Marking Scheme: *Three questions carry 10 marks each. Question 1 has 10 MCQ's of 1 mark each. Questions 2 and 3 have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks. Question 1 is compulsory. Attempt any 2 out of questions numbers 2, 3 and 4.*

Question 1:

1. What should be added to -5/4 to get -1?
   I. -1/4
   II. 1/4
   III. 1
   IV. -3/4

2. In the equation 3x = 4-x, transposing -x to LHS we get
   I. 3x - x = 4
   II. 3x + x = 4
   III. -3x + x = 4
   IV. -3x - x = 4

3. If x/3 + 1 = 7/15, then which of the following is correct?
   I. x/3 = 7/15 - 1
   II. x/3 = -7/15 + 1
   III. x/3 = -7/15 - 1
   IV. none of these

4. Which of the following lies between 0 and -1?
   I. 0
   II. -3
   III. -2/3
   IV. 4/3

5. If 2x/5 = 4, the value of x is-
   I. 10
   II. -10
   III. -8/5
   IV. 8/5

6. The multiplicative identity of -1 is ?
   I. 1
   II. -1
   III. 0
   IV. None of these

7. If 7x+15 = 50, then which of the following is the value of x?
   I. -5
   II. 65/7
   III. 5
   IV. 1/5

8. Two years ago my age was x years, then what was my age 5 years ago?
    I. X + 7
    II. X - 2 - 5
    III. X - 5
    IV. X- 3

9. How old will I be after 10 years, if my age before 10 years was 'x' years?
    I. X + 20
    II. X - 20
    III. X + 10
    IV. X - 10

10. Which of the following is the product of 7/8 and -4/21?
   I. -1/6
  II. 1/12
 III. -16/63
 IV. -147/16

Question 2:

1. a. What is the additive inverse of 3/5?
    a. What is the multiplicative inverse of 3/5?

2. Find two rational numbers between   (i) -3 and 3.
                                          (ii) 0 and 1.

3. a. Find x: 7x + 2 = -19
    b. Find x: 3x - 9 = 5x – 3

Question 3:

1. The sum of two consecutive even numbers is 38. Find the numbers.

2. Identify: (i)   The rational number that does not have any reciprocal at all.
                     (ii)   The rational numbers those are equal to their reciprocals.
                     (iii)   The rational number that is equal to its negative.

3. 4/5 of a number is more than 3/4 of the number by 5 . Find the number.

Question 4:

1. The sum of three consecutive odd numbers is 51. Find the numbers.

2. Find x: (a) 18 - 7x = -3   (b) 3(x + 4) = 21

3. a. Find the multiplicative inverse of: (i) -11/-15   (ii) -5
    b. The sum of the two numbers is 5/9. If one of the numbers is 1/3, find the other.