

SSC

MARCH 2020

MATHEMATICS
ALGEBRA – PART I

Time allowed: 2 hours

Maximum marks: 40

General Instructions:

- (i) All questions are compulsory.
- (ii) Use of calculator is not allowed.
- (iii) The numbers to the right of the questions indicate full marks.
- (iv) In case MCQ's Q. No. 1(A) only the first attempt will be evaluated and will be given credit.
- (v) For every MCQ, the correct alternative (A), (B), (C) or (D) of answers with sub question number is:

1. (A) For every sub question 4 alternative answers are given. Choose the correct answer and write the alphabet of it: [4]

- (i) In the formal of GSTIN there are _____ alpha-numerals.
(A) 15 (B) 10 (C) 16 (D) 9

Answer: Answer is not given due to change in reduced syllabus.

- (ii) From the following equations, which one is the quadratic equation?
(A) $\frac{5}{x} - 3 = x^2$ (B) $x(x + 5) = 4$ (C) $n - 1 = 2n$ (D) $\frac{1}{x^2}(x + 2) = x$

Answer: (B) $x(x + 5) = 4$

- (iii) For simultaneous equations in variables x and y, if $D_x = 49$, $D_y = -63$, $D = 7$, then what is the value of x?
(A) 7 (B) -7 (C) $\frac{1}{7}$ (D) $-\frac{1}{7}$

Answer: (A) 7

- (iv) If $n(A) = 2$, $P(A) = \frac{1}{5}$, then $n(S) = ?$
(A) $\frac{2}{5}$ (B) $\frac{5}{2}$ (C) 10 (D) $\frac{1}{3}$

Answer: (C) 10

1. (B) Solve the following sub questions: [4]

- (i) Find second and third term of an A. P. whose first term is -2 and common difference is -2 .

Answer: Given,

First term, $a = -2$

Common difference, $d = -2$

We know that Second term $= a + d$

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Albert A Gayle



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