

CHINIOT ISLAMIA PUBLIC SCHOOL AND COLLEGE

1ST QUARTERLY TEST

Computer Science Paper 2 - Grade 6

Name: _____ Section: _____ Roll No: _____

Duration: 2 Hours

Total Marks: 50

INSTRUCTIONS • Answer all questions. • Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs. • Write your name, centre number and candidate number in the boxes at the top of the page. • Write your answer to each question in the space provided. • Do not use an erasable pen or correction fluid. • Do not write on any bar codes. • Calculators must not be used in this paper:

INFORMATION • The total mark for this paper is 50. • The number of marks for each question or part question is shown in brackets []. • No marks will be awarded for using brand names of software packages or hardware.

Q1 .

1. Suppose you want to create a greeting card in MS Paint. Explain how you would use **Text Tool, Fill Tool, and Save options** effectively.

2. What do you understand about GO button and STOP button in scratch, and draw the diagram of both and identify its colour as well.

3. What is computer programming and what are the applications of programming in todays world?

4. Hira wants to search for “advantages of emails” but types the whole sentence instead of keywords. Explain why using **keywords** is better.

5. State Events and Sensing block of scratch and its uses.

6. How can you upload a new background in the scratch stage area write your answer in steps.

7. In MS Paint, you want to create a banner with both pictures and text. Explain the steps and tools you will use.

8. How many types of computer languages are used in programming explain your answer in detail.

9. You want to design a diagram with exact circles and rectangles. Explain how the **Shape Tool** ensures neatness.

10. How can you customize a sprite in scratch write all steps in your answer.

11. Fatima needs images of “Mount Everest” for a school project. Explain how she can search for **copyright-free images** on the internet.

12. Explain how the **Color Picker Tool** helps when editing a multi-colored drawing in MS Paint.

13. How can you converting an algorithm into a program give your answer with an example.

14. Motion block is used in scratch for creating animation, state any 5 possible blocks which are available in Motion block.

15. You want to draw a cartoon character in MS Paint. Explain how the **Brush Tool** would help compared to the **Pencil Tool**.

16. Write an algorithm to make a cup of tea .

17. Discuss types of low level languages in detailed.

18. Two types of languages are used in computer which is low level and high level so explain your answer in detail about their uses .

19. What is Paint Editor in scratch and list down any three main parts of paint editor .

20. What do you mean by sprite and script in scratch and what is the default sprite in scratch?

Q2 .

1. Explain how **decomposition** helps in solving a **large math problem**.

2. Write a step-by-step **algorithm for making tea**. Explain why this is considered an algorithm.

3. Explain how solving “Finding the average of 5 numbers” is a **simple problem**, while “Designing a shopping website” is **complex**.

4. Differentiate between a **simple problem** and a **complex problem**. Give one example each.

5. Explain the importance of **algorithmic thinking** in everyday life. Give two examples where it helps in solving problems faster.

6. Khalid wants to make a sandwich. Write the algorithm steps and explain why the

6. Anand wants to make a sandwich. write the **algorithm steps** and explain why the steps must be in sequence.

7. Define an **algorithm** in your own words. Explain with one real-life example why algorithms must always have a clear start and end.

8. A student wants to decide clothes: If temperature $> 40^\circ$ wear light clothes, else normal

8. A student wants to decide clothes. If **temperature** > 40 , wear light clothes, else normal clothes. Write algorithm and explain.

9. A student identifies patterns in multiplication tables. Explain how this shows **pattern recognition** in computational thinking.

10. What is the difference between **finite loops** and **infinite loops**? Give one real life

10. What is the difference between **while loops** and **do-while loops**? Give one real-life example of each and explain why the difference is important.

11. Write step-by-step algorithm for **buying a pencil from a shop**. Explain how decision-making (if-else) is involved.

12. Ali wants to plan his daily study schedule. Explain how **computational thinking** helps

12. Ali wants to plan his daily study schedule. Explain how **computational thinking** helps him break the task into steps.

13. Write an if-else program in Python to check if a number is **positive or negative**.

14. Give one real-life example of **finite repetition** and one of **infinite repetition**. Explain

14. Give one real life example of **while** repetition and one of **do-while** repetition. Explain difference.

15. A teacher wants to know if today's temperature is **hot (>30)** or **cool (≤ 30)**. Write an if-else program in Python.
