

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)

CLASS: MBA  
BRANCH: MGT

SEMESTER : IV  
SESSION : SP/2023

SUBJECT: MT547 BUSINESS FORECASTING

TIME: 3 Hours

FULL MARKS: 50

**INSTRUCTIONS:**

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
  2. Attempt all questions.
  3. The missing data, if any, may be assumed suitably.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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Q.1(a) Differentiate between Quantitative and qualitative predictive forecasting methods [5]  
Q.1(b) what is an advantage of naïve forecasting [5]

Q.2(a) What is the objective of decomposition of a time series [5]  
Q.2(b) what are the methods to smooth time series data [5]

Q.3(a) fit a trend line by using least square method [5]

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
sales	20	22	21	25	28	24	30	28	31	35	30

Q.3(b) what is demand estimation with example [5]

Q.4(a) what is the value of partial autocorrelation function of lag order1 [5]  
Q.4(b) What is auto correlation in regression with example. [5]

Q.5(a) What is Arima model concept. [5]  
Q.5(b) Explain three step of Box Jenkins method [5]

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