



NATIONAL OFFICERS ACADEMY
Mock Exams CSS-2023
November 2022 (Mock-4)
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. Briefly explain the disaster risk management process. Analyze the performance of NDMA in the wake of recent events.
- b. What is GPS? How does it work?
- c. Explain the structure of proteins in detail. Briefly explain different types of proteins and their functions.
- d. The global population just hit 8 billion. What do you understand by the term population planning? What are different strategies to control the population on a managerial level?

Q. No. 3

- a. What is hepatitis? What are its different types, symptoms, and treatments?
- b. What is Biosphere? What is a biome? Tell about major biomes.
- c. What are antibiotics? Explain how they are made and how they assist the human body. Are there any negative impacts associated with them?
- d. What do you know about drinking water quality and its different standards?

Q. No. 4

- a. What is Biofuel? Explain different methods of producing it.
- b. What is SWM? What are the different methods? Briefly analyze the condition of SWM in Pakistan.
- c. Write brief notes on the following terms:
 - i. Food adulteration
 - ii. Food deterioration
 - iii. Food preservation
 - iv. Food additives
- d. Mitochondria is the powerhouse of cells. Explain its structure and the different functions played by it in the daily functioning of a cell.

Q. No. 5

- a. What is your understanding of an Avalanche? Describe its types. Give a few examples.
- b. What are EM radiations? Briefly describe the spectrum of these radiations and their types.
- c. What do you understand by the term food quality? Explain different standards by which it is gauged.
- d. What is AI? What are the fundamentals of it?

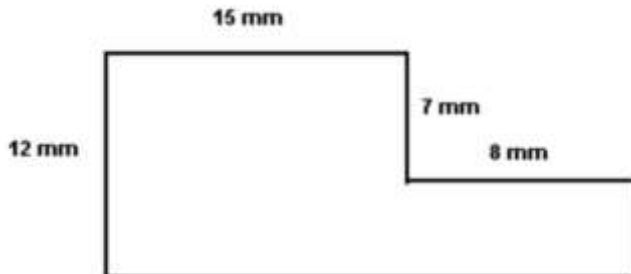
SECTION-II

Q. No. 6

- a. The average of 45 results was calculated as 27 but later it was found that while calculating 39 was taken as 93 by mistake, then what will be the correct average?
- b. Complete the series 12, 22, 42, 72_____?
- c. Find the number whose 17% is 51.
- d. If one-third of one-fourth of a number is 15 then what is three-tenth of that number?

Q. No. 7

- a. Sum of ages of son and father is 56 years .After 4years the age of father will be three times that of son. What are their ages respectively?
- b. A man walks 5km south and then turns to left and walks 5km. Now in which direction is he from starting point?
- c. Draw a triangle which is right triangle and at the same time isosceles.
- d. Find the perimeter of the shape below:



Q. No. 8

- a. Discuss the factors affecting intelligence.
- b. $U = [\text{Whole number from 10 to 24}]$
 $A = [\text{Even Number}]$
 $B = [\text{Number divisible by 5}]$
Write down the number elements of $A \cap B$.
- c. A told B that C is his father's nephew. D is A's cousin but not the brother of C. What relationship is there between D and C?
- d. In a certain code language COMPUTER is written as RFUVQNPC. How will MEDICINE be written in that code language?

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