



**NATIONAL OFFICERS ACADEMY**  
**Mock Exams CSS-2025**  
**June 2024 (Mock-2)**  
**GENERAL KNOWLEDGE-I**  
**GENERAL SCIENCE AND ABILITY**

<b>TIME ALLOWED: THREE HOURS</b>	<b>PART-I (MCQS)</b>	<b>MAXIMUM MARKS = 20</b>
<b>PART-I(MCQS): MAXIMUM 30 INUTES</b>	<b>PART-II</b>	<b>MAXIMUM MARKS = 80</b>

**NOTE:**

- i. **Part-II** is to be attempted on the separate **Answer Book**.
- ii. Attempt **ONLY FOUR** questions from **PART-II** by selecting **TWO** questions from **EACH SECTION**. **ALL** questions carry **EQUAL** marks.

**PART-II**  
**SECTION-I**

**Q. No. 2**

- a. Global warming, which is a global threat, is hitting the developing and least developed world the most. What measures should be taken to counter it in COP-29?
- b. Describe the functions of arteries, veins and capillaries.
- c. Why do atoms form chemical bonds? Explain structure of water.
- d. What are conductors, semiconductors, metals, plastics, and ceramics? Give an example of each.

**Q. No. 3**

- a. Technological advancement has increased the food production on one hand but decreased the quality of food on the other hand. Briefly explain.
- b. What are the problems facing solid waste management?
- c. What is Dengue Fever? What are the symptoms of Dengue fever?
- d. Discuss plate tectonics in the Tsunami. Distinguish the Richter magnitude scale and Volcanic Explosivity Index.

**Q. No. 4**

- a. Enlist the available sources of renewable energy in Pakistan; and suggest policy options to utilize these sources to overcome the present energy crisis.
- b. Explain the structure of Sun.
- c. What is ceramic material? Is it possible that ceramics can be recycled?
- d. Draw and explain the structure of Ear. Also label its parts.

**Q. No. 5**

- a. What is artificial intelligence and is it possible for artificial intelligence to outsmart humans?
- b. Define rocks formation, rock cycle and different types of rocks.
- c. Explain carbohydrates and its types.
- d. What are the benefits of balance diet?

**SECTION-II**

**Q. No. 6**

- a. The total population of a village increased from 18,000 to 22,500 in a decade. What is the percentage increase of population per year of that village?
- b. A soap factory makes 600 units in 9 days with the help of 20 machines. How many units can be made in 12 days with the help of 18 machines?
- c. A car covers a distance of 450m in 1minute whereas train covers 69km in 45 mins. Find the ratio of their speeds.
- d. Find perimeter of a Pentagon with each side equal to 15cm.

**Q. No. 7**

- a. Define I.Q, what are factors which affect I.Q?
- b. What is circumference of a circle with radius 4cm?
- c. Age of 5-students is 20, 22,21,21,23. Find mean, median, mode and range.
- d. Tahir started a business with a capital of Rs. 15,000. After 5 months Umar also joined him with an investment of Rs. 30,000. At the start of 9th month, Usman joined them by investing Rs. 45,000. At the end of the year they earned a profit of Rs. 406,000. Find the share of each one.

**Q. No. 8**

- a. If BROTHER is written as QDGSNQA. How SISTER will be coded?
- b. Identify the missing term: 1, 2, 6, 21, \_\_\_\_\_.
- c. Naseer walked from A to B in the East 10 feet. Then he turned to the right and walked 3 feet. Again he turned to the right and walked 14 feet. How far is he from A?
- d. The average temperature of a week is 33°C. Average of first three days is 30°C while of the last three days is 35°C. What is temperature on fourth day of week?

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*We wish you good luck for CSS-2025!*