

NATIONAL OFFICERS ACADEMY <u>Final Mock Exams</u> for Special CSS & <u>Mock-6</u> for CSS2024

September 2023

GENERAL KNOWLEDGE-I GENERAL SCIENCE AND ABILITY

TIME ALLOWED: THREE HOURS

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. The doctor of the future will no longer treat humans with drugs but rather will cure and prevent diseases with nutrition. Explain?
- b. Distinguish composting, incineration, and pyrolysis in solid waste management.
- c. Describe the role of kidney in the urine formation.
- d. Distinguish N-type and P-type semiconductors. Semiconductors are the brain of modern electronics. Comment.

Q. No. 3

- a. What causes a cyclone? In which part of cyclone winds are the strongest and destructive?
- b. What are shallow focus and deep focus? What causes earthquake? What was the magnitude of earthquake in Morocco recently?
- c. Write a note on Dengue fever. What are the primary causes of Dengue fever, and what preventive measures can be taken to avoid Dengue infection?
- d. Distinguish ionic and covalent bonds with examples.

Q. No. 4

- a. What are the causes of land pollution?
- b. What are the main goals of the COP-27?
- c. Write is the role of GIS in environmental science?
- d. What are the fundamentals of artificial intelligence?

O. No. 5

- a. Give structure and functions of human ear.
- b. What is digestive system? What is the role of small intestine in digestion?
- c. Write a short note on Vitamins.
- d. Describe the functions of pituitary glands.

SECTION-II

Q. No. 6

ι.	Identify the series:
	i) 10, 100, 200, 310,
	ii) 3, 7, 23, 95

b. The perimeter of a rectangle is given below 114cm. Find the area of rectangle:

(3x-y)cm	
	(2x-3)cm
(2x+y)cm	

- c. Nisha is 15 years elder to Romi. If 5 years ago, Nisha was 3 times as old as Romi, then find Nisha's present age.
- d. 210 Oranges, 252 apples and 294 pears equally packed in cartons so that no fruit is left. What is the biggest possible number of cartons needed?

O. No. 7

- a. During a sale a clerk was putting a new price tag on each item. On one shirt, he accidentally raised the price by 20% instead of lowering it by 20%. As a result the price on the tag was Rs. 80 too high. What was the original price of the shirts?
- b. In a certain code BROTHER is written as QDGSNQA. What will be code for SISTER?
- c. Define and Draw the following:
 - i. Scalene Triangle
 - ii. Equilateral Triangle
 - iii. A triangle which is Isosceles and Right at the same time
- d. A pizza is divided into 8 slices in which 3 slices contain raisin in it; Shiza picks a slice, what is the probability that she will pick a slice with raisin?

Q. No. 8

- a. A man walks 5km towards south. Then turns right and after walking 3km he turns to the left and walks 4km. Then he goes back 10km straight. Now in which direction is he from starting point & how far he is from starting point?
- b. Find the arithmetic mean of cubes of 1st five prime numbers.
- c. A group of 50 men can construct 20 kilometer road in 40 days. How long will 70 men take to complete same length of road?
- d. Zahid left a property worth Rs 1750,000/. His family had to pay off a debt of Rs 150,000/. The rest of money was distributed between a son and a daughter. How much did each child receive if share of a son was double than that of a daughter?

***** Good Luck for SPECIAL CSS & CSS2024****