

Algebra-2
Model Exam Question paper - 2
11th Standard

Business Maths

Reg.No. :

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I. Answer all the questions

Time : 00:45:00 Hrs

Total Marks : 35

Part-A

7 x 1 = 7

- 1) The value of 8P_3 is
(a) $8 \times 7 \times 6$ (b) $\frac{8 \times 7 \times 6}{3 \times 2 \times 1}$ (c) 8×7 (d) 3×21
- 2) The value of 8C_0 is
(a) 8 (b) 1 (c) 7 (d) 0
- 3) The value of ${}^{10}C_9$ is
(a) 9 (b) 1 (c) ${}^{10}C_1$ (d) 0
- 4) Number of lines that can be drawn using 5 points in which none of 3 points are collinear as
(a) 10 (b) 20 (c) 5 (d) 1
- 5) If $\binom{5}{x} + \binom{5}{4} = \binom{6}{5}$ then x is
(a) 5 (b) 4 (c) 6 (d) 0
- 6) If $10C_r = 10C_{4r}$ then r is
(a) 2 (b) 4 (c) 10 (d) 1
- 7) Sum of all the binomial coefficient is
(a) 2^n (b) b^n (c) 2^n (d) n

Part-B

6 x 2 = 12

- 8) How many distinct words can be formed using all the letters of the word?
(i) ENTERTAINMENT
- 9) How many distinct words can be formed using all the letters of the word?
MATHEMATICS
- 10) How many distinct words can be formed using all the letters of the word?
MISSISSIPPI
- 11) Evaluate
 ${}^{10}C_6$
- 12) Evaluate
 ${}^{15}C_{13}$
- 13) If ${}^{36}C_n = {}^{36}C_{n+4}$ find 'n'.

Part-C

2 x 3 = 6

- 14) In how many ways can the letters of the word CONTAMINATION be arranged?
- 15) How many even numbers of 4 digits can be formed out of the digits 1,2,3,...,9 if repetition of digits is not allowed?

Part-D

2 x 5 = 10

- 16) Find the sum of all numbers that can be formed with the digits 3,4,5,6,7 taken all at a time.
- 17) In how many ways can 7 boys and 4 girls can be arranged in a row so that
(i) all the girls sit together (ii) no two girls sit together?
