Exam Code: 509601 **Paper Code: 1264-R**

Programme: Master of Science (Economics)

Semester - I

Course Title: Macroeconomics Theory-I

Course Code: MECL-1172

Time Allowed: 3 Hours **Maximum Marks: 70**

Note: Candidates are required to attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 14 marks.

Section-A

1. Define national income. Explain various methods of estimating it. **14**
2. Explain the concept of social income accounting. Also discuss its limitations **14**

Section-B

3. Critically discuss Keynesian model of income determination. **14**
4. Explain in detail the classical version of wage-price flexibility. **14**

Section-C

5. Explain the permanent income hypothesis. Also give its criticism. **14**
6. Explain the relative income hypothesis. Also compare it with absolute income hypothesis. **14**

Section-D

7. Discuss the concept of money multiplier. Explain various factors affecting money supply. **14**
8. Critically explain the post Keynesian view on demand for money given by James Tobin. **14**

Exam Code: 223103 **Paper Code: 3258-R**

Programme: Master of Arts (Economics)

Semester - III

Course Title: Theory of Statistics

Course Code: MECL-3174 (Opt. - III)

Time: 3 Hours **Max. Marks: 80**

Note: - Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any Section. Each question carries 16 marks.

SECTION – A

1. (a)State and prove Chebychev's inequality.
   (b) Drive two main properties of Gamma Distribution.
2. Define the Normal distribution and derive its main properties.

SECTION – B

3. (a) Explain the main properties of a good estimator.
   (b) Define maximum likelihood estimators and discuss its properties.
4. What is F-distribution and derive its main properties.

SECTION – C

5. (a) Discuss the procedure of testing a statistical hypothesis.

(b) Intelligence test on two groups of boys and girls gave the following results:

	Mean	Standard Deviation	Number
Girls	80	15	150
Boys	75	20	250

Is there a significant difference in the mean score obtained by boys and girls at 5 % level of significance?

6. For a 2 x 2 contingencies table :

a	b
c	d

Prove that:

$$\text{Chi-square} = \frac{N(ad - bc)}{(a + b)(a + c)(c + d)(b + d)}$$

SECTION – D

7. Explain briefly the various types of non-parametric tests and specify the situation in which they are applicable.
8. A random sample of three models of scooter were tested for the petrol mileage (the number of km per litre).Use Kruskal-Wallis test at 5% level of significance to determine if the average milage of the three models is same.

Model A :	60	54	76	48	66	52	62	56
Model B :	62	58	52	48	70			
Model C :	42	64	36	65	42	60	82	