

Roll No _____ (To be filled in by the candidate)

(Academic Sessions 2015 – 2017 to 2017 – 2019)

MATHEMATICS

219-(INTER PART – II)

Time Allowed : 30 Minutes

Q.PAPER – II (Objective Type)

GROUP – I

Maximum Marks : 20

PAPER CODE = 8195

Note : Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

| | |
|-----|---|
| 1-1 | If $y = e^{2x}$ then $y_2 = :$ (A) e^{2x} (B) $2e^{2x}$ (C) $4e^{2x}$ (D) $16e^{2x}$ |
| 2 | $\int a^x dx = :$ (A) $\frac{\ln a}{a^x} + c$ (B) $\frac{a^x}{\ln a} + c$ (C) $\frac{1}{a^x \ln a} + c$ (D) $a^x \ln a + c$ |
| 3 | $f(x) = ax + b, a \neq 0$ is : (A) Trigonometric function (B) Linear function (C) Cubic function (D) Quadratic function |
| 4 | $\int_0^{\frac{\pi}{2}} \cos x dx = :$ (A) $\frac{\pi}{2}$ (B) 0 (C) -1 (D) 1 |
| 5 | $\lim_{n \rightarrow +\infty} \left(1 + \frac{1}{n}\right)^{\frac{n}{2}} = :$ (A) e^{-1} (B) e^2 (C) $e^{\frac{1}{2}}$ (D) e^3 |
| 6 | Differential of y is denoted by : (A) $\frac{dy}{dx}$ (B) dy (C) dx (D) dy' |
| 7 | If $f(x) = \cos x$ then $f'(\pi) = :$ (A) 1 (B) 0 (C) -1 (D) 2 |
| 8 | The value of $\frac{dy}{dx} = \frac{-2}{x^3}$ at $x = -1$ is : (A) 4 (B) 5 (C) -2 (D) 2 |
| 9 | Order of the differential equation $\frac{x d^2 y}{dx^2} + \frac{dy}{dx} - 2x = 0$ is : (A) 1 (B) 2 (C) 3 (D) 4 |

(Turn Over)