Disclaimer - This data may not be accurate as it is based on memory of test takers. This will be a precise tool for students to understand the type of questions to expect in Numerical Ability, Verbal Ability and Mathematics Sections in upcoming slots.

We wish you All the Very Best for your GATE-2018.

Section-I: General Ability

1. A number is given 715_423, in which, thousand place is missing and number is completely divisible by 3. What is the minimum number at missing place?
(A) 0 (B) 2 (C) 5 (D) 6

2. Find the value of the series $1+\frac{1}{4}+\frac{1}{16}+\frac{1}{64}+\frac{1}{256}+........$
(A) 2 (B) $\frac{7}{4}$ (C) $\frac{3}{2}$ (D) $\frac{4}{3}$

3. A person in wishing to buy a car of cost 10,000,00 after 5 years. If the rate of interest is 10% and interest is added compoundly (yearly), then the amount invested in bank is
(A) 5,00,000 (B) 6,20,000 (C) 6,66,750 (D) 7,50,000

4. A cab driver is involved in a Hit and Run accident case at night.
The following assumptions are noted by police officer:
i. In the city 85% of the cabs are green colour, remaining 15% cabs are blue colour
ii. A witness is saying that cab colour was blue
iii. The witness can identify the colour of the cab 80% accurately
What is the probability that the colour of the cab which involved in accident should be blue?
(A) 12% (B) 15% (C) 41% (D) 80%

5. In metal alloy combinations A and B having gold and copper in the ratio of 2:3 and 3:7 respectively. The equal amount of the A and B melted and made new alloy C. What is the ratio of the gold and copper in C?
(A) 5:7 (B) 7:13 (C) 1:2 (D) 8:15

6. If we gave him that last _____ of cake, you will ensure____ in our house today
(A) peas, peace (B) piece, peace
(C) peace, piece (D) piece, peas

7. In this place, there is a vast scope of _______, still tourism is a/an _____area.
(A) improvement, neglected (B)
(C) Interest, disinterested (C)

8. A man of height 1.5m is standing away from the lamp pole at distance of 3m from the lamp pole. The shadow from the top of the lamp pole of the man is twice as his height. What is the height of the lamp pole?
(A) 1.5m (B) 3m (C) 4.5m (D) 6m

Section-II-Technical

1. Let M be a real 4 × 4 matrix. Consider the following statements:
S1: M has 4 linearly independent eigen vectors
S2: M has 4 distinct eigen values
S3: M is non-singular (invertible)
Which one among the following is true?
(A) S1 implies S2 (B) S1 implies S3 (C) S2 implies S1 (D) S3 implies S2

2. Consider matrix $A = \begin{bmatrix} k & 2k \\ k^2 - k & k^2 \end{bmatrix}$ and vector $x = \begin{bmatrix} x_1 \\ x_2 \end{bmatrix}$. The no. of distinct real values of k for which the equation $Ax = 0$ has infinitely many solutions is _______

3. Consider $p(s) = s^3 + a_2 s^2 + a_1 s + a_0$ with real coefficients. It is known that its derivative $p'(s)$ has no real roots. The no. of real roots of $p(s)$ is
(A) 0 (B) 1 (C) 2 (D) 3

4. Let $x_1, x_2, x_3 \,\&\, x_4$ be independent normal random variable with zero mean & unit variance. The probability that x_4 is the smallest among the four is ________.

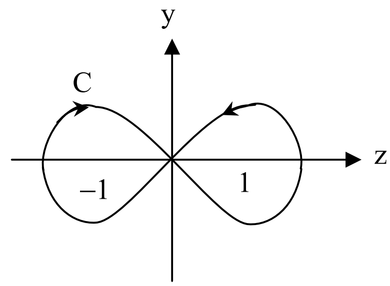
5. Tailor series expansion of $f(x) = \int_0^x e^{-\left(\frac{t^2}{2}\right)} dt$ around x=0 has the fo $f(x) = a_0 + a_1 x + a_2 x^2 + ...$
The coefficient a_2 (correct to two decimal places) is equal to _________.

6. Let $f(x, y) = \frac{ax^2 + dy^2}{xy}$, where a & b are constants. If $\frac{\partial f}{\partial x} = \frac{\partial f}{\partial y}$ at x =1 and y=2, then relation between a & b is
(A) $a = \frac{b}{4}$ (B) $a = \frac{b}{2}$ (C) $a = 2b$ (D) $a = 4b$

7. The position of a particle $y(t)$ is described by the differential equation
$$\frac{d^2y}{dt^2} = -\frac{dy}{dt} - \frac{5y}{4}$$
The initial conditions are $y(0) = 1 \,\&\, \left.\frac{dy}{dt}\right|_{t=0} = 0$. The position (accurate to 2 decimal places) of the particle at $t = \pi$ is _____.

8. The counter C given below is on the complex plane $z = x + jy$, where $j = \sqrt{-1}$

The value of the integral $\frac{1}{\pi j}\oint_c \frac{d^z}{z^2 - 1}$ is _____.



9. Let $x = x^2 + y - 2$ & $z^3 - xy + y2ty^3 = 1$. Assume that x & y are independent variables. At $(x, y, z) = (2, -1, 1)$, the value (correct to 2 decimal places) of $\frac{\partial y}{\partial x}$ is ______.