GateAssignment7

EE24BTECH11048-NITHIN.K

1 Q.1 - Q.5 CARRY ONE MARK EACH

1) It is a common criticism that most of the academicians live in their _____, so they are not aware of the real life challenges.
   a) homes
   b) ivory towers
   c) glass palaces
   d) big flats

2) His hunger for reading is insautible. He reads indiscriminately, He is most certainly a/an _____ reader.
   a) all-round
   b) prcocious
   c) voracious
   d) wise

3) Select the word that fits the analogy:
   Fuse : Fusion :: Use : _____
   a) all-round
   b) prcocious
   c) voracious
   d) wise

4) If 0, 1, 2, ..., 7, 8, 9 are coded as O, P, Q,..., V, W, X, then 45 will be coded as _____
   a) TS
   b) ST
   c) SS
   d) SU

5) The sum of two positive numbers is 100. After subtracting 5 from each number, the product of the resulting numbers is 0. One of the original numbers is _____.
   a) 80
   b) 85
   c) 90
   d) 95

2 Q6 - Q10 CARRY TWO MARKS EACH.

6) The American psychologist Howard Gardner expounds that human intelligence can be sub-categorised into multiple kinds, in such a way that individuals differ with respect to their relative competence in each kind. Based on this theory, modern educationists

insist on prescribing multi-dimensional curriculum and evaluation parameters that enable development and assessment of multiple intelligences.

Which of the following statements can be inferred from the given text?

a) Howard Gardner insists that the teaching curriculum and evaluation needs to be multi-dimensional.
b) Howard Gardner wants to develop and assess the theory of multiple intelligences.
c) Modern educationists want to develop and assess the theory of multiple intelligences.
d) Modern educationists insist that the teaching curriculum and evaluation needs to be multi-dimensional.

7) Five friends P, Q, R, S and T went camping. At night, they had to sleep in a row inside the tent. P, Q and T refused to sleep next to R since he snored loudly. P and S wanted to avoid Q as he usually hugged people in sleep.

Assuming everyone was satisfied with the sleeping arrangements, what is the order in which they slept?

a) RSPTQ
b) SPRTQ
c) QRSPT
d) QTSPR

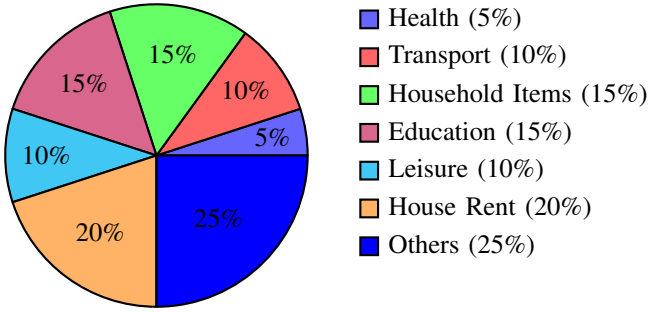
8) Insert seven numbers between 2 and 34, such that the resulting sequence including 2 and 34 is an arithmetic progression. The sum of these inserted seven numbers is _____.

a) 120
b) 124
c) 126
d) 130

9) The unit's place in 26591749^{110016} is _____.

a) 1
b) 3
c) 6
d) 9

10) The total expenditure of a family, on different activities in a month, is shown in the pie-chart, The extra money spent on education as compared to transport (in percent) is _____



a) 5
b) 33.3
c) 50
d) 100

3 Q1 - Q25 CARRYONE MARK EACH.

11) In the following partial differential equation, θ is a function of t and z, and D and K are functions of θ

$$D(\theta)\frac{\partial^2\theta}{\partial z^2} + \frac{\partial K(\theta)}{\partial z} - \frac{\partial\theta}{\partial t} = 0$$

The above equation is

a) a second order linear equation
b) a second degree linear equation
c) a second order non-linear equation
d) a second degree non-linear equation

12) The value of $\lim_{x\to\infty} \frac{x^2-5x+4}{4x^2+2x}$ is

a) 0
b) $\frac{1}{4}$
c) $\frac{1}{2}$
d) 1

13) The true value of $\ln(2)$ is 0.69. If the value of $\ln(2)$ is obtained by linear interpolation between $\ln(1)$ and $\ln(6)$, the percentage of absolute error (round off to the nearest integer), is

a) 35
b) 48
c) 69
d) 84