**RUBRIC: SSC 1st ANNUAL EXAMINATION 2022 Revised final correction by anwaar sb dated 02-06-22 at 3:15**

**SUBJECT: MATHEMATICS SSC- I (Local**

| **Q.# /Part #** | **Criteria** | **Level 1 (Marks)** | **Level 2(Marks)** | **Level 3 (Marks)** | **Level 4 (Marks)** | **Level 5 (Marks)** |
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|  | Finding the values of and | Correctly simplifying LHS by scalar multiplication and addition of matrices  (2) | Correct scalar multiplication or addition of matrices  (1) | Wrong answer  (0) |  |  |
| Correctly finding the values of and  (2) | Correctly finding the value of either or  (1) | Wrong answer  (0) |  |  |
|  | Simplifying and writing the answer in the form | Correctly rationalizing (2) | Partially correct  (1) | Wrong answer  (0) |  |  |
| Correctly simplifying and writing in the form  (2) | Partially correct  (1) | Wrong answer  (0) |  |  |
|  | Simplifying by using the laws of exponents | Correctly applying the laws of exponents and converting division to multiplication  (2) | Either correctly applying the laws of exponents or converting division to multiplication  (1) | Wrong answer  (0) |  |  |
| Correctly applying the laws of exponents and simplifying the expression  (2) | Either correctly applying the Laws of exponents or simplifying the expression  (1) | Wrong answer  (0) |  |  |
|  | Finding the value of | Correct conversion of logarithmic form to its equivalent exponential form  (1) | Wrong answer  (0) |  |  |  |
| Correctly simplifying the expression and finding the value of  (2) | Partially correct  (1) | Wrong answer  (0) |  |  |
| Finding the correct value of  (1) | Wrong answer  (0) |  |  |  |

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|  | Rationalizing and finding the values | Finding the correct value of by Rationalizing  (2) | Partially correct  (1) | Wrong answer  (0) |  |  |
| Finding the correct values of  and  (2) | Finding the correct value of either or  (1) | Wrong answer  (0) |  |  |
|  | Factorizing the expression | Correctly arranging of the terms  (2) | Partially correct  (1) | Wrong answer  (0) |  |  |
| Correctly factorizing  (2) | Partially correct  (1) | Wrong answer  (0) |  |  |
|  | Finding HCF | Correctly factorizing all three expressions  (3) | Correctly factorizing any two expressions  (2) | Correctly factorizing any one expression  (1) | Wrong answer  (0) |  |
| Finding the correct value of H.C.F  (1) | Wrong answer  (0) |  |  |  |
|  | Solving the inequality | Correctly applying LCM on both sides  (1) | Wrong  (0) |  |  |  |
| Finding correct values of y  (2) | Partially correct  (1) | Wrong answer  (0) |  |  |
| Correctly finding the solution set (1) | Wrong answer  (0) |  |  |  |
| ) | Solving linear equation involving absolute value | Correctly simplifying and finding the correct value of  (2) | Partially correct  (1) | Wrong answer  (0) |  |  |
| Correctly simplifying and finding the correct value of  (2) | Partially correct  (1) | Wrong answer  (0) |  |  |
| ) | Drawing graph by taking at least four ordered pairs | Correctly drawn graph from the given equation:   1. Labeling the coordinate axes 2. Plotting correct ordered pairs on the coordinate axes 3. Drawing a straight line by joining the points.   (4) | Any two correct steps  (3) | Any one correct step  (2) | Partially correct  (1) | Wrong answer  (0) |
|  | Using distance formula to show the condition of collinearity of three points | Correctly finding the values of , and  (3) | Correctly finding the values of any two  (2) | Correctly finding the value of any one  (1) | Wrong answer  (0) |  |
| Justifying the condition of collinearity  (1) | Wrong answer  (0) |  |  |  |
|  | Any point on the bisector of an angle is equidistant from its arms | Correct figure, given, to prove, construction  (2) | Any three correctly shown aspects (3) | Any two correctly shown aspects  (2) | Any one correctly shown aspect  (1) | Wrong answer  (0) |
| Proof with correct statements and correct reasons  (2) | Proof with correct statements and partially correct reasons (1.5) | Proof with correct statements without reasons (1) | Wrong answer  (0) |  |
| 2(xiii) | Find the value of from the given figure | Correctly substituting the values in the equation  (1) | Wrong answer  (0) |  |  |  |
| Correct Simplification  (2) | Partially correct  (1) | Wrong answer  (0) |  |  |
| Finding the correct value of  (1) | Wrong answer  (0) |  |  |  |
|  | Find the values of and from the given figure | Correct substitution of values from the figure in the given equation  (2) | Partially correct  (1) | Wrong answer  (0) |  |  |
| Constructing the second equation from the figure and finding the correct value of y  (2) | Partially correct  (1) | Wrong answer  (0) |  |  |

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|  | Solving the system of linear equations by using matrix inversion method | Correctly writing the system of equations in matrix form and expressing it as  (2) | Partially Correct  (1) | Wrong answer  (0) |  |  |
| Correctly finding the values of det A and adj of A  (2) | Either correctly finding the values of det A or adj of A  (1) | Wrong answer  (0) |  |  |
| Correctly finding  (2) | Partially Correct  (1) | Wrong answer  (0) |  |  |
| Finding the correct values of and  (2) | Finding the correct values of either or  (1) | Wrong answer  (0) |  |  |
|  | Showing that the given points are vertices of a parallelogram | Correctly finding the values of , , and  (4) | Correctly finding any three values  (3) | Correctly finding any two values  (2) | Correctly finding any one value  (1) | Wrong answer  (0) |
| Correctly showing that opposite sides are equal  (4) | Any two sides equal  (2) | Partially Correct  (1) | Wrong answer (0) |  |
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| 5 | Solving the system of linear equation by using graphical method | Correct construction of two tables of values  (4) | Correct construction of one table of values  (2) | Partially correct  (1) | Wrong answer  (0) |  |
| Correct plotting of points and correct drawing of 1st straight line  (2) | Either correct plotting of points or correct drawing of 1st straight line  (1) | Wrong answer  (0) |  |  |
| Correct plotting the points and correct drawing 2nd straight line  (2) | Either correct plotting of points or correct drawing of 2nd straight line  (1) | Wrong answer  (0) |  |  |

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| 6 | Proving that if two angles of a triangle are congruent, then the sides opposite to them are also congruent | Correct figure, given, to prove, construction  (4) | Any three correctly shown aspects  (3) | Any two correctly shown aspects  (2) | Any one correctly shown aspect  (1) | Wrong answer (0) |
| Proof with correct statements and correct reasons  (4) | Proof with correct statements and partially correct reasons  (3) | Proof with partially correct statements and partially correct reasons **OR**  Proof with correct statements without reasons  (2) | Partially correct  (1) | Wrong answer  (0) |
| 7 | Construction of triangle ABC with two perpendicular bisectors | Correct construction of triangle ABC by drawing ,  (4) | Any two correctly shown aspects  (3) | Any one correctly shown aspect  (2) | Partially correct  (1) | Wrong answer (0) |
| Correct construction of two perpendicular bisectors  (2) | Correct construction of any one perpendicular bisector  (1) | Partially correct  (0.5) | Wrong answer  (0) |  |
| Correct steps of construction  (2) | Partially correct steps of construction  (1) | Wrong answer  (0) |  |  |