



National Officers Academy
E-Mock Exams for CSS-2021
August Mocks
GENERAL KNOWLEDGE-I
(GENERAL SCIENCE AND ABILITY)

TIME ALLOWED: TWO HOURS AND FORTY MINUTES

MAXIMUM MARKS: 100

NOTE:

- i. **SUBJECTIVE PART** is to be attempted on Hard Answer Sheets and converted to PDF file before submitting on LMS.
- ii. Attempt **ONLY FOUR** questions from **SUBJECTIVE PART** by selecting **TWO** questions from each **SECTION**. **ALL** questions carry **EQUAL** marks.
- iii. All the parts (if any) of each Question must be attempted at one place instead of at different places.
- iv. Write Q. No. in the Answer Book in accordance with Q. No. in the Q. Paper.
- v. No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.
- vi. Extra attempt of any question or any part of the question will not be considered.

SUBJECTIVE PART — PART-II

SECTION-I

- Q. 1.** (A) Write a short note on parallel universe theory.
(B) What is a vaccine? What are the methods of the preparation of vaccine?
(C) Write different types of winds.
(D) What are the causes of volcanism? Where is the oldest volcano of the world present?
- Q. 2.** (A) Write a short note on renewable energy resources.
(B) What is the difference between hydrogen bond and ionic bond.
(C) What are the causes of air pollution? How can we reduce air pollution?
(D) Write a short note on biomolecules.
- Q. 3.** (A) What are semiconductors? Briefly explain their types.
(B) What is networking. What are its different types?
(C) What is remote sensing? What are the techniques of remote sensing?
(D) Write a short note on artificial satellites.

SECTION-II

- Q. 4.** (A) In a basket of apples, 12% of them are rotten and 66 are in good condition. Find the total number of apples in the basket.
(B) Oscar needs to ship 14 rock CDs, 12 classical CDs, and 8 pop CDs. He can pack only one type of CD in each box and he must pack the same number of CDs in each box. What is the greatest number of CDs Oscar can pack in each box?
(C) The cost of admission to a popular music concert was \$162 for 12 children and 33 adults. The admission was \$122 for 88 children and 33 adults in another music concert. How much was the admission for each child and adult?
(D) A man shows a photo & says: “The woman in the photo is the grandmother of my nephew & her son is the brother-in-law of my sister.” If he has no other sister, then what is the relation of the woman in photo with the sister of that man?
- Q. 5.** (A) The ratio of alcohol and water in a mixture is 4:3. When 5 liters of water is added, the ratio becomes 4:5. Find the quantity of alcohol and water in the new mixture.

(B) If $U = \{\text{Natural Numbers from 15 to 87}\}$, $A = \{\text{Set of Prime Numbers}\}$, $B = \{\text{Set of Even Numbers}\}$, find (i) $A \cap B$

(C) Umair, Usman and Umer have 187 cm, 189 cm, 175 cm heights respectively. The average of the heights of Umair, Usman, Umer and Hamid is 180. Find the height of Hamid.

(D) In certain code 'FROZEN' is written as 'OFAPSG'. Then how would 'MOLTEN' be written in that code?

Q. 6. (A) If 5 students compile an assignment comprising of 26 pages in 2 days, how many students are needed to compile an assignment consisting of 84 pages in 3 days? (B) Twenty-six squares of paper lettered A to Z are placed in a can. One letter is randomly chosen from the can and turns out to be the letter G. If a second letter is drawn without putting the letter G back into the can, what is the probability that it will be the letter F?

(C) Zahid left a property worth Rs. 1,750,000. His family had to pay off a debt of Rs. 150,000. The rest of the money was distributed between a son and a daughter. How much did each child receive if the share of the son was double than that of the daughter?

(D) The total number of people in a row is 48. X is at 12th position from the left-hand side and Y is at the 22nd position from the right-hand side. How many people are sitting in between X and Y?

Best of Luck for CSS-2021