

(2)

1-11	<p>2<sup>nd</sup> term in the expansion of <math>(1 - 2x)^{\frac{1}{3}}</math> is :</p> <p>(A) <math>-\frac{2x}{3}</math>                      (B) <math>\frac{2x}{3}</math>                      (C) <math>\frac{x}{2}</math>                      (D) <math>\frac{x}{3}</math></p>
12	<p>A square matrix A is symmetric if <math>A^t =</math> :</p> <p>(A) -A                      (B) A                      (C) <math>A^t</math>                      (D) <math>A^2</math></p>
13	<p>A die is rolled, the probability that the dots on the top are greater than 4 is :</p> <p>(A) <math>\frac{1}{2}</math>                      (B) <math>\frac{1}{3}</math>                      (C) <math>\frac{1}{4}</math>                      (D) <math>\frac{1}{6}</math></p>
14	<p><math>\frac{22}{7}</math> is :</p> <p>(A) Natural number                      (B) Whole number (C) Rational number                      (D) Irrational number</p>
15	<p>If <math>y = \frac{2}{3}x + \frac{4}{9}x^2 + \frac{8}{27}x^3 + \dots</math> then interval of convergence is :</p> <p>(A) <math>0 &lt; x &lt; -\frac{3}{2}</math>                      (B) <math>-\frac{3}{2} &lt; x &lt; 0</math> (C) <math>\frac{1}{2} &lt; x &lt; -\frac{1}{2}</math>                      (D) <math>0 &lt; x &lt; \frac{3}{2}</math></p>
16	<p>The middle term in the expansion of <math>(3 - 2x)^{10}</math> is :</p> <p>(A) <math>T_4</math>                      (B) <math>T_5</math>                      (C) <math>T_6</math>                      (D) <math>T_7</math></p>
17	<p>When <math>3x^4 + 4x^3 + x - 5</math> is divided by <math>x + 1</math> then remainder is :</p> <p>(A) 7                      (B) 6                      (C) -6                      (D) -7</p>
18	<p>If the length of arc is equal to radius of circle then angle subtended at the centre is equal to :</p> <p>(A) One degree                      (B) One radian                      (C) <math>180^\circ</math>                      (D) <math>\pi</math> radians</p>
19	<p>Number of identity elements in any group is :</p> <p>(A) 1                      (B) 2                      (C) 3                      (D) 4</p>
20	<p><math>2^n - 1 &lt; n!</math> is true for :</p> <p>(A) <math>n \geq 1</math>                      (B) <math>n \geq 2</math>                      (C) <math>n \geq 3</math>                      (D) <math>n \geq 4</math></p>