

ABC International School

Class X – Multi-Type MCQ Paper

6 Different MCQ Question Types

Name: _____

Class: _____ Section: _____

Roll no.: _____

Instructions:

- Fill OMR sheet with blue/black pen.
- Fill circles completely.
- No stray marks.
- Enter Name, Class, Section.

SET **A**

Questions: **18**
Duration: **45min**

Programming & Technology

Mixed question types about programming and technology

1. Consider the following programming languages and their typical use cases. Which programming language is primarily used for web frontend development?

- A. Python B. JavaScript
C. C++ D. Java

2. Read the statement below carefully and determine its accuracy. Based on your knowledge of Python programming language, evaluate the statement.

Statement:

Python is an interpreted programming language that supports object-oriented programming.

- A. The statement is completely true
B. The statement is partially true
C. The statement is completely false
D. Cannot be determined

3. Review the following statements about Git version control system. Select the option that identifies all the correct statements.

- i. Git is a distributed version control system
ii. Git was created by Linus Torvalds
iii. Git requires a central server to function
iv. Git can track changes in binary files

- A. i and ii only B. i, ii and iv only
C. i, ii and iii only
D. All statements are correct

4. Match each programming language with its primary use case. How many of the following programming languages are correctly matched with their primary use?

- i. Python - Data science and AI
ii. JavaScript - Web frontend development
iii. SQL - Database queries

- A. Only i and ii B. Only ii and iii
C. All three D. None

5. Consider the standard software development lifecycle (SDLC) phases listed below. What is the correct sequence for these software development lifecycle phases?

A. Requirements Analysis
B. Design
C. Implementation
D. Testing
E. Deployment

- A. A → B → C → D → E
B. A → C → B → D → E
C. B → A → C → D → E
D. A → B → D → C → E

6.

Machine Learning is a subset of Artificial Intelligence that enables computers to learn and make decisions without being explicitly programmed. It uses algorithms to analyze data, identify patterns, and make predictions. There are three main types: supervised learning (using labeled data), unsupervised learning (finding patterns in unlabeled data), and reinforcement learning (learning through trial and error with rewards).

Based on the information provided, answer the question below.

- A. Supervised learning
B. Unsupervised learning
C. Reinforcement learning
D. All three types

Geography & World Knowledge

Mixed question types about geography and world knowledge

7. Consider the different continents and their geographical sizes. Which is the largest continent by area?

A. Africa B. Asia
C. North America D. Europe

8. Consider the geographic facts about major world rivers. Analyze the accuracy of the following statement about the Amazon River.

Statement:

The Amazon River is the longest river in the world and flows through Brazil, Peru, and Colombia.

- A. The statement is completely true
B. The statement is partially true
C. The statement is completely false
D. Cannot be determined

9. Examine the following facts about the Sahara Desert. Which of the following statements about the Sahara Desert are correct?

- i. It is the largest hot desert in the world
ii. It covers parts of 11 countries
iii. It is larger than the United States
iv. It receives no rainfall throughout the year

- A. i and ii only B. i, ii and iii only
C. i and iii only
D. All statements are correct

10. *Test your knowledge of world capitals by matching countries with their capital cities. How many of the following countries are correctly matched with their capitals?*

- | | |
|----------------|------------|
| i. France | - Paris |
| ii. Japan | - Beijing |
| iii. Australia | - Canberra |
| iv. Brazil | - Brasília |

- | | |
|-------------------|-----------------------|
| A. i and iii only | B. i, iii and iv only |
| C. ii and iv only | D. All four |

11. *Consider the lengths of these major world rivers. What is the correct sequence of these rivers from longest to shortest?*

- A. Nile River
- B. Amazon River
- C. Yangtze River
- D. Mississippi River

- A. A → B → C → D
- B. B → A → C → D
- C. A → B → D → C
- D. B → A → D → C

12.

Climate change refers to long-term shifts in global temperatures and weather patterns. While climate variations are natural, scientific evidence shows that human activities, particularly the emission of greenhouse gases like carbon dioxide from burning fossil fuels, have been the dominant driver of climate change since the mid-20th century. The effects include rising sea levels, more frequent extreme weather events, and changes in precipitation patterns.

According to the paragraph, what has been the dominant driver of climate change since the mid-20th century?

- A. Natural climate variations
- B. Solar radiation changes
- C. Human activities
- D. Ocean currents

Science & Chemistry

Mixed question types about science and chemistry

13. *Think about the basic chemical compounds you encounter daily. What is the chemical formula for water?*

- | | |
|---------------------|--------------------|
| A. H ₂ O | B. CO ₂ |
| C. NaCl | D. CH ₄ |

14. Consider the electronic configuration and chemical behavior of noble gases. Evaluate the following statement about noble gas reactivity.

Statement:

Noble gases are chemically inert because they have complete outer electron shells.

- A. The statement is completely true
B. The statement is partially true
C. The statement is completely false
D. Cannot be determined
15. Review the following facts about the photosynthesis process in plants. Which of the following statements about photosynthesis are correct?
- i. It occurs in the chloroplasts of plant cells
 - ii. It converts carbon dioxide and water into glucose
 - iii. It requires sunlight as an energy source
 - iv. It produces oxygen as a byproduct
- A. i and ii only B. i, ii and iii only
C. ii, iii and iv only
D. All statements are correct
16. Test your knowledge of chemical element symbols. How many of the following elements are correctly matched with their chemical symbols?
- i. Gold - Au
 - ii. Silver - Ag
 - iii. Iron - Fe
 - iv. Copper - Cu
 - v. Lead - Pb
- A. All five B. Four only
C. Three only D. Two only

17. Recall the ordered stages of cell division during mitosis. What is the correct sequence of phases in mitosis?

- A. Prophase
B. Metaphase
C. Anaphase
D. Telophase

- A. A → B → C → D
B. A → C → B → D
C. B → A → C → D
D. A → B → D → C

18.

The periodic table organizes chemical elements by their atomic number, which represents the number of protons in an atom's nucleus. Elements in the same vertical column (group) have similar chemical properties because they have the same number of valence electrons. Elements in the same horizontal row (period) have the same number of electron shells. The periodic table helps predict an element's properties based on its position.

According to the paragraph, why do elements in the same group have similar chemical properties?

- A. They have the same atomic number
B. They have the same number of valence electrons
C. They have the same number of electron shells
D. They have the same atomic mass

* * * * **END** * * * *