

RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College affiliated to University of Calcutta)

SECOND YEAR [BATCH 2014-17]

B.A./B.Sc. FOURTH SEMESTER (January – June) 2016

Mid-Semester Examination, March 2016

Date : 17/03/2016

Time : 11 am – 1 pm

ECONOMICS (Honours)

Paper : IV

Full Marks : 50

[Use a separate Answer Book for each group]

Group – A

1. Answer **any one** question : [1×5]
 - a) Discuss the concept of 'surplus labour'.
 - b) Discuss the concept of 'Dualism' in less developed countries.
2. Answer **any two** questions : [2×10]
 - a) Discuss the assumptions of Lewis model. Discuss in detail the idea of 'Lewisian Turning Point'. [3+7]
 - b) Discuss in detail the idea of 'Real cost of labour' in Sen's model of peasant economy. Show that with respect to Sen's model the zero marginal productivity of labour is not a necessary condition for the existence of surplus labour. [5+5]
 - c) Discuss the concepts of 'Fixed Rent Contract', 'Share Cropping Contract' and 'Pure Wage Contract'. Why 'Share Cropping Contract' is inefficient? Explain. [3+7]

Group – B

3. You obtained the following regression result :
$$\hat{Y}_t = 50 - 2978 \cdot 5 X_t \quad ; r^2 = 0 \cdot 6149$$
$$(629 \cdot 3)$$
The figure in the bracket is the SE. Find out the sample size (n) underlying the result. [5]

Answer **any two** questions : [2×10]

4. Suppose you want to estimate the following log-linear Cobb-Douglas production function
$$\log Q = \alpha + \beta_1 \log L + \beta_2 \log K + u$$
where Q = output, L = Labour units, K = value of Capital and u is the stochastic disturbance term. Explain the steps involved and decision rules in the test chosen for examining the equality of elasticities of labour and capital in respect of your estimated model. [10]
5. Suppose you estimated the consumption function $C_t = \alpha_1 + \alpha_2 Y_t + u_t$ and the savings function $S_t = \beta_1 + \beta_2 Y_t + v_t$, where C, S and Y are consumption, savings, and income respectively, and $C + S = Y$. u_t and v_t are random errors.
 - a) What is the relation between $\hat{\alpha}_2$ & $\hat{\beta}_2$ (i.e estimated α_2 & β_2 by OLS)?
 - b) Will the residual sum of squares be the same for the two models? Explain. [10]
6.
 - a) State the assumptions necessary for OLS estimation of the two-variable population regression model. [5]
 - b) Come up with the relationship between t & r^2 in the context of a two-variable linear regression model with intercept. [5]