

National Officers Academy Final Mock Exams for CSS-2021 January 2021 GENERAL KNOWLEDGE-I (GENERAL SCIENCE AND ABILITY)

TIME ALLOWED: THREE HOURS	PART-I (MCQS)	MAXIMUM MARKS = 20
PART-I(MCQS): MAXIMUM 30 MINUTES	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>SUBJECTIVE PART — PART-II</u> <u>SECTION-I</u>

Q. No. 02

- a. The covid-19 pandemic has become the worst public health Crisis. Comment; also discuss the similarities & differences b/w Influenza & Covid-19.
- b. Global warming is a non-conventional threat, how to counter it. Do you see any shift on global climate pact under President Joe Biden?
- c. What are active & passive sensors? Discuss Remote Sensing in detail.
- d. Write a note on balanced diet.

Q. No. 03

- a. Differentiate the total solar eclipse, partial solar eclipse & annular solar eclipse. Why does lunar eclipse not appear on every month?
- b. What are tornadoes? Differentiate between tornadoes and cyclone.
- c. What is optics? How optical fiber works?
- d. How satellites are launched & which force is responsible to move them around the Earth?

Q. No. 04

- a. What is octet rule in chemical in chemical bonding? Explain covalent bond in detail.
- b. Why water molecule is angular in structure?
- c. Human Brain is the natural intelligence; C.P.U of computer is the artificial intelligence. Discuss the similarities.
- d. Explain the structure of Human eye. How far sightedness can be removed?

Q. No. 05

- a. Liver is a chief chemist, comment.
- b. Write a note on Polio & what steps have been taken by Pakistan for its eradication.
- c. Black holes are also called collapsars, how they are formed?
- d. What are intrinsic & extrinsic semi-conductors?

SECTION-II

Q. No. 06

- a. 40% of the 7920 visitors to an amusement park were children. 25% of the children and 1/3 of the adults were repeat visitors. How many percent of the visitors were visiting the amusement park for the first time?
- b. 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?

- c. 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 & one daughter, so that son receives double than daughter. Find the share of each child.
- d. Erin is making thirty shirts for her upcoming family reunion. At the reunion she is selling each shirt for \$18 apiece. If each shirt cost her \$10 apiece to make, how much profit does she make if she only sells 25 shirts at the reunion?

Q. No. 07

- a. A Radio station is having a promotion in which every 12th caller receives a fare ticket of concert & every 15th caller receives a limbo ride. Which caller will be the 1st to win both the rides together?
- b. There is a 20 litres of a solution which has 20% of bleach. Extra bleach is added to it to make it to 50% bleach solution. How much water must be added further to bring it back to 20% bleach solution?
- c. Ali is 5 years younger than Asad. Four years later, Asad will be twice as old as Ali. Find their present ages.
- d. 100 people are waiting in a queue to get the newly published book of Harry Potter. A person gets tired of waiting and therefore leaves the queue. What is the probability that the person left was standing between 37th and 67th person?

Q. No. 08

- a. Complete the series: SCD, TEF, UGH, _____, WKL.
- b. In a certain code if LIGHT is coded as GILTH, find the code of RAINY.
- c. A man walks 2km towards North. Then, he turns to the East & walks 10km. After this he turns to the North & walks 3km. After this he turns to the east & walks 2km. How far is he from starting point?
- d. Define average, median, mode, range & differentiate shortly primary and secondary mental abilities.

Best of Luck for CSS-2021