Course: TRAV 7005 Aviation Forecasting Techniques
End Term Examination, December 2019

Programme: M.B.A (AVM)   Semester: III
Time: 3 hrs.   Max. Marks: 100

Section A (All Questions are Mandatory)

1	Define/Give Brief explanation of the following terms (a) Evaluating Forecasting Model (b) Identification of problem (c) Preliminary Analysis (d) Collection of Information (e) Choosing and Fitting Models (f) Relationship between the dependent and independent variables must be linear (g) Dependent variables should not be related (collinearity) (h) The errors have to be independent of each other (no serial correlation) (i) ☐Errors have to follow normal distribution (j) The regression errors must have a constant variance (homoscedasticity)	**[10x2=20]**	**CO 1 & CO2**
	SECTION B (Attempt any **Four Questions**) Short Notes		
2	Write short answers on any four of the following (a) Which are the four forecasting methods in use for short term forecasting? (b) What are the short term, medium term and long-term uses of forecast? Give examples for each use. (c) Discuss Data collection and preparation in brief. (d) Which are the data issues at non-towered airports? (e) What are the primary objectives of the airport master plan?	**[5x4=20]**	**CO 1 & CO2**

	SECTION C		

3	Answer any two questions
	  (a) Explain Econometric modeling/regression method of forecasting in detail.
	  (b) Explain Multiplicative and additive time series method of forecasting.
	  (a) Explain market share forecasting with a suitable example.
		[2 X 15 = 30]	**CO2 &CO3**

	SECTION D		

4.	Answer the following question in brief with suitable example
	
	    i) Explain hypothesis testing with illustration.
	    ii) Explain application of F-Test in forecasting with example.
	    iii) Explain application of T-Test in forecasting with example.
	    iv) Explain Co-efficient of determination in forecasting with example.
	    v) How the presence of homoscedasticity effect forecasts.
		[5x6=30]	**CO 4 (integration of CO1,2 & 3)**