Name:

Enrolment No:

UPES
UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2020

Course: Trade Analytics | **Semester: II**
Program: MBA IB | **Time: 03 Hours**
Course code: INTB 7005 | **Max. Marks: 100**

SECTION A

Instructions

**Answer all the questions in the answer scripts only.*

	Answer all the questions	**2*20=40**	**COs**
Q 1	What is forecasting? Discuss the purposes of forecasting and factors involved in forecasting. Brief the views of Joel Dean on forecasting the new and established products.		**CO1**
Q 2	India has accumulated total export earnings from cotton annually from 2008 to 2018. Export figures (in US$ Millions) for the past 10 years. (a) Forecast India's cotton export using Naïve, Moving average and exponential smoothing methods. (b) Develop a simple linear regression equation for this data to forecast the cotton exports of India for the next five years.		**CO2**

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Exports	181861	176765	220408	301483	289565	336611	317545	264381	260327	295847	323056

SECTION B

Instructions

a. *Laptops should be brought by the students.*
b. *Internet connection should be disabled.*
c. *Only Excel sheet, SPSS and Oracle Crystal Ball software are allowed to use on laptops.*
d. *The datasheet (excel) will be provided through the pen drive for answering the next section.*
e. *After the problem is solved, you should write only the equations and interpretations in answer sheets.*
f. *Calculators, mobiles and other electronic devices are not allowed.*
g. *After exams are over, your worked out sheets will be collected by the invigilator through pen drive.*
h. *Personal pen drives are not allowed.*
i. *Internet browsers should and other windows should not be opened.*
j. *Excel, SPSS and Oracle results should be kept in a folder (folder names should be your Roll number only and submitted to the invigilator.*

	Answer all the questions	**3*20=60**	

Q 1	Analyze the impact of various macroeconomic factors on India's export to USA by using traditional and modern gravity models of trade using the SPSS software and the data. (a) Data to be used for the traditional gravity method: India's exports to USA, GDP of India, GDP of USA and the average distance between India and USA. (b) Data to be used for modern gravity method: India's exports to USA, GDP of USA, average distance between India and USA, INR vs US $, Population of USA.	**CO4**
Q 2	What is Symmetric Revealed Comparative Advantage Indexes (SRCA)? Measure SRCA of merchandise exports of Iron and Steel from India and China (from 2001 to 2018) to the world by using ***excel*** and compare SRCA of both the countries.	**CO4**
Q 3	(a) Forecast the nominal exchange rate of India against US $, £, € and ¥ by using ARIMA and Multiple regression forecasting techniques in the ***Oracle Crystal Ball*** software. Also generate forecasted series and projected trend line. (b) Compare the historical data series and forecasted data series of the different models and identify the best model of forecasting. Generate the forecasted series and comparative picture of historical and forecasted series.	**CO4**