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. What are the potential benefits and challenges of implementing Artificial Intelligence (AI) in healthcare? Discuss the impact of AI on patient care and medical diagnosis.
  b. Describe the Big Bang theory and its significance in understanding the origin and evolution of the universe. What are some of the key evidence supporting this theory?
  c. What are the primary causes and effects of global warming? Discuss the role of human activities in contributing to global warming and suggest some potential strategies for mitigating its impacts.
  d. What are the key components of a disaster management plan? Discuss the importance of preparedness, response, and recovery in mitigating the impacts of natural disasters. Provide examples of successful disaster management strategies.

Q. No. 3
  a. Describe the structure and function of the human heart. Explain the cardiac cycle and the role of the heart in maintaining blood circulation. How does the heart regulate blood pressure?
  b. What are biofuels, and how are they produced? Discuss the advantages and disadvantages of using biofuels as an alternative energy source. How can biofuels contribute to reducing greenhouse gas emissions?
  c. What are the key factors that determine food quality? Discuss the importance of food safety and the role of food quality control measures in preventing foodborne illnesses. How can consumers ensure they are consuming safe and healthy food?
  d. Describe the structure of the Earth's interior, including the crust, mantle, and core. Explain the differences between the oceanic and continental crust. How do plate tectonics shape the Earth's surface?

Q. No. 4
  a. What are the characteristics of a tropical cyclone? Describe the formation process and the factors that influence its intensity. How do cyclones impact coastal communities?
  b. What is remote sensing, and how is it used in environmental monitoring? Discuss the advantages and limitations of remote sensing technology in tracking changes in land use, vegetation, and climate.
  c. What are the different types of vitamins, and how do they contribute to human health? Discuss the importance of vitamins in maintaining healthy skin, hair, and eyes, and describe the consequences of vitamin deficiencies.
  d. What is poliomyelitis (polio), and how is it transmitted? Discuss the global efforts to eradicate polio and the challenges faced in achieving this goal. Describe the importance of vaccination in preventing polio.

SECTION-II

Q. No. 5

    a. In a certain school, 20% of students are below 8 years of age. The number of students above 8 years of age is 2/3 of the number of students of 8 years of age which is 48. What is the total number of students in the school?

    b. Father is aged three times more than his son Rashid. After 8 years, he would be two and a half times of Rashid's age. After further 8 years, how many times would he be of Rashid's age?

    c. Two dice are tossed. The probability that the total score is a prime number is?

    d. The captain of a cricket team of 11 members is 26 years old and the wicket keeper is 3 years older. If the ages of these two are excluded, the average age of the remaining players is one year less than the average age of the whole team. What is the average age of the team?

Q. No. 6

    a. If selling price is doubled, the profit triples. Find the profit in percent.

    b. Two servants X and Y are paid a total of Rs. 550 per week by their master. If X is paid 120 percent of the sum paid to Y, how much is Y paid per week?

    c. The ratio between the perimeter and the breadth of a rectangle is 5 : 1. If the area of the rectangle is 216 sq. cm, what is the length of the rectangle?

    d. Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5?

Q. No. 7

    a. Two numbers A and B are such that the sum of 5% of A and 4% of B is two-third of the sum of 6% of A and 8% of B. Find the ratio of A: B.

    b. In a two-digit, if it is known that its unit's digit exceeds its ten's digit by 2 and that the product of the given number and the sum of its digits is equal to 144, then the number is?

    c. A sum of money is to be distributed among A, B, C, D in the proportion of 5 : 2 : 4 : 3. If C gets Rs. 1000 more than D, what is B's share?

    d. A father said to his son, "I was as old as you are at the present at the time of your birth". If the father's age is 38 years now, the son's age five years back was?

***** *We wish you Good Luck for CSS-2026* *****