

NATIONAL OFFICERS ACADEMY

Mock Exams CSS-2022 March 2022 (Mock-8) 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. Define the term malnutrition, elaborate its major causes and consequences.
- b. Differentiate between food contamination and adulteration?
- c. What are computer bases? Differentiate RAM and ROM?
- d. How information is transmitted through optical fiber?

Q. No. 3

- a. Draw the structure of the human eye, briefly explain its functions?
- b. Liver is a chief chemist. Comment.
- c. Comment, the greenhouse effect is a blessing. Also discuss enhanced greenhouse effect and its relation in global warming?
- d. Write a note on the following
 - a) Working of GPS b) Working of mobile phone

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. What are conductors, semiconductors, metals, plastics, and ceramics? Give an example of each.

Q. No. 5

- a. How energy is produced on the sun? Distinguish dark matter and dark energy.
- b. Distinguish lunar and solar eclipses.
- c. Discuss the steps involved in Solid Waste Management.
- d. Discuss the role of forests in the country's economy in the context of the Prime Minister's initiative of tree tsunami?

SECTION-II

O. No. 6

- a. A primary school had an enrollment of 850 pupils in January 2021. In January 2022, the enrollment was 1120. What was the increase percentage for the enrollment?
- b. A man is 5 times as old as his son, two years ago the sum of squares of their ages was 114, find the present age of his son?
- c. A man has some hens and cows if the no of heads be 48 and no of feet is equal to 140, find the no of hens.

d. A car runs at a speed of 40 km/h during first half of the journey and at the speed of 60km/h the 2nd half of journey. What is the average speed of a car?

Q. No. 7

- a. A number is divided by 6 and then 50 is added. If the total is 60, what is that number?
- b. Find the odd one out:
 - 8, 16, 24, 34, 40, 48
- c. A tower is 15m tall. If I am standing 20m from the base of the tower. What is my aerial distance from the top of the tower?
- d. In a hotel, the tariff for every odd dates is Rs.1000 and for even dates is Rs. 2000. If the man paid total of 30000 in all. For how many days did he stay in the hotel given that the first day is 5th date of the month?

Q. No. 8

- a. Distinguish between IQ and EQ?
- b. In a mixture of 60 liters, the ratio of milk and water is 2:1. If this ratio is to be 1:2, then what is the quantity of water to be further added?
- c. If A is the brother of B and B is the sister of C, C is the father of D. How D is related to A, D being a male member?
- d. If ROSE is coded as 6821 CHAIR is coded as 73456, PREACH is coded as 961473, what will be code for SEARCH?

We wish you Good Luck for CSS-2022!