Name: **Enrolment No:**	UPES

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2019

Course: Business Analytics using Excel — **Semester: IV**
Programme: BA Energy Economics — **C. Code: DSBA 2001**
Max. Marks: 100 — **Time: 03 Hours**
Instructions: Please answer the questions strictly in Context

SECTION A

Write on the following in brief		**Marks**	**CO**
Q.1.	Mode	**4**	**1**
Q.2.	Standard Deviation	**4**	**1**
Q.3.	Percentile	**4**	**1**
Q.4.	Correlation	**4**	**1**
Q.5.	Conditional Probability	**4**	**2**
Q.6.	Z value	**4**	**1**
Q.7.	Multiplication Rule (Probability)	**4**	**3**
Q.8.	Addition Rule (Probability)	**4**	**3**

SECTION B

Attempt all Questions		**Marks**	**CO**
Q.1.	What would be the outputs of the following Excel functions a. NORMDIST b. NORMSDIST c. NORMINV d. NORMSINV e. BINOMDIST f. CRITBINOM	**3*6=18**	**3**
Q.2.	In what scenarios are 'Box Plots' useful ways of data representation?	**10**	**4**
Q.3.	How can t-values and p-values (the results of regression run on data) be helpful in deciding the independent variables of a regression model?	**20**	**4**

SECTION C

Attempt this section		**Marks**	**CO**
Q.1.	What are 'Interaction variables'? How do 'Non-linear transformation of variables' help with regression modeling?	**20**	**5**

Name:

Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2019

Course: Business Analytics using Excel **Semester: IV**
Programme: BA Energy Economics **C. Code: DSBA 2001**
Max. Marks: 100 **Time: 03 Hours**
Instructions: Please answer the questions strictly in Context

SECTION A

Write on the following in brief		**Marks**	**CO**
Q.1.	Mode	**4**	**1**
Q.2.	Outlier	**4**	**1**
Q.3.	Percentile	**4**	**1**
Q.4.	Correlation	**4**	**1**
Q.5.	Conditional Probability	**4**	**2**
Q.6.	Z value	**4**	**1**
Q.7.	Multiplication Rule (Probability)	**4**	**3**
Q.8.	Addition Rule (Probability)	**4**	**3**
Q.9.	Box Plot	**4**	**3**
Q.10	Two Tailed Test	**4**	**2**
Q.11	Confidence Interval	**4**	**1**
Q.12	Mutually Exclusive Events	**4**	**1**
Q.13	Inter Quartile Range.	**4**	**1**

SECTION B

Attempt all Questions		**Marks**	**CO**
Q.1.	What would be the outputs of the following Excel functions a. NORMDIST b. NORMSDIST c. NORMINV d. NORMSINV e. BINOMDIST f. CRITBINOM	**3*6=18**	**3**
Q 2	The frequency distribution of shoe sizes for a sample of 21 women was collected and is summarised in below table. Find the Average Shoe Size Shoe Size / Frequency 4 / 5 5 / 6 6 / 7 7 / 2 8 / 1 **Total** / **21**	**5**	**4**
Q.3.	Let's assume that you invest in Company XYZ stock, which has returned an average 10% per year for the last 10 years. How risky is this stock compared to, say, Company ABC stock, which also has an average return of 10%?	**5**	**4**

	<table><tr><th>Year</th><th>Return (Company XYZ)</th><th>Return (Company ABC)</th></tr><tr><td>1</td><td>5%</td><td>8%</td></tr><tr><td>2</td><td>-15%</td><td>10%</td></tr><tr><td>3</td><td>35%</td><td>9%</td></tr><tr><td>4</td><td>0%</td><td>10%</td></tr><tr><td>5</td><td>25%</td><td>10%</td></tr><tr><td>6</td><td>-10%</td><td>12%</td></tr><tr><td>7</td><td>50%</td><td>9%</td></tr><tr><td>8</td><td>5%</td><td>10%</td></tr><tr><td>9</td><td>10%</td><td>9%</td></tr><tr><td>10</td><td>-5%</td><td>12%</td></tr><tr><td>Average</td><td>10%</td><td>10%</td></tr></table>		
Q.4.	How can t-values and p-values (the results of regression run on data) be helpful in deciding the independent variables of a regression model?	**20**	**4**