



NATIONAL OFFICERS ACADEMY
Mock Exams CSS-2023
July 2022 (Mock-1)
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.**
- 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. What are computer buses? Explain CPU as brain of computer.
- b. Write a note on G.I.S and remote sensing.
- c. How does a mobile phone work?
- a. Discuss any 5-applications of artificial intelligence.

Q. No. 3

- a. What causes a cyclone? In which part of cyclone winds are the strongest and destructive?
- b. What is a black hole and how is it formed?
- c. Discuss the rotation and revolution of the earth, and its structural parts.
- d. Distinguish ionic and covalent bonds with examples.

Q. No. 4

- a. How hurricanes are generated? Discuss the role of Coriolis force, when Katrina hurricane became the major disaster touching the USA?
- b. Discuss plate tectonics in the Tsunami. Distinguish the Richter magnitude scale and Volcanic Explosivity Index.
- c. Why do atoms form chemical bonds? Explain structure of water.
- d. Differentiate between intrinsic and extrinsic semi-conductors.

Q. No. 5

- a. What is meant by essential fats? Write down the different types of fat.
- b. Briefly explain the Water Cycle.
- c. Write down the names of a few diseases caused by a virus and bacteria; mentioning the name of virus/bacteria and disease caused by them.
- d. What are the benefits attributed to the increasing use of Solar Panels?

SECTION-II

Q. No. 6

- a. A boy can type 1350 words in 30 minutes. How many words, he could type in 5 minutes?
- b. A primary school had an enrollment of 850 pupils in January 2012. In January 2022 enrollment was 1120, what is the percentage increase in the enrollment?
- c. A man pays 10 % of his income as income tax. If his income tax amount is 1500, what is his income?
- d. Average age of group of 13 boys is 13. When two more boys joined the group average rose by 2 years. What is the sum of the ages of two new boys?

Q. No. 7

- a. Identify the series?
 - i) 5, 9, 17, 33.....?
 - ii) 1, 7, 49, 343.....?
- b. A rectangular room is 6m long, 5m wide and 4m high. Find total volume of the room in cubic meters?
- c. Find the number of triangles below :



- d. What is the perimeter of the octagon with each side of 2cm?

Q. No. 8

- a. It takes 3 liters of paint to cover an area of 24 square meters, what percentage increase in the quantity of paint would be required to cover an area of 50.4 square meters?
- b. Discuss the factors affecting intelligence.
- c. In a certain code language BROTHER is written as QDGSNQA, how will SISTER write in a same code language?
- d. A man left his property of Rs. 640,000. A debt of Rs. 40,000 was due to him and Rs. 5,000 was spent on his burial. Distribute the amount between his widow, one daughter and two sons according to the Islamic Law.

***** *We wish you Good Luck for CSS-2023******