

# PM SHRI Kendriya Vidyalaya Misa Cantt.

## HOLIDAY HOMEWORK

### Artificial Intelligence | Class VIII

Activity Plan • Data & Fairness in AI, Ethics & Responsible AI

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#### Instructions

- Do it neatly in your Notebook. Attempt any **4 out of 6** questions each page.
- Be honest and original – do not copy from friends or the internet.

#### Data Fuels AI – How AI Uses Data

*Learning Focus: Data and Fairness in AI: data, types of data, how AI learns*

AI learns from data. Data can be numbers, text, images or audio. The more good data we give, the better AI can learn.

#### Attempt any 4 out of 6 questions.

1. What is data? Explain with the help of an example.
2. Name any four types of data and write one example of each.
3. How does AI learn from data? Explain in your own words.
4. Why is more good data helpful for AI? Give a reason.
5. Write any two ways in which data is collected in daily life.
6. Write True or False and correct it if it is false: "AI can work without any data."

## Good Data, Bad Data – Data Quality

*Learning Focus: Data and Fairness in AI: quality of data*

Good data must be complete, correct, enough and relevant. If we give bad data to AI, we get bad results.

**Attempt any 4 out of 6 questions.**

1. Name the four qualities of good data and explain any one of them.
2. What is meant by “Garbage In, Garbage Out”? Explain with an example.
3. What problems can happen if some values are missing in the data?
4. In a student record, the age of a student is written as 130. What is wrong with this data? How can it be corrected?
5. What is meant by relevant data? Give one example.
6. Why can AI not give good results if the data is bad? Explain.

## Is the Data Fair? – Fairness and Bias

*Learning Focus: Data and Fairness in AI: bias in data, fair data*

Bias means an unfair preference. If the data used to train AI has many examples of one group and very few of another, the AI may treat the groups unfairly.

**Attempt any 4 out of 6 questions.**

1. What is bias in AI? Explain with an example.
2. Write any two reasons why bias comes in AI.
3. An AI is trained with 100 photos: 90 of Group A and 10 of Group B. For which group will it work better? Why?
4. How can we make the data in Question 3 fair?
5. What is meant by variety in data? Why is it needed?
6. Why should AI be fair to everyone? Explain.

## Right or Wrong? – Ethics in AI

*Learning Focus: Ethics and Responsible AI: ethical principles of AI*

Ethics means knowing what is right and what is wrong. AI should follow ethical rules so that it does not harm anyone.

**Attempt any 4 out of 6 questions.**

1. What is ethics? Why do we need ethics in AI?
2. Name any four ethical principles of AI and explain any one of them.
3. What is privacy? Why is it important?
4. Is it ethical to collect people's personal data secretly? Give reasons.
5. What is a deepfake? Why can it be harmful?
6. Why should an AI be tested before it is used in a hospital?

## Be a Responsible AI User – Responsible AI

*Learning Focus: Ethics and Responsible AI: responsible use of AI*

Responsible AI means that people use AI in an honest, fair and safe way, and a human always stays in control.

### **Attempt any 4 out of 6 questions.**

1. What is Responsible AI? Explain in your own words.
2. A doctor uses an AI tool that suggests a medicine. Why should the doctor, and not the AI alone, take the final decision?
3. Why should we check an AI answer before believing it?
4. Is it right to copy an AI answer and submit it as your own work? Give reasons.
5. Why should we never share personal details like address or OTP with a chatbot?
6. Write any three rules for using AI responsibly and explain one of them.

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## HOLIDAY HOMEWORK

### Mathematics | Class VIII

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#### Instructions

- Do it neatly in your Notebook.
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1. Complete MDP.

2. COMPLETE MATH SUBJECT ENRICHMENT ACTIVITY IN A4 SHEET

- A Story of Number
- $(a+b)^2$
- $(a-b)^2$
- Properties of Parallelogram
- Pythagoras Theorem

3. Solve the Half-yearly question paper on your notebook.

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## HOLIDAY HOMEWORK

### English | Class VIII

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#### Instructions

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1. Write an essay on Climate change.

# PM SHRI Kendriya Vidyalaya Misa Cantt.

## HOLIDAY HOMEWORK

### Hindi | Class VIII

#### Instructions

- Do it neatly in your Notebook.
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#### व्याकरण

प्रश्न 1. निम्नलिखित शब्दों के पर्यायवाची लिखिए:  
सूर्य, पृथ्वी, जल, आकाश, वन, मित्र, कमल, वायु, घर और नदी।

प्रश्न 2. निम्नलिखित शब्दों के विलोम शब्द लिखिए:  
आशा, स्वतंत्र, प्रकाश, सफलता, लाभ, प्रेम, साहस, आरंभ, उपस्थित और सरल।

प्रश्न 3. निम्नलिखित शब्दों के दो-दो पर्यायवाची लिखिए:  
विद्यालय, विद्यार्थी, शिक्षक, पुस्तक और प्रकृति।

प्रश्न 4. संज्ञा, सर्वनाम, विशेषण और क्रिया की परिभाषा लिखिए तथा प्रत्येक के पाँच-पाँच उदाहरण दीजिए।

प्रश्न 5. निम्नलिखित वाक्यों में काल पहचानिए:

1. मैं प्रतिदिन विद्यालय जाता हूँ।
2. सीमा ने कहानी लिखी।
3. बच्चे मैदान में खेलेंगे।
4. वर्षा हो रही है।
5. हमने अपना कार्य पूरा कर लिया है।

प्रश्न 6. निम्नलिखित मुहावरों के अर्थ लिखकर वाक्य बनाइए:  
आँखों का तारा, दाँत खट्टे करना, हाथ बँटाना, नाक में दम करना और नौ दो ग्यारह होना।

#### लेखन कौशल

प्रश्न 7. अनुच्छेद लेखन: निम्नलिखित में से किसी एक विषय पर लगभग 120 शब्दों में अनुच्छेद लिखिए।

- \* जल संरक्षण का महत्व
- \* स्वच्छ भारत, स्वस्थ भारत
- \* मेरा प्रिय त्योहार
- \* पर्यावरण संरक्षण
- \* विद्यार्थी जीवन में अनुशासन

प्रश्न 8. पत्र लेखन: अपने मित्र को पत्र लिखकर शरदकालीन अवकाश में बिताए गए समय का वर्णन कीजिए।

प्रश्न 9. संवाद लेखन: 'जल संरक्षण' विषय पर दो मित्रों के बीच लगभग 10 संवाद लिखिए।

प्रश्न 10. कहानी लेखन: निम्नलिखित संकेतों के आधार पर एक रोचक कहानी लिखिए और उचित शीर्षक दीजिए।

**PM SHRI Kendriya Vidyalaya Misa Cantt.**  
**HOLIDAY HOMEWORK**  
**Sanskrit | Class VIII**

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**CLASS VIII संस्कृत**

प्रश्न 1. संख्या पदानि लिखत (Write number words in Sanskrit from 101 to 150): 101 से 150 तक की संख्याएँ संस्कृत शब्दों में लिखें.

प्रश्न 2. (20) क्रिया पदानि लिखत् (Write 20 verb forms/roots): 20 क्रिया पद लिखें.

प्रश्न 3. विभक्ति रूपाणि लिखत् (Write noun declensions for 'Bhavat' and 'Sarit'): 'भवत्' तथा 'सरित्' शब्द रूप लिखें.

प्रश्न 4. सन्धि उदाहरण लिखत (Write examples of Consonant Sandhi): व्यञ्जन संधि के सभी भेदों के 5-5 उदाहरण लिखें.

प्रश्न 5. प्रत्यय उदाहरण लिखत (Write examples of suffixes - Krit and Taddhita): कृत् एवं तद्धित प्रत्यय के 5-5 उदाहरण लिखें.

# PM SHRI Kendriya Vidyalaya Misa Cantt.

## HOLIDAY HOMEWORK

### Social Science | Class VIII

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#### Instructions

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#### A. Very Short Answer Questions (1 Mark)

- 1.What is colonialism?
- 2.What is meant by a colony?
- 3.When did the British East India Company come to India?
- 4.Who was the first Governor-General of Bengal?
- 5.What was the main objective of the British East India Company?
- 6.What is meant by the term colonial rule?
- 7.Who introduced the Permanent Settlement in Bengal?
- 8.What was the Doctrine of Lapse?
- 9.Who was Tipu Sultan?
- 10.When did the Revolt of 1857 take place?

#### B. Short Answer Questions (2–3 Marks)

- 1.What were the main reasons for the establishment of British rule in India?
- 2.How did the British East India Company expand its political power in India?
- 3.Explain the significance of the Battle of Plassey (1757).
- 4.What was the importance of the Battle of Buxar (1764)?
- 5.How did British colonial rule affect Indian artisans and handicrafts?
- 6.What was the Permanent Settlement? Mention two of its features.
- 7.How did the British land revenue policies affect Indian peasants?
- 8.What was the Doctrine of Lapse? Give one example.
- 9.Mention three major changes introduced by the British in India.
10. How did British rule affect Indian industries?

# PM SHRI KV MISA CANTT, NAGAON (ASSAM)

## HOLIDAY HOMEWORK – SCIENCE

Class VIII | NCERT Curiosity | Chapters 1–6

### Chapters Covered

- 1. Exploring the Investigative World of Science
- 2. The Invisible Living World: Beyond Our Naked Eye
- 3. Health: The Ultimate Treasure
- 4. Electricity: Magnetic and Heating Effects
- 5. Exploring Forces
- 6. Pressure, Winds, Storms, and Cyclones

### Roll-Number-Wise Individual Assignments

#### Roll No. 1

**Theme:** Chapter 1 investigation

1. **Task 1:** Investigate which paper towel absorbs the most water. Compare 3 brands/types using equal-sized pieces and equal water amounts. Record a fair-test plan, table, result and conclusion.
2. **Task 2:** Make a labelled flowchart of the scientific investigation process. Define observation, question, hypothesis, variable and conclusion with one example each.
3. **Task 3:** Prepare 5 questions you would investigate about everyday science.

#### Roll No. 2

**Theme:** Microscopic life

4. **Task 1:** Create an illustrated fact sheet on microorganisms that are useful and harmful. Include at least 4 examples and their roles.
5. **Task 2:** Explain why many living things cannot be seen with the naked eye. Draw a simple labelled sketch of a microscope and state the function of its main parts (as studied).
6. **Task 3:** Write 6 questions and answers from Chapter 2, including two application-based questions.

#### Roll No. 3

**Theme:** Healthy habits

7. **Task 1:** Design a one-week healthy routine chart showing sleep, physical activity, hygiene, meals and screen breaks.
8. **Task 2:** Explain the difference between communicable and non-communicable diseases, with examples and preventive measures.
9. **Task 3:** Create a poster titled 'Health Is a Shared Responsibility' with 6 practical messages.

#### Roll No. 4

**Theme:** Electricity and safety

10. **Task 1:** Draw and label a simple electric circuit with a cell, switch, bulb and connecting wires. Explain what happens when the switch is open and closed.
11. **Task 2:** Make a safety leaflet about electrical appliances, wet hands, damaged wires and overloading. Include at least 6 safety rules.
12. **Task 3:** Explain the heating effect and magnetic effect of electric current, with two everyday applications of each.

#### Roll No. 5

**Theme:** Forces around us

13. **Task 1:** Prepare a table of 8 everyday situations showing the force involved, whether contact/non-contact, and its effect.
14. **Task 2:** Explain how force can change an object's speed, direction or shape. Give one example for each effect.
15. **Task 3:** Draw a labelled diagram or comic strip showing balanced and unbalanced forces in an everyday situation.

#### Roll No. 6

**Theme:** Pressure and weather

16. **Task 1:** Explain how pressure depends on force and area. Use 3 everyday examples such as sharp knives, school bags or broad tyres.
17. **Task 2:** Create a safety information poster on cyclones: warnings, safe shelter, emergency kit and actions before/during/after a cyclone.
18. **Task 3:** Explain how uneven heating and air-pressure differences can produce winds. Add a labelled diagram.

#### Roll No. 7

**Theme:** Science detective

19. **Task 1:** Choose one everyday question and design a fair investigation. State aim, hypothesis, materials, variables, steps, observations and conclusion.
20. **Task 2:** Write a short report on how magnification helps us study the invisible living world, with examples.
21. **Task 3:** Prepare 8 short-answer questions from Chapters 1 and 2 with answers.

#### Roll No. 8

**Theme:** Health and prevention

22. **Task 1:** Make a comparison chart of personal hygiene, community hygiene and food hygiene, with at least 4 examples in each column.

23. **Task 2:** Explain why balanced nutrition, clean water, exercise and rest are important for health.
24. **Task 3:** Create a myth-versus-fact page with 5 general statements about health and hygiene; correct each misconception.

#### Roll No. 9

**Theme:** Electromagnetism

25. **Task 1:** Make a paper-based labelled model/diagram explaining how an electromagnet works. Include a safe low-voltage circuit diagram and uses.
26. **Task 2:** Compare permanent magnets and electromagnets in a table: source of magnetism, control, strength (general) and uses.
27. **Task 3:** Write 5 everyday examples where the magnetic effect of current is useful.

#### Roll No. 10

**Theme:** Friction and force effects

28. **Task 1:** Observe three activities (pushing a book, stretching a rubber band, rolling a ball). Record the force applied and the effect observed.
29. **Task 2:** Make a concept map of different types of forces covered in Chapter 5, with examples.
30. **Task 3:** Write 5 assertion-reason style statements about forces and provide the correct reasoning.

#### Roll No. 11

**Theme:** Storm preparedness

31. **Task 1:** Prepare a family emergency-kit checklist for a cyclone or severe storm. Explain the purpose of each item.
32. **Task 2:** Draw and label a diagram showing how air moves due to differences in heating/pressure.
33. **Task 3:** Write a 150-word report on why weather warnings and reliable information matter during storms.

#### Roll No. 12

**Theme:** Microbes in daily life

34. **Task 1:** Create a table showing 5 helpful and 5 harmful effects of microorganisms, including food, environment and health.
35. **Task 2:** Explain the importance of cleanliness, safe food handling and vaccination in preventing disease (as applicable to the textbook).
36. **Task 3:** Prepare a 6-panel comic strip about a student learning to prevent the spread of infection.

### Roll No. 13

**Theme:** Fair testing

- 37. **Task 1:** Test whether a wet or dry paper surface lets a small object slide farther. Plan a fair test and record repeated observations safely.
- 38. **Task 2:** Explain independent, dependent and controlled variables using your investigation.
- 39. **Task 3:** Make a one-page guide: 'How to avoid mistakes in a science experiment'.

### Roll No. 14

**Theme:** Electric heating

- 40. **Task 1:** Research from the textbook how the heating effect of current is used in appliances. Make a table of 5 appliances and their purpose.
- 41. **Task 2:** Explain why a fuse or suitable protective device is important in an electric circuit. Include safety rules.
- 42. **Task 3:** Draw two circuit diagrams: one complete and one incomplete, and explain the difference.

### Roll No. 15

**Theme:** Pressure in real life

- 43. **Task 1:** Find and sketch 5 examples where a larger area reduces pressure or a smaller area increases pressure. Explain each.
- 44. **Task 2:** Solve 4 simple numerical/application questions of your own on pressure using the relation  $\text{pressure} = \frac{\text{force}}{\text{area}}$ , showing units.
- 45. **Task 3:** Write a short explanation of why broad straps are more comfortable than thin straps for carrying a heavy bag.

### Roll No. 16

**Theme:** Health awareness

- 46. **Task 1:** Prepare a weekly habit tracker for hydration, exercise, sleep, handwashing and balanced meals. Add a reflection paragraph.
- 47. **Task 2:** Make a table comparing prevention and treatment, using general examples from the chapter.
- 48. **Task 3:** Create 10 MCQs from Chapter 3 and provide an answer key.

### Roll No. 17

**Theme:** Living world

- 49. **Task 1:** Prepare illustrated profiles of 4 microorganisms or microscopic living forms mentioned in the chapter, describing shape/feature and role where known.
- 50. **Task 2:** Explain how a microscope changes what we can observe. Include a before/after observation example.
- 51. **Task 3:** Write a paragraph on why microorganisms should not all be considered harmful.

### Roll No. 18

**Theme:** Pushes and pulls

- 52. **Task 1:** Record 10 actions from daily life that involve a push or pull. Categorise the force and state its effect.
- 53. **Task 2:** Explain contact and non-contact forces with examples. Draw at least 2 examples of each type covered.
- 54. **Task 3:** Prepare 5 real-life problems in which you identify the force responsible and explain your answer.

### Roll No. 19

**Theme:** Cyclone science

- 55. **Task 1:** Create a cyclone information booklet with causes, warning signs, safety measures and recovery actions.
- 56. **Task 2:** Explain the role of air pressure and wind in storms using a labelled diagram.
- 57. **Task 3:** Make a comparison table of a thunderstorm, strong wind and cyclone using textbook-based information.

### Roll No. 20

**Theme:** Scientific observation

- 58. **Task 1:** Keep a two-day observation diary of a natural phenomenon (clouds, plant growth, evaporation or shadows). Record time, conditions and changes.
- 59. **Task 2:** Separate your observations from your inferences in a two-column table with at least 6 entries.
- 60. **Task 3:** Write a conclusion explaining what your observations suggest and what more evidence you would need.

### Roll No. 21

**Theme:** Food and health

- 61. **Task 1:** Design a balanced meal plate using locally available foods. Explain how variety supports health without prescribing a diet.
- 62. **Task 2:** Create a table of common hygiene practices and the health problems they help prevent.
- 63. **Task 3:** Write 8 short questions with answers from Chapter 3, including 3 application-based questions.

### Roll No. 22

**Theme:** Magnetic effect

- 64. **Task 1:** Draw and explain a simple electromagnet setup. List variables that could affect the strength and suggest a fair test.
- 65. **Task 2:** Prepare a comparison of the heating and magnetic effects of electric current with examples.

66. **Task 3:** Make a safety checklist for conducting a low-voltage circuit activity under adult/teacher supervision.

#### Roll No. 23

**Theme:** Force in sports

67. **Task 1:** Choose 3 sports and explain how force changes motion in each. Add small sketches.

68. **Task 2:** Explain how friction can help or oppose motion, using examples from sports or transport.

69. **Task 3:** Create a 10-question quiz on Chapter 5 with an answer key.

#### Roll No. 24

**Theme:** Air and pressure

70. **Task 1:** Explain with labelled sketches why air exerts pressure and how pressure differences create wind.

71. **Task 2:** Write a short case study on cyclone preparedness in a coastal community, using reliable educational sources and clearly listing sources.

72. **Task 3:** Prepare a glossary of 12 key terms from Chapter 6 with simple definitions.

#### Roll No. 25

**Theme:** Microbes and environment

73. **Task 1:** Make a mini-poster showing the role of microorganisms in decomposition, food production or other textbook examples.

74. **Task 2:** Explain why handwashing and safe storage of food matter. Include a sequence of 6 illustrated steps for safe habits.

75. **Task 3:** Create 5 'What would happen if...?' questions about microorganisms and answer them.

#### Roll No. 26

**Theme:** Circuit investigator

76. **Task 1:** Plan a fair investigation of how the number of cells may affect bulb brightness using only a teacher-approved low-voltage kit. If unavailable, submit a labelled plan only.

77. **Task 2:** Draw and label circuit symbols used in your chapter and make a small symbol key.

78. **Task 3:** Explain three causes of electrical hazards and how to reduce the risks.

#### Roll No. 27

**Theme:** Pressure calculations

79. **Task 1:** Create 5 pressure word problems using everyday situations; solve them with formula, substitution and units.

80. **Task 2:** Explain the difference between force and pressure with 4 examples.

81. **Task 3:** Design a one-page infographic on pressure in everyday life.

### Roll No. 28

**Theme:** Health campaign

- 82. **Task 1:** Prepare a school health campaign plan with slogan, 5 activities and intended audience.
- 83. **Task 2:** Explain how healthy choices and preventive practices can support individual and community well-being.
- 84. **Task 3:** Make 10 true/false statements from Chapter 3 and correct the false ones.

### Roll No. 29

**Theme:** Microscope and discovery

- 85. **Task 1:** Draw a labelled microscope and write a short account of how magnification helps scientific investigation.
- 86. **Task 2:** Create a classification chart of microorganisms by broad group using examples from the textbook.
- 87. **Task 3:** Write 5 questions that a young scientist could investigate about the microscopic world.

### Roll No. 30

**Theme:** Forces and motion

- 88. **Task 1:** Design a table with 6 examples of force changing speed, direction or shape.
- 89. **Task 2:** Explain balanced and unbalanced forces using diagrams and examples appropriate to the chapter.
- 90. **Task 3:** Prepare 6 case-based questions from Chapter 5 with answers.

### Roll No. 31

**Theme:** Cyclone communication

- 91. **Task 1:** Draft a clear public-awareness announcement for a cyclone warning. Include what to do and what not to do.
- 92. **Task 2:** Create a before/during/after cyclone checklist for a household.
- 93. **Task 3:** Explain why people should follow official warnings rather than rumours during severe weather.

### Roll No. 32

**Theme:** Scientific method at home

- 94. **Task 1:** Investigate which location in your home has the strongest natural light at three different times. Record observations; do not look directly at the Sun.
- 95. **Task 2:** Write a report with question, hypothesis, method, data table and conclusion.
- 96. **Task 3:** Explain how repeating observations improves confidence in results.

### Roll No. 33

**Theme:** Health and microbes

97. **Task 1:** Make a flowchart showing how an infection can spread and how hygiene practices can interrupt transmission.
98. **Task 2:** Create an illustrated table of helpful microorganisms and their uses.
99. **Task 3:** Write 5 case-based questions about hygiene and prevention with answers.

### Roll No. 34

**Theme:** Electricity applications

100. **Task 1:** Create a chart of 6 devices that use the heating or magnetic effect of electric current, explaining each use.
101. **Task 2:** Explain why electric current should be handled carefully and list 8 precautions.
102. **Task 3:** Draw a labelled circuit and describe how to check whether it is complete without unsafe experimentation.

### Roll No. 35

**Theme:** Pressure and surfaces

103. **Task 1:** Compare how pressure changes when the same force acts on different areas. Use drawings and one simple calculation.
104. **Task 2:** Explain how pressure in air relates to wind and weather, with a labelled sketch.
105. **Task 3:** Prepare 5 HOTS questions from Chapter 6 and answer them.

### Roll No. 36

**Theme:** Healthy community

106. **Task 1:** Design a community poster about clean surroundings, safe drinking water, hygiene and prevention of illness.
107. **Task 2:** Write a short reflection on how personal habits can affect other people's health.
108. **Task 3:** Prepare 10 MCQs covering Chapters 2 and 3 with answer key.

### Roll No. 37

**Theme:** Force investigation

- 109. **Task 1:** Plan an investigation comparing how far a toy car travels on two different surfaces. Keep the starting point and push as consistent as possible.
- 110. **Task 2:** Identify the variables and present a table for at least 3 trials per surface.
- 111. **Task 3:** Explain how friction affects the results and state one limitation of your investigation.

### Roll No. 38

**Theme:** Weather-ready school

- 112. **Task 1:** Design a school noticeboard display about cyclone readiness and safe behaviour during severe weather.
- 113. **Task 2:** Explain the connection between air pressure, wind and storms using a diagram.
- 114. **Task 3:** Prepare 8 short-answer questions from Chapter 6 with answers.

### Roll No. 39

**Theme:** Integrated science portfolio

- 115. **Task 1:** Create a 4-page mini portfolio: one page each on scientific investigation, microscopic life, health, and electricity/forces/pressure (combine the last three topics as needed).
- 116. **Task 2:** Include at least 4 labelled diagrams and a glossary of 15 terms from Chapters 1–6.
- 117. **Task 3:** Write a final reflection: which concept did you find most useful in daily life, and why?