

NATIONAL OFFICERS ACADEMY Mock Exams for CSS 2025 **July 2024(Mock-3) GENERAL KNOWLEDGE-I GENERAL SCIENCE AND ABILITY**

TIME ALLOWED: THREE HOURS	PART-I (MCQS)	MAXIMUM MARKS = 20
PART-I(MCQS): MAXIMUM 30 INUTES	PART-II	MAXIMUM MARKS = 80
NOTE	•	

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

PART-II **SECTION-I**

O. No. 2

- a. "Artificial Intelligence is the new electricity." Justify with your opinion.
- b. CPU is brain of computer, how it resembles with human brain in working?
- c. What do you mean by a balanced diet? Deficiency of vitamins A, B and C can result into what type of imbalances in human body?
- Discuss working of optical fibers. What is GPS? How 2D & 3D locations are measured by satellites? d.

Q. No. 3

- a. Why atoms form chemical bonds? Discuss covalent bond in a water molecule.
- b. What is Doping? Discuss different types of Ceramics.
- c. State some of the merits and demerits of global warming.
- d. What is polio? What are the challenges in eradication of polio in Pakistan?

O. No. 4

- a. Write a note on liver juice "Bile".
- b. Describe role of kidney in excretion.
- c. Discuss different methods of Solid Waste Management.
- d. Define the terms:
 - i) Anaemia ii) Appendicitis iii)Spleen iv)Myopia v)Isotones

Q. No. 5

- a. Pakistan is the fifth most populous country of the world. What are the causes of population explosion in Pakistan? What can be the control measures?
- b. Differentiate between Cyclones and Tornadoes, which cyclone was observed in 2024?
- c. How earthquake occurs? How many people died in Türkiye's earthquake in 2023? What was the intensity of earthquake on Richter scale which jolted Türkiye?
- d. Define the following terms: i)Hypocenter ii)Epicenter iii) Eye wall of hurricane iv) Shallow focus v)Parsec

SECTION-II

Q. No. 6

- In a bag, there are a certain number of toy-blocks with alphabets A, B, C and D written on them. a. The ratio of blocks A : B : C : D is in the ratio 4 : 7 : 3 : 1. If the number of 'A' blocks is 50 more than the number of 'C' blocks, what is the number of 'B' blocks?
- b. A pair of shoes originally cost is 80\$. If there is a 15% discount and 10% sale tax applied. What is the final price?
- c. A train travels 42km between two stops at average of 36km/hr. If train departs at 4pm. When does the train arrive?
- d. Arrange the jumbled words:

Q. No. 7

- a. Find the volume of a cylinder with radius 30 cm and height 1m.
- b. The average age of three boys is 15 years. If their ages are in the ratio 3:5:7, what is the age of the youngest boy?
- c. Identify the series:
 i. 8, 19, 52, 151, 447, ___. (What is wrong number in this series?)
 ii. 11, 13, 17, 19, 23, ___.
- d. If a triangle has sides of 5cm, 4cm and 6cm. What will be each angle?

Q. No. 8

- a. A man travels over the path of a right-angle triangle having base and hypotenuse 4 and 5 kilometers, respectively. After a complete round he continues in the same direction for 6 *km* and then turns at 90 degree and continues for another 8*km*. How long he has travelled and how far he is from his starting point?
- b. Hassan, Ali, Akbar, Nasir and Shahbaz are classmates having different pocket money. Hassan's pocket money is one third as much as of Ali and Ali has five times as much as Akbar. Akbar has thrice as much as Nasir and Shahbaz gets equal to Nasir and that of Ali. If they get Rs. 8000 then find the pocket money of each.
- c. What will be the surface area and volume of a sphere if it has radius of 7m?
- 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