## CONFIDENTIAZ

| Name of Examination <br> (Please tick, symbol is given) | : | MID |  | END | $\sqrt{ }$ | SUPPLE | NA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name of the School <br> (Please tick, symbol is given) | : | SOE |  | SOCS |  | SOB | $\checkmark$ |
| Programme | : | BBA E-Commerce Marketing |  |  |  |  |  |
| Semester | : | 4 |  |  |  |  |  |
| Name of the Course | : | Research Methodology |  |  |  |  |  |
| Course Code | : | BBC 123 |  |  |  |  |  |
| Name of Question Paper Setter | : | Naveen Chandra Pandey |  |  |  |  |  |
| Employee Code | : | 40000913 |  |  |  |  |  |
| Mobile \& Extension | : | 8755475110 |  |  |  |  |  |
| Note: Please mention additional Stationery to be provided, during examination such as Table/Graph Sheet etc. else mention "NOT APPLICABLE": |  |  |  |  |  |  |  |
| FOR SRE DEPARTMENT |  |  |  |  |  |  |  |
| Date of Examination |  |  | : |  |  |  |  |
| Time of Examination |  |  | : |  |  |  |  |
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Note: - Pl. start your question paper from next page

## 1 UPES

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2018

Programme: BBA E-Commerce Marketing<br>Course Name: Research Methodology \& Report Writing<br>Semester - IV<br>Course Code: BBC 123<br>Max. Marks : 100

No. of page/s: 3

1. Write briefly on the following -
$\left(6^{* 5=30)}\right.$
a. Mode
b. Median
c. Degree of Freedom
d. Null Hypothesis
e. Two Tailed Test
2. Which measure of Central Tendency would be applicable in the below cases and Why?
( $\mathbf{5}^{*} 2=10$ )
a. To find the average income of a village of 1500 people. Two millionaires live in the village; remaining are poor farmers.
b. To find the winning party in an election
3. Using the Z-table, figure out what percentage of area under the curve is greyed?

4. Twenty five high school students complete a preparation program for taking the SAT test. Here are the SAT scores from the 25 students who completed the SAT prep program:

434694457534720400484478610641425636454514563370499640501625
612471598509531
We know that the population average for SAT scores is 500 with a standard deviation of 100 .
The question is, are these students' SAT scores significantly greater than the said population.
Test at $\mathbf{5 \%}$ level of significance.
5. In a population, the average IQ is 100 with a standard deviation of 15 . A team of scientists wants to test a new medication to see if it has either a positive or negative effect on intelligence, or no effect at all. A sample of 30 participants who have taken the medication has a mean of 140 . Did the medication affect intelligence, Test at $\mathbf{5 \%}$ ?
6. The specimen of copper wires drawn from a large lot have the following breaking strength (in Kg . Weight):

578572570568572578570572596544
Test whether the mean breaking strength of the lot may be taken to be 578 Kg . Weight. Test at $\mathbf{5 \%}$.
7. Calculate the standard deviation for the following population of scores:

85375647265364578656

