Ref. No : Ex/PG/Eco 40 /2019

**Master of Arts Examination, 2019**
**2nd Year , 2nd Semester**
**Economics**
**Advanced Econometrics II**

**Time 2 hours** **Full marks 30**

**Answer any three questions**

1. (a) Distinguish between Structural VAR and reduced form VAR.
   (b)Discuss the method of Identification of a VAR model.

**5+5 = 10**

2. Explain for finding out co integration among the variables using VAR approach.

**10**

3. (a)State and explain Granger Representation Theorem.
   (b) How do you test for number of lags of the variables using VAR model?

**5+5 = 10**

4. (a)Distinguish between semi parametric and non-parametric estimation method.
   (b) In the context of Kernel Density estimation, discuss the method of choosing optimum bandwidth.
   (c) How do you choose optimum Kernel?

**3+ 5+2 = 10**

5. (a) Discuss the concept of 'Survivor' function and 'Hazard' function in the context of duration model.

(b) Suppose 't' be a random variable representing duration of a particular event until the next event occurs. CDF of 't' is given below,

$$F(t) = 1 - e^{-t^2}$$

Derive hazard function at t= 2 time period. Does hazard rate increase in t=3 period? Explain.

**4+3+3=10**

6. Write short note
   (a) Before- and-after comparison in Programme Evaluation
   (b) Role of Poisson distribution in count data modeling.

**5+5 = 10**