Name: **Enrolment No:**	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2023

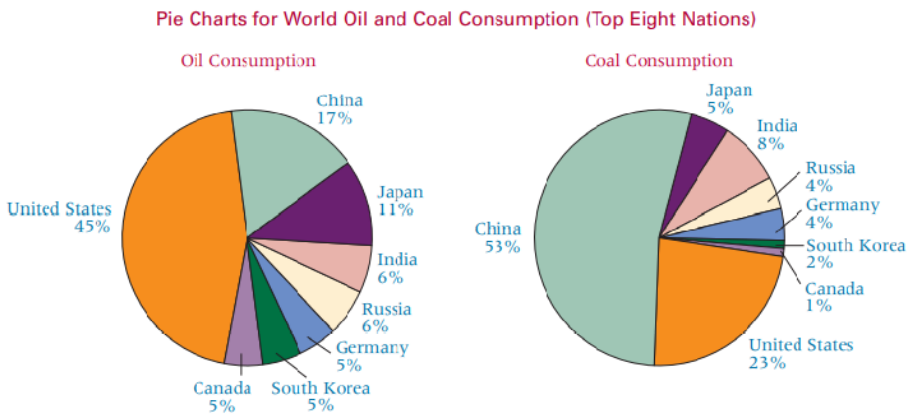
Course: Business Analytics **Semester: V**
Program: BBA – Foreign Trade **Time : 03 hrs.**
Course Code: DSBA3008 **Max. Marks: 100**

Instructions: Attempt all sections

SECTION A
10Qx2M=20Marks

S. No.		Marks	CO
Q 1	Attempt all questions.		**CO1**
a.	Data Analysis is a process of? a) inspecting data b) cleaning data c) transforming data d) All of the above	**2**	**CO1**
b.	A graph that uses vertical bars to represent data is called as a) Line graph b) Bar graph c) Scatterplot d) Vertical graph	**2**	**CO1**
c.	Data analytics which deals with development of a solution for a particular organization is classified as a) Industry analytics b) economic analyses c) applied analytics d) basic analytics	**2**	**CO1**
d.	What is a hypothesis? a) A statement that the researcher wants to test through the data collected in a study. b) A research question the results will answer. c) A theory that underpins the study. d) A statistical method for calculating the extent to which the results could have happened by chance.	**2**	**CO1**
e.	Which of the following is true about hypothesis testing? a) answering yes/no questions about the data b) estimating numerical characteristics of the data c) describing associations within the data2	**2**	**CO1**

	d) modeling relationships within the data		
f.	____ are used when you want to visually examine the relationship between two quantitative variables. a) Bar graph b) pie graph c) line graph d) Scatterplot	**2**	**CO1**
g.	An advantage of using computer programs for qualitative data is that they a) Can reduce time required to analyse data (i.e., after the data are transcribed) b) Help in storing and organising data c) Make many procedures available that are rarely done by hand due to time constraints d) All of the above	**2**	**CO1**
h.	If the assumed hypothesis is tested for rejection considering it to be true is called? a) Null Hypothesis b) Statistical Hypothesis c) Simple Hypothesis d) Composite Hypothesis	**2**	**CO1**
i.	_____ are the basic building blocks of qualitative data. a) Categories b) Units c) Individuals d) None of the above	**2**	**CO1**
j.	A statement made about a population for testing purpose is called? a) Statistic b) Hypothesis c) Level of Significance d) Test-Statistic	**2**	**CO1**
SECTION B **4Qx5M= 20 Marks**			
Q2.	What do you understand by correlation? Give examples.	**5**	**CO2**
Q3.	Explain polynomial regression. What are indicator variables? Give examples.	**5**	**CO1**
Q4.	What do you understand by time series? Explain with examples.	**5**	**CO2**

Q5.	What is Causal Analytics? Explain degree of causality.	**5**	**CO1**
SECTION-C 3Qx10M=30 Marks			
Q6.	What are the different Projective Techniques? Why are they useful?	**10**	**CO2**
Q7.	What is exploratory analysis? Give a detailed comparison of methods for conducting exploratory analysis.	**10**	**CO2**
Q8.	A. Explain optimization models in detail. How do you solve optimization problems in excel? OR B. What is data mining? What are the different techniques used in data mining?	**10**	**CO2**
SECTION-D 2Qx15M= 30 Marks			
Q9.	In 1985, New Coke was launched, replacing the classic Coke formula. The company had done taste tests with 200,000 people and found that test subjects preferred the taste of New Coke over Pepsi, which had become a tough competitor. Based on this data alone, classic Coke was taken off the market and replaced with New Coke. This was seen as the solution to take back the market share that had been lost to Pepsi. But as it turns out, New Coke was a massive flop and the company ended up losing tens of millions of dollars. As a business Analyst comment on the situation. How could this have happened with data that seemed correct?	**15**	**CO3**
Q10.	Shown below are side-by-side Excel pie charts displaying both oil and coal energy consumption figures by country. Give your expert opinions as a business analyst.  	**15**	**CO3**