?
2. How long will it be in air before it hits the ground?

6. Discuss the motion of object under free fall. Neglect air resistance.

7. Plot the graph of following under free fall:

1. Variation of acceleration with time.

2. Velocity with time
3. Distance with time.

8. The period of oscillation of simple pendulum is  $T = 2\pi l/g$  where 'l' is the length of pendulum and 'g' is acceleration due to gravity. Show dimensionally that the above formula is incorrect. Also rectify the formula dimensionally.
9. Give any four rules to determine the significant figures with example.
10. The mass of the object is measured to be 4.237 g and its volume is measured to be 2.51 cm<sup>3</sup>. Then find the density of a substance with correct significant figure.
11. What do you mean by least count of an instrument?
12. What is Vernier Callipers? State its principle, least count, zero error and its type.
13. What is Screw Gauge? State its least count, pitch of screw gauge, working and zero error.
14. What do you mean by backlash error?
15. If force(F), velocity(V) and time (T) are chosen as fundamental quantities then what will be the dimensions of mass, time, surface tension, universal Gravitational constant.
16. From top of building 100 m in height a ball is dropped and at the same time another ball is projected vertically upwards from the ground with a velocity of 25 m/s. find when and where the two balls meet. ( $g = 9.8\text{m/s}^2$ ).
17. Derive the Equations of motion with the help of calculus method.
18. A car covers one-third of distance at speed u, next one-third distance with speed v and the last one-third distance with speed w. Find the average velocity of the car.
19. Derive the formula for the resultant of two vectors with the help of triangle law of vector addition.
20. What is projectile motion. Show that the path of projectile is parabolic. Also Derive the formula for the Time of flight, Height of projectile and its Range.

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### हिंदी :

1. अपने क्षेत्र के चौराहों पर भीख मांगते बच्चों के विषय में अपनी अनुभूति और समस्या के समाधान हेतु अपने विचार व्यक्त करते हुए समाचार पत्र के संपादक को पत्र व्याकरण उत्तर पुस्तिका में लिखें।

2. परियोजना कार्य

निम्नलिखित व्यक्तित्व का पूर्ण परिचय देते हुए चित्रात्मक परियोजना तैयार करें।

क. संत कबीर तथा कृष्ण दीवानी मीरा

ख. स्वर कोकिला लता मंगेशकर

## **ENGLISH :**

The following has to be done in your English language registers

### **Writing:**

1.You are the HR manager of Oxford Software services. You require software engineers familiar with ERP software oracle with maximum 5 years' experience. Draft a suitable advertisement.

2. Design a poster in not more than 50 words on Reduce, Reuse, and Recycle

### **Grammar exercises**

1. Fill in the blanks with the correct form of the words:

a.He ..... (beat) the thief if he catches the man.

b.She might catch the bus if she.....(run) fast.

c.They would have won if they .....(play) well.

d.If you ..... (inform) me I would have reached the station.

e.If she .....(not work) hard, she will fail.

f.Unless they .....(request) me, I would not go.

g.If you ..... (help) me, I would have completed this job.

h.If I ..... (be) a bird I would fly to you.

i.In case you ..... (see) Avish, give him this book.

j.Unless she ..... (mend) her ways, she will suffer.

**2. Fill in the blanks in the following passages with the appropriate tense forms of the verbs given in brackets:**

1.My younger brother, Tinu, (a) ..... (fall) off his bicycle yesterday. He (b) ..... (hurt) his right ankle and (c) ..... (be) in bed since then. The doctor (d) ..... just (examine) him and (e) .....(advise) him complete rest for a week. He hopes that Tinu (f) ..... (recover) soon.

2.The match (a) .....(begin) before we reached the stadium. There (b)..... (be) a great rush at the gate. People (c) ..... (argue) with the security guards. Entering the stadium (d)..... (prove) a tedious job. I (e)..... (be) able to forget this nasty experience in the years to come. I (f) .....(decide) never to watch an event in an overcrowded place.

3.When I (a)..... (look) at the Palace in the morning sunlight, I was amazed. It (b) ..... (seem) an architectural wonder. I (c) ..... (watch) it from different angles and (d) ..... (take) snaps. Perhaps my movements (e) ..... (make) the guards suspicious. They at once (f) ..... (catch) hold of my camera and spoke rudely to me.

4.It is estimated that India (a) ..... (make) rapid strides in science in the coming years. For that we (b) ..... (need) good science teachers, labs and equipment. Unfortunately, the existing scenario (c)

..... (not present) an encouraging sight. The nation (d) ..... (lack) administrators with a vision. Scientists (e) ..... (be) more interested in foreign assignments than research at home. Students too (f) ..... not (lag) behind you ever .

5.(a) ..... (hear) of paperless office? You (b) ..... certainly (say), “no”. Well, very soon the old favourite of pen-pushers (c) ..... (make) an unceremonious exit. You (d) ..... already (see) it happening in the banks. Where (e) ..... (be) those bulky ledgers? A smart computer (f) ..... (replace) them quietly.

### **3. Correct the following sentences using proper tense forms.**

- a. I am liking it very much.
- b. She is knowing you very well.
- c. Mohit is seeing the bus coming.
- d. It rains now, we can't go out.
- e. Water vapour is condensing to form clouds.
- f. Madhu is always writing beautiful poems.
- g. The poem is going round the earth.
- h. These students prepare for their exams these days.
- i. Why do you work so hard today?
- j. My uncle has arrived from Mumbai last night.

## **PROJECT WORK**

### **TOPIC OF THE PROJECT:**

"The Address" by Marga Minco provides a poignant depiction of the psychological toll of World War 2 on individuals. Analyze the psychological impact of war on the protagonist, focusing on themes of loss, survivor's guilt, and the struggle for identity. Evaluate how these psychological aspects are portrayed in the story and their relevance to broader experiences of individuals affected by the war.

### **PROJECT GUIDELINES:**

- \* Cover Page: Include the project title, school details, and student information.
- \* Contents/Index: Provide a table of contents for easy navigation.
- \* Statement of Purpose/Objectives/Goals: Clearly outline the purpose and objectives of the project.
- \* Introduction: Introduce the topic of the project and its significance.
- \* Project Work (800-1000 words): This section can be divided into sub-topics as needed to cover all aspects of the project. Consider including:
  - \* Character analysis
  - \* Setting exploration

- \* Symbolism in the novel
- \* Themes analysis
- \* Plot summary and analysis
- \* Historical context
- \* Author study
- \* Comparison with other works
- \* Critical review
- \* Creative project
- \* Conclusion: Summarize the key findings and insights from the project.
- \* Relevant Photographs: Include photographs that capture positive learning experiences related to the project.
- \* List of Resources/Bibliography: Provide a list of all the resources used in the project, including books, articles, websites, and any other reference cited.
- \* The project must be done on comment sheets and art sheets, total no: 15

**MATHS:**

Solve NCERT questions of Chapter 1 : Sets in your Maths Notebook.

**COMPUTER SCIENCE:**

Solve the following chapters of Computer Science Practical Book (in Practical Book itself):

Ch : Getting started with Python

Ch: Python Fundamentals

Ch: Data Handling (Till Operators in Python)