



**NATIONAL OFFICERS ACADEMY**  
**Mock Exams for CSS-2025**  
**May 2024 (Mock-1)**  
**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. Differentiate Climate and Environment. What are the causes of air pollution in Pakistan?
- b. Write a note on Vitamins and their role in Human body.
- c. Compare goal of COP-27 and COP-28 on climate change.
- d. What are Active and Passive sensors? How these are used in G.I.S?

**Q. No. 3**

- a. What are buses? Discuss their types in Computer. Also draw block diagram of input and output devices of Computer.
- b. Define optics. How does an optical fiber work?
- c. Define the following terms:
  - i. Hypocenter
  - ii. Annular Lunar Eclipse
  - iii. Epicenter
  - iv. Magma
  - v. Dark Matter
- d. Differentiate Big Bang and Big Crunch. How age of the Universe is measured?

**Q. No. 4**

- a. Draw the structure of Eye. How Myopia and Hyperopia can be corrected?
- b. Discuss different units in the Human Cell.
- c. What are Galaxies? Give its types. Are galaxies moving or at rest? Justify with evidence.
- d. Compare main parts of the Sun and Earth.

**Q. No. 5**

- a. How Cyclones are formed? Discuss.
- b. Differentiate Ionic and Covalent bond.
- c. Give uses of Gamma Rays, X-Rays and Radio waves.
- d. What are the tides? Write a note on L.E.D.

**SECTION-II**

**Q. No. 6**

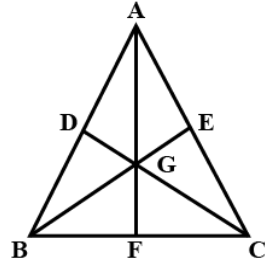
- a. Radius of cylinder is 8cm and height is 15cm. Find its volume.
- b. Al Aqsa Mosque in Jerusalem, Israel has a dome of rock in regular octagonal shape. What will be the angle of each side?
- c. Maximum length and depth of Dal Lake in Srinagar is 4.6 mile and maximum width is 2.2mile. Find surface area of Dal Lake.
- d. A ladder is leaning against the side of a 10m tall house. If the base of the ladder is 3m away from the house, how tall is the ladder?

**Q. No. 7**

- a. A person multiplied a number by  $\frac{3}{5}$  instead of  $\frac{5}{3}$ . What is the percentage error in the calculation?
- b. If ratio of chocolates to ice cream cones in a box is 5:8 and the number of chocolates is 30. Find the ice-cream cones.
- c. A tablet contains 30mg of medication. How many tablets will be needed to provide Ms. Smith with 240mg of medications?
- d. The average of 50 numbers is 20. If two numbers are 37 and 43 are discarded, what is the average of the remaining numbers?

**Q. No. 8**

- a. Write the formula of I.Q. What are the factors which can affect I.Q?
- b. Find the number of triangles in the below equilateral triangle:



- c. A letter is chosen at random from the word “Superintendent”. What is the probability that word is vowel?
- d. Distribute Rs.4320 among Zain ,Aslam and Ashraf in such a way that if Zain gets 2-parts then Aslam gets three parts, whereas Ashraf gets seven parts.

**\*\*\*\*\* We wish you Good Luck for CSS-2025\*\*\*\*\***