

Sainik School Bhubaneswar Autumn Vacation Task

Class-VII

Subject-Physics

- 1. Name the device used to open and close a circuit.
- 2. Give one example each of **periodic motion** and **rectilinear motion**.
- 3. Draw the symbols of the following components: (a) Battery, (b) Switch (open), (c) Electric bulb.
- 4. State the difference between conductors and insulators with one example each.
- 5. Why is it necessary to standardize units of measurement?
- 6. Give two differences between speed and velocity.
- 7. A simple pendulum takes 40 s to complete 20 oscillations. Find the time period of the pendulum.
- 8. Draw a neat diagram of a simple electric circuit with a cell, switch, bulb, and connecting wires.
- 9. Explain why dry cells are commonly used in torches and remote controls.
- 10. A car covers 240 km in 4 hours. Calculate its average speed.
- 11. Write the differences between **uniform motion** and **non-uniform motion**. Give one example of each.
- 12. A train travels a distance of 360 km at a uniform speed of 90 km/h. How much time will it take to cover this distance? If the train increases its speed to 120 km/h, how much time will it take?
- 13. Explain how the invention of the pendulum clock brought about an improvement in the measurement of time.
- 14. Why do electricians wear rubber gloves while working with electrical appliances?
- 15. A bus starts from rest and covers 200 m in 25 seconds. Is its motion uniform or non-uniform? Give reasons.

Project Work (Any one)

- Prepare a working model on:
 - o Electric circuit and its components
- Write a **note** on "Development of methods for measurement of time from ancient to modern age".

BIOLOGY

- 1. What are the good practices for maintaining oral hygiene? Try to gather information from newspapers/ conversation with elders. Prepare a report.
- 2. Find out the different ways to maintain a healthy digestive system.
- 3. Suggest some food items that help to maintain good digestive health.
- 4. What is air quality and AQI? Find out the effect of air quality on the respiratory systems of people working in various fields- farmers, factory workers and street vendors.
- 5. Birds can fly at high altitudes where oxygen levels are low. How might their respiratory system be adapted to help them survive in such conditions?
- 6. Write down the contribution of the Scientist "Kamala Sohonie" from your science book CURIOSITY.
- 7. Imagine a situation where all the organisms that carry out photosynthesis on the earth have disappeared. What would be the impact of this on living organisms?
- 8. Write down the contribution of Indian Plant Scientist Rustom Hormusji Dastur in the field of photosynthesis.
- 9. How did scientists learn about digestion in human body?
- 10. Poster- Making: 'Healthy Habits for Healthy Life'

MATHEMATICS

- 1. A company produced 12,54,300 items in its first year, 21,45,700 in its second year, and 34,51,900 in its third year. If the target for the next three years is to produce 1 crore items in total, how many more items do they need to produce?
- 2. The product of two numbers is 2,34,80,000. If one of the numbers is 800, find the other number.
- 3. Arrange the following in descending order: The population of City A is 75,00,000; the population of City B is 78 lakh; the population of City C is 0.8 crore; and the population of City D is nine hundred thousand more than City A.
- 4. A factory produces 5,76,000 screws per month. If the factory works 24 days a month and 12 hours a day, how many screws does it produce per hour?
- 5. A box contains 500 apples, each weighing approximately 150 grams. What is the total weight of 100 such boxes in kilograms?
- 6. The distance from the Earth to the Sun is approximately 14,96,00,000 km. Write the number in words.
- 7. Using the digits 1, 3, 5, 7, 9, 0, 2, 4, 6, find the difference between the largest 9-digit number and the smallest 9-digit number, where all digits are used exactly once.
- 8. A charity raises ₹9,75,000. It spends ₹5,25,000 on medical camps and the rest is distributed equally among 200 families. How much money does each family receive?
- 9. A bookstore sold 4,500 books in January. In February, it sold 1,200 more books than in January. In March, it sold twice the number of books sold in January. What was the total number of books sold in these three months?
- 10. If 1 crore can be represented as 10^x and 1 million as 10^y , what is the value of x-y?
- 11. Simplify the expression: $15-[\{25 \div 5 \times 3\} + \{10 \times 2 15\}]$
- 12. A shopkeeper buys 10 chairs and 15 tables. A chair costs ₹800 and a table costs ₹1,500. He gets a discount of ₹500 on the total purchase. Write and solve an arithmetic expression for the final cost.
- 13. Simplify the following expression: $500 \div 50 + 15 \times (20 10) \div 5$
- 14. A train travels for 4 hours at a speed of 60 km/h and then for 2 hours at a speed of 80 km/h. Write an expression and calculate the total distance covered.
- 15. Use the distributive property to simplify the expression $15 \times (100-3)$

- 16. Find the value of $[(12\times5)+(24\div6)]-(10\times2)$
- 17. A car manufacturing factory produces 20 cars per day. It produces 15 SUVs and 5 trucks per day. Write an arithmetic expression for the number of SUVs and trucks produced in a week (7 days).
- 18. Evaluate $3\times[4+\{10\div(2\times5)\}]$
- 19. A fruit vendor buys 100 kg of apples for ₹8,000. He sells 75 kg for ₹100 per kg and the rest at a loss of ₹10 per kg. Find his total profit or loss.
- 20. A group of 5 friends go to a restaurant. The total bill is ₹2,500. They want to leave a tip of ₹500. Two friends pay for their own share, and the remaining three split the rest of the bill and tip equally. Write an expression and find the amount paid by each of the three friends.
- 21. A boy bought a pen for ₹12.50, a notebook for ₹25.75, and a geometry box for ₹55.50. He gave the shopkeeper a ₹100 note. What amount of money did he get back?
- 22. The length of a rectangle is 25.5 cm and its width is 12.25 cm. Find its perimeter.
- 23. The weight of a bag of rice is 50 kg. A family uses 1.5 kg of rice per day. How many days will the bag last?
- 24. A car travels a distance of 150.75 km on Monday and 215.25 km on Tuesday. If it travels 5.5 km per litre of fuel, how many litres of fuel did it consume in two days?
- 25. By how much is the sum of 125.6 and 84.75 greater than their difference?
- 26. Find the area of a square whose side is 5.2 cm.
- 27. Multiply 5.125 by 1000 and divide the result by 10.
- 28. Arrange the decimals 5.55, 5.055, 5.505, and 5.5055 in descending order.
- 29. A tailor uses 2.5 metres of cloth to make a shirt. How many shirts can he make from 50 metres of cloth?
- 30. The temperature at 6 a.m. was 15.5 °C. By noon, it had increased by 8.75 °C. By 6 p.m., it had decreased by 3.25 °C. What was the temperature at 6 p.m.?
- 31. The price of a pencil is ₹'p' and the price of an eraser is ₹'e'. If you buy 5 pencils and 3 erasers, and get a discount of ₹10, write an algebraic expression for the final cost.
- 32. The perimeter of a rectangle is 48 cm. If its length is 'l' and its width is 'w', write an equation relating 'l' and 'w'. If the length is 16 cm, find the width.
- 33. A taxi driver charges ₹15 for the first kilometre and ₹10 for every subsequent kilometre. Write an algebraic expression for the total cost of a journey of 'k' kilometres (where k>1).

- 34. Find the value of the expression: 2(x+y)+3(x-y) when x=5 and y=2
- 35. The perimeter of a triangle is 25 cm. The lengths of two sides are 'a' and 'b'. Write an algebraic expression for the length of the third side. If a = 8 cm and b = 10 cm, find the third side.
- 36. Simplify the algebraic expression 5x+3y+(2x-7y)
- 37. If x=10 and y=5,, compare the values of the expressions 2x+y and 3x-2y
- 38. The volume of a cuboid is given by $=l \times b \times h$. If l=10 cm, b=8 cm and h=5 cm, find the volume.
- 39. The area of a square is 'a'. Write an algebraic expression for its perimeter.
- 40. The sum of three consecutive integers is 60. If the first integer is 'x', write an algebraic equation to find the value of 'x'.
- 41. Two parallel lines are intersected by a transversal. If one of the interior angles is 110°, find the measure of all other angles.
- 42. If two lines intersect, and the ratio of two adjacent angles is 4:5, find the measure of all four angles.
- 43. A transversal intersects two parallel lines. The difference between a pair of consecutive interior angles is 40°. Find the measure of each of these angles.
- 44. Can two obtuse angles be supplementary? Can two acute angles be supplementary? Can two right angles be supplementary?
- 45. Parallel lines are intersected by a transversal. The measures of two alternate interior angles are $(5a-10)^{\circ}$ and $(2a+50)^{\circ}$. Find the value of 'a'.

GEOGRAPHY

- 1) Define barter system.
- 2) Interview your parents/grandparents: "How did people buy and sell 40-50 years ago?
- 3) Name the safety standard bodies in India that certify products?
- 4) State three advantages of Paper currency over metallic coins.
- 5) Paste pictures of:
 - ·Barter exchanges.
 - ·Ancient coins of India (Mauryan, Mughal).
 - ·Modern Indian currency notes.
 - ·Debit/credit cards, UPI apps.
- 6) Record daily temperature, rainfall for 10–15 days. Present it in a graph.
- 7) On an outline map of your state, locate and label the major rivers, mountains, plateaus, and plains.
- 8) List at least 5 sustainable practices they follow at home (e.g., saving water, using cloth bags, waste segregation).
- 9) What makes India's climate so diverse?
- 10) Collect pictures of festivals of India links to farming (eg. Baisakhi, Onam)and paste in your H.W notebook.

ENGLISH

- 1. Write a bio sketch of a poet/author you admire.
- 2. Imagine you are a reporter. Write a news report on a sports event held in your school.
- 3. Write a paragraph on "Books vs. Internet Which is Better for Learning?".
- 4. Grammar:
- I. What are modal verbs? Write all the modal verbs with examples."
- II. "What are phrasal verbs? Write any 20 phrasal verbs with examples."
- 5. Read the poem "Try Again" and write a summary along with the values you learnt from it.
- 6. Write a short conversation between two friends discussing their holiday plans.
- 7. Imagine you could travel anywhere in the world. Describe the place and explain why you chose to visit it.

SAINIK SCHOOL BHUBANESWAR 2025-26

AUTUMN VACATION TASK

CLASS-VII

HIGHER HINDI

- 'गिरिधर कविराय की कुंडलियाँ' पाठ को चित्र सिहत लिखकर कंठस्थ कीजिए ।
- 2. 'वर्षा बहार' कविता को चित्र सिहत लिखकर वर्षा ऋतु की विशेषताओं को अपने शब्दों में लिखिए ।
- 3. 20 वाक्य लिखकर उनमें विशेषण और विशेष्य अलग करके लिखिए ।
- 4. किन्हीं 20 शब्दों के विलोम शब्द लिखिए I
- किन्हीं 20 शब्दों के दो दो समानार्थी शब्द लिखिए ।
- 6 निम्नलिखित विषयों पर पत्र लिखिए -
 - (क) बदलते मौसम में मच्छरों से बचने की सलाह देते हुए अपने मित्र को एक पत्र लिखिए ।
 - (ख) पूजा की छुट्टियों में घर आने की सूचना देते हुए अपने मामा जी को एक पत्र लिखिए ।
- 7. निम्नलिखित विषयों पर अनुच्छेद लिखिए -
 - वर्षा ऋतु
 - मेरे जीवन का लक्ष्य
 - जल संरक्षण
- 8. निम्नलिखित विषयों पर संवाद लिखिए -
 - (क) फल विक्रेता और ग्राहक के मध्य I
 - (ख) मोबाइल फोन के नुकसान विषय पर पिता पुत्र के मध्य
- 9. निम्नलिखित विषयों से संबंधित आकर्षक विज्ञापन तैयार कीजिए -
 - रक्षक हेलमेट विक्रेता के लिए
 - स्वदेश मोबाइल पर मिल रही छूट के लिए
- 10. कोई एक स्वरचित कविता या कहानी लिखिए ।

VACATION TASK

CLASS-VII

LOWER HINDI

- 1. अनुच्छेद लिखिए-
 - क. मेरे जीवन का लक्ष्य
 - ख. प्रदूषण
 - ग. मेरी कक्षा
 - घ. मेरे माता-पिता
 - ङ. मेरा देश
- 2. टेसू राजा बीच बाजार कविता लिखिए। (चित्र के साथ)
- 3. चूहो,म्याऊँ सो रही है कविता से 10 MCQ प्रश्न लिखिए।
- 4. बुलबुल पाठ के प्रश्न-उत्तर लिखिए।
- 5. आप मोर के बारे में क्या जानते हैं लिखिए।
- 6. स्वच्छता पर 2 नारे लिखिए।
- 7. स्वरचित लेख लिखें।(For school magazine)
- 8. पढ़ाए गए पाठों में से कोई 25 शब्द तीन-तीन बार लिखिए।
- 9. एक्की-दोक्की कहानी को चित्रकथा रूप में लिखिए।



Sainik School Bhubaneswar Autumn vacation Task (2025 - 2026) Class VII (Higher Odia)

- ୧) ନିମ୍ନ ଲିଖିତ ବିଷୟ ଗୁଡିକର ଅଭ୍ୟାସ କର ।
- କ) ଛୋଟରୁ ବଡ
- ଖ) ବାଳୁତ ବୀର ସେ
- ଗ) ତଟିନୀର ଖେଦ
- ଘ) କାଠରୁ ଭାତ , ଘାସରୁ ଦୁଧ ବାୟୁରୁ ଚିନି
- ୨) ଦଶହରା ଛୁଟି କିପରି କାଟିଲ ଦୂରରେ ଥିବା ସାଙ୍ଗ ନିକଟକୁ ପତ୍ର ଲେଖ।
- ୩) ନିଜ ମନରୁ ଭାବି ୩୦ ଟି ବିପରୀତ ଶବ୍ଦ ଲେଖ ।
- ୪) ନିଜ ମନରୁ ଭାବି ୨୦ ଟି ପ୍ରତିଶବ୍ଦ ଲେଖ ।
- ୫) ନିମ୍ନ ଲିଖିତ ବିଷୟରେ ପ୍ରବନ୍ଧ ଲେଖ।
 - କ) ମୋ ପ୍ରିୟ ଶିକ୍ଷକ/ଶିକ୍ଷୟିତ୍ରୀ
 - ଖ) ଶୀତଋତୁ
 - ଗ) କ୍ରୀଡାର ଉପକାରିତା
 - ଘ) ବୃକ୍ଷରୋପଣ



Sainik School Bhubaneswar

AUTUMN VACATION TASK 2025-2026

Class VII (Lower Odia)

- ୧. ତଳେ ଦିଆଯାଇଥିବା ବିଷୟ ଗୁଡିକୁ ଦେଖି ଲେଖ I
 - କ) ଆମ ଗାଁ
 - ଖ) ବେଙ୍ଗୁଲି କରୁଛି କେଁ କଟର
 - ଗ) ଖରା , ବର୍ଷା , ଶୀତ
 - ଘ) ଆମ ଅଞ୍ଚଳର ଭୂମିରୂପ
 - **ଡ)** ଆମର ପର୍ବପର୍ବାଣି
- ୨. ତୁମ ବହିରେ ଥିବା ପାଠ ଗୁଡିକୁ ପଢି ସେଥିରେ ଥିବା **କ୍ସ , ଷ , କ୍ତ , କ୍ର , ଷ , ହ୍ର , ହ୍ର**
- ୩. ତଳେ ଦିଆଯାଇଥିବା ବିଷୟ ଗୁଡିକୁ ନେଇ ଗପ ଲେଖ I
 - କ) ଆମ ବିଦ୍ୟାଳୟ
 - ଖ) ଆମ ଗାଁ
 - ଗ) ମୋ ପ୍ରିୟ ଶିକ୍ଷକ / ଶିକ୍ଷୟିତ୍ରୀ
 - ଘ) ମୋ ପ୍ରିୟ ସାଙ୍ଗ
- ୪. ଜାତୀୟ ସଂଗୀତ କୁ ମନେପକାଇ ଲେଖ l (ଜନ-ଗଣ-ମନ-ଅଧିନାୟକ ଜୟହେ)

INFORMATION TECHNOLOGY

Part A – Theory Questions

- 1. What is an Operating System? Explain with two examples.
- 2. Write three main functions of an Operating System.
- 3. What is the difference between CUI (Character User Interface) and GUI (Graphical User Interface)? Give examples.
- 4. Why is GUI more popular than CUI among users?
- 5. Write short notes on:
 - a) Windows OS
 - b) Linux OS
 - c) Android OS
- 6. What is Mail Merge? Explain its purpose.
- 7. Write the steps to create a Mail Merge document in MS Word.
- 8. What are the two main components of Mail Merge? Explain with examples.
- 9. How is Mail Merge useful for schools and businesses?
- 10. Give two differences between a Normal Document and a Mail Merge Document.

Part B - Practical / Activity

- 1. Open your computer/laptop and identify the Operating System installed (Windows / Linux / macOS / Android). Write 5 features of it.
- 2. Make a comparison table between GUI and CUI.
- 3. Draw or paste pictures of at least 5 GUI icons (Recycle Bin, My Computer, Folder, File, Browser, etc.) and explain their use.
- 4. Create a Mail Merge letter inviting parents for a Parent-Teacher Meeting. Use a data source with 5 parent names and addresses.

Suggested Submission Format

- 1. Use chart paper/ A4 size paper.
- 2. Cover Page: Title, Name, Class, School.
- 3. Part A: Write five features of Operating System installed in your computer.
- 4. Part B: Make a comparison table between GUI and CUI.
- 5. Part C: Draw or paste pictures of at least 5 GUI icons Part D: Shortcut Keys (with table & practice activity).
- 6. Part E: Write down the steps of a Mail Merge letter inviting parents for a Parent-Teacher Meeting. Use a data source with 5 parent names and addresses.
- 7. Conclusion: For each concepts

Part C - Higher Order Thinking (HOTS)

- 1. If computers had only CUI and no GUI, how would it affect beginners?
- 2. Imagine you are designing a new Operating System. What features would you add to make it more user-friendly?
- 3. Why do you think Mail Merge saves time and reduces errors?
- 4. Imagine you are the school principal. How can Mail Merge help you in sending circulars and invitations?
- 5. If Mail Merge did not exist, what extra work would you have to do to send letters to 50 students?

LIBRARY

- 1. The Hindu young world invites students to send in drawings, prose and poems to be featured in its Scrapbook pages. Send entries to <u>youngworld@thehindu.co.in</u> along with **your Name**, class, school, city and a passport size photograph.
- Note: 1. Drawing must be in JPG format only.
- 2. Text contribution should not be more than 200 words and be sent as Word document.
- 3. Cadets should retain the hard copy of his/her original work and submit in the school library.

A cadet can use one of these topics for their creative work of drawing, poem or prose. The topics are given only for reference; cadets are free to choose any other topic of their choice.

All contribution must be the original work of the cadet.

Ser	Topic	Ser	Topic
No		No	
1	My Garden	19	Deepawali
2	MY School Library	20	Indian festivals
3	Friendship	21	Importance of trees
4	My family	22	New Year
5	My school Life	23	Christmas
6	India of My dreams	24	Children's Day
7	Independence Day	25	World book day
8	My dream	26	World heritage day
9	The missile man of India	27	World Sparrow Day
10	My village	28	World Water day
11	MY FAVOURITE TEACHER	29	Republic Day
12	My best friend	30	Martyrs'Day
13	My Mother	31	World WETLAND DAY 2 Feb
14	Nature	32	National Science Day
15	Climate change	33	Holi
16	Save water	34	World Wildlife day
17	Rainy season	35	Unity in Diversity
18	Dusshera	36	Cleanliness

2. The children Magazine Champak invites students to send in **drawings**, **prose**, **poems**, **Jokes**, **Riddles**, **Stories** to be featured in its Magazine. Send entries with **your Name**, age, school, and Address To:

Delhi Press 703, B Wing, INS Tower, Opp. Trident Hotel, GB lock, BKC, Bandra(East) Mumbai-400051

NOTE:----

- 1. Cadets should retain the hard copy of his/her original work and submit in the school library.
- 2. All contribution must be the original work of the cadet.
- 3. A cadet can use one of the topics given in activity 1 above for their creative work of drawing, poem or prose. The topics are given only for reference; cadets are free to choose any other topic of their choice.
- 3. Write a 'Book Review' of your favourite book read from the School Library. Use A4 sheet for the activity. Draw border and write neatly.

SAINIK SCHOOL BHUBANESWAR

CLASS VII (CHEMISTRY)

AUTUMN VACATION TASK FOR 2025

- 1. Suppose a new material was discovered. It is shiny, can be drawn into wires and conducts electricity well. Would you classify it as a metal or a non-metal? Why?
- 2. A copper wire was used in an electric circuit, and it conducted electricity well. If you replace it with a piece of coal, what will happen? Why?
- 3. Write any five uses of non-metals in everyday life.
- 4. Differentiate between metals and non-metals on the basis of their physical properties.
- 5. Sodium metal is kept in kerosene but not water. Why?
- 6. Rohan visited a jewelleiy shop with his parents. He noticed that most ornaments were made of gold and silver. The shopkeeper told them that these metals are used not only because they look beautiful but also because they can be easily shaped into different designs.
 - i. Name the property of metals that allows them to be beaten into thin sheets.
 - ii. What did Rohan notice about most of the ornaments in the shop?
 - iii. Which of the two metals, gold or silver is more ductile?
 - iv. Why are gold and silver ideal for making jewellery?
- 7. Explain weathering of rocks.

- 8. Rusting of iron can be prevented. Suggest methods and explain the type of change you are trying to avoid.
- 9. Which gas is released when vinegar and baking soda are mixed? What happens when this gas is passed through lime water?
- 10. Why are some chemical changes irreversible while most physical changes are reversible? Give two examples.
- 11. You observe that milk turns sour after some time. Identify the type of change and explain its practical significance.
- 12. Candle burning involves multiple changes. Identify which are physical and which are chemical changes and justify your answer.

Autumn Vacation Assignment (2025-26)

Subject: History & Civics

Class: VII

Instructions:

All work must be handwritten in your notebook or on A4 sheets.

- Include illustrations, timelines, maps, or pictures wherever appropriate.
- Maintain neatness, originality, and clarity of thought.

1. Map Work

- On a political map of India, locate and label any 6 important cities of the medieval period (e.g., Delhi, Kannauj, Madurai, Warangal, Ujjain, Vijayanagara).
- Shade and label the regions ruled by Cholas and Pallavas.
- Mark the important trade routes that connected inland cities to coastal ports.
- Identify and color the regions where major temples (like Thanjavur, Konark, Madurai) were built.
- 2. Make a table comparing two empires (e.g., Maurya vs. Gupta) on the basis of:
 - Ruler
 - Administration
 - Economy
 - Culture
- 3. Write a short-illustrated biography of any two famous emperor (Chandragupta Maurya, Ashoka, Samudragupta, etc.).
- 4. Create a poster comparing "Life in a Democracy vs Life in a Dictatorship."
- 5. Write a paragraph: "If you were the Prime Minister of India for one day, what 3 important decisions would you take and why?"
- 6. Prepare a family tree of Mauryan Empire rulers starting from Chandragupta → Bindusara → Ashoka.

7. Prepare a colourful chart with:

- Monarchy, Dictatorship, Democracy, Oligarchy, Theocracy

 → 2 features + 1 example country each.
- 8. Prepare a list of at least 8 trade goods (cotton, spices, ivory, pearls, silk, etc.). Write which regions they were exported to.
- 9. Ancient Cities Project

Choose any 2 ancient cities (e.g., Pataliputra, Taxila, Ujjain, Mathura, Varanasi). Collect pictures, paste them, and write:

- a. Location
- b. Importance (economic, political, cultural)
- c. Trade items
- 10. Imagine you are Ashoka after the Kalinga War. Write a letter to your people announcing your new policy of Dhamma.