

Algebra-1
Model Exam Question paper - 1
11th Standard
Business Maths

Reg.No. :

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I. Answer all the questions

Time : 00:35:00 Hrs

Total Marks : 25

Part-A

5 x 1 = 5

- 1) If $n! = 24$ then n is
(a) 4 (b) 3 (c) 4! (d) 1
- 2) The value of $3! + 2! + 1! + 0!$ is
(a) 10 (b) 6 (c) 7 (d) 9
- 3) The value of $\frac{1}{4!} + \frac{1}{3!}$ is
(a) $\frac{5}{20}$ (b) $\frac{5}{24}$ (c) $\frac{7}{12}$ (d) $\frac{1}{7}$
- 4) The total number of ways of analysing 6 persons around a table is
(a) 6 (b) 5 (c) 6! (d) 5!
- 5) The value of $x(x-1)(x-2)!$ is
(a) $x!$ (b) $(x-1)!$ (c) $(x-2)!$ (d) $(x+1)!$

Part-B

4 x 2 = 8

- 6) Resolve into partial fractions
 $\frac{x+1}{x^2-x-6}$
- 7) Resolve into partial fractions
 $\frac{2x-15}{x^2+5x+6}$
- 8) Resolve into partial fractions
 $\frac{1}{x^2-1}$
- 9) If ${}^nP_5 = (42)^n P_3$, find n .

Part-C

4 x 3 = 12

- 10) Resolve into partial fractions
 $\frac{x+4}{(x^2-4)(x+1)}$
- 11) Resolve into partial fractions
 $\frac{x+1}{(x-2)^2(x+3)}$
- 12) Resolve into partial fractions
 $\frac{1}{(x-1)(x+2)^2}$
- 13) Resolve into partial fractions
 $\frac{x}{(x-1)(x+1)^2}$
