

NATIONAL OFFICERS ACADEMY Mock Exams CSS-2022 August 2021 (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.

<u>PART-II</u> 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?
- d. Differentiate between intrinsic and extrinsic semi-conductors.

Q. No. 3

- a. Explain Tornados, why are these funnel shaped?
- b. Differentiate between Planet and Star. Sun is a star, give some of its physical characteristics.
- c. Discuss seismic waves in detail.
- d. Write different methods of food preservation.

Q. No. 4

- a. Explain the structure of kidney.
- b. Liver is a chief chemist. Comment
- c. Global warming is a non-conventional threat to the world. What measures are needed to reduce it? Give analysis with reference to COP-25.
- d. What are vaccines? Name the vaccines available in Pakistan for Covid-19. What are the measures to reduce myths about vaccines in general masses?

Q. No. 5

- a. Why do atoms form chemical bonds? Explain any two types.
- b. Differentiate between solar and lunar eclipses.
- c. Explain hydrological cycle in detail.
- d. Differentiate between reforestation and afforestation. What are the causes of water pollution in Pakistan?

SECTION-II

Q. No. 6

- a. A man buys 5Kg of meat at Rs. 800 per kg. In addition, he has to pay a consumption tax of 6% on the selling price. Calculate the total amount of memory that he has to pay?
- b. An army camp has a 30 days stock of food for 900 soldiers. 150 soldiers leave the camp for how many days same stock of food will be sufficient for rest of the soldiers?
- c. At a camp for boys and girls the ratio of boys to girls is 3:5. If camp enrollment is 160. How many of the children are boys?
- d. Zahid left a property of 175000. His family had to pay a debt of 150000, rest of the money was to be distributed b/w his two sons & 1 daughter, so that son receives double than daughter. Find the share

of each child.

Q. No. 7

- a. A Radio station is having a promotion in which every 12th caller receives a fare ticket of concert and every 15th caller receives a limbo ride. Which caller will be the 1st to win both the rides together?
- b. A square has an area of 225cm². What is its perimeter?
- c. Ali is 5 years younger than Asad. Four years later, Asad will be twice as old as Ali. Find their present ages.
- d. Two numbers are in the ratio 3:5, if 9 is subtracted from each term, the new numbers are in the ratio 12:23.What is the smallest number?

Q. No. 8

- a. A starts from his office and walks 3 km towards North. Then he turns rights and walks 2 km and then right and walks 5 km. Then again right and walks 2 km and then again right and walks 2 km. How far is he from the starting point?
- b. The cost for hiring a car for two days in 2018 was Rs. 264 which was 20% more than in 2013. What was the cost of hiring a car for two days in 2013?
- c. If A= Set of even numbers, B = Set of multiples of 5, U = Natural numbers from 10 to 80, find A U B =?
- d. In a certain code language, if BLADE is written as EIDAH, how will CRICKET be written in the same code language?

We wish you good luck for CSS-2022 !