

#### NATIONAL OFFICERS ACADEMY

# Mock Exams CSS-2022 April 2022 (Final Mock) 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. 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. Explain in a single sentence
  - a) Computer buses
  - b) Motherboard

- d) Microphone
- e) Geostationary satellites

- c) RAM
- 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 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. What are the causes of water pollution?
- b. What are the goals of the Glasgow climate pact?
- c. Give any 5-uses of remote sensing.
- d. Discuss any 5-applications of artificial intelligence.

#### Q. No. 5

- a. Give structure and functions of human eye.
- 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.

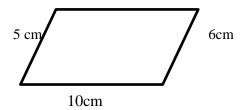
## **SECTION-II**

### Q. No. 6

- a. 172 is considered to be magic number for a no-confidence motion for the premier in the national assembly of Pakistan. 172 is what percent of total numbers of NA?
- b. A family consists of 2 grandparents, 2 parents and 3 children. Average age of grandparents

Is 67 years, that of parents is 35 years and that of grandchildren is 6 years. What is the average age of the family?

c. What is the area and perimeter of the below figure:



d. Asghar left a property worth of 4, 80,000, find the share of his widow, three sons, and 4 daughters?

## Q. No. 7

- a. Yasir is 15 years older than Zia. 5 years ago Yasir was 3 times as old as Zia. Find the present age of Yasir?
- b. Find the missing one:

7, 26, -----, 124

c. If  $\hat{U} = \{1,2,3,4,5,6,7,8\}$ and  $A = \{2, 3, 5, 7\}$ Find  $A \hat{U} A^{C}$ 

- d. Define the following
  - A. Arithmetic mean

- C. EQ
- B. IQ D. Range of DATA

E. Histogram and pictogram

## Q. No. 8

- a. A travels 35 km towards the west, takes a right turn and travels 50 km more next, she takes another right turn and travels 35 km in that direction. How far is she from her original position?
- b. If A is the husband of B and C is the mother of D and B. How is C related to A?
- c. If SUMMER is written as RUNNER, how WINTER will be coded in the same code?
- d. 7 persons live in a street, having a house in a line. Consider the following:
  - 1- A lives in the corner's house
  - 2- C is in between E and G
  - 3- There is one house between D and F
  - 4- F is neighbor of G
  - 5- There are two houses between A and G

Who lives in the 2<sup>nd</sup> corner?

\*\*\*\* We wish you Good Luck for CSS-2022\*\*\*\*