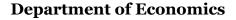


Department of Economics

Internal Assessment – CC2

F.M. 20

- 1. What type of function are the following, a)U= x^2y^2 , b) u=x+y, c) U= e^{3x}
- 2. Show that, $lagrange\ multiplier=\frac{\delta v}{dM}$, $where\ v=i$ ndirect utility; M=money income 3. Find AFC, AVC, MC and AC for the following cost function, $c=aq^3+bq^2-cq$
- 4. Define quasiconcavity with example.
- 5. Max U=xy+2y s.t.4x+2y=60. Find optimum values of x and y.
- 6. Define union and intersection of a set. What is a null set?







Full Marks 10

Answer any four of the following questions (5 marks each)

- 1. Difference between homogenous and homothetic function.
- 2. Write a short note on Cobweb model.
- 3. Explain Hawkin-Simon's condition.
- 4. Write a short note on Prisoner's dilemma.
- 5. Can multiple Nash equilibria exist in a game? Explain with an example.
- 6. What is the connection between primal and dual problem. Give example.





Department of Economics

Internal Assessment – CC2

F.M. 20

- 1. Find the optimum x and y for the utility function, $U=x^2y^2$ s.t. M=px+py
- 2. Show that, $lagrange\ multiplier=\frac{\delta v}{dM}$, $where\ v=i$ ndirect utility; M=money income
- 3. Find AP and MP of the following function, $q=xy-0.2x^2-0.8y^2$
- 4. Define convexity and concavity with example.
- 5. Define the following: Range, Mapping, Polynomial Function, Nested sets
- 6. If y=x+2z and z=3v-6m, then find dy/dx and dy/dm

Juternal Exquination CC-6. (enternediati Answer any four questions 1. Explain Quantity theory of noung 2. What How will you Explain subbly of loquable fund and deraile for leanable fund en 3. Discuss the vertical aggregation subbly curve in classical model 4. Explain the sources of wage rigidity in keepnesian model s Explain in your own words the difference between classical and keynesian theory Exclase Aggregat Devand function. 6. How demand for labor carrie be determined in vergnesian system. 7. How the charge in sucone tax vali will affect the equilibrium out but and price level in classica Hodel. 8. Ordern the effects of supply Stocks en keynesse system.



Department of Economics Barasat Government College Internal – CC7 (Mathematical Methods for Economics II) Full Marks 20

Answer any four of the following questions (5 marks each)

- 1. State and prove Euler's Theorem.
- 2. Can convergence be achieved in Cobweb model?
- 3. Derive the Hawkin-Simon's condition. State its importance.
- 4. Write a short note on Prisoner's dilemma.
- 5. Can dominant strategy be the Nash equilibrium in a game? Explain with an example.
- 6. What is the connection between primal and dual problem. Give example.



Department of Economics

Internal Assessment – CC2

F.M. 20

- 1. Find the optimum x and y for the utility function, U=xy s.t. M= px + py
- 2. Find the slope and curvature of the curve; a) U=xy, b) U=x+y
- 3. At what respective values of x will AP and MP be zero, given y=10, $q = xy 0.2x^2 0.8y^2$
- ${\bf 4.} \quad {\bf State\ with\ an\ example\ the\ difference\ between\ implicit\ function\ and\ explicit\ function.}$
- 5. Define the following: Range, Mapping, Polynomial Function, Nested sets
- 6. If y=x+2z and z=3v+5m, then find dy/dx and dy/dm



Department of Economics

Internal Assessment – CC2

F.M. 20

- 1. Find the optimum x and y for the utility function, U=xy s.t. M= px + py
- 2. Find the slope and curvature of the curve; a) U=xy, b) U=x+y
- 3. Find AFC, AVC, MC and AC for the following cost function, $c = aq^3 + bq^2 cq$
- 4. State with an example the difference between implicit function and explicit function.
- 5. Define the following: Range, Mapping, Polynomial Function, Nested sets
- 6. What is the difference between singular and non-singular matrix. How do you check that?

Barasat Govt College

Dapartment of Economics

Class Test

Semester 3

Economics(Honours)



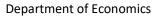
Time: 1 hour F.M. = 20

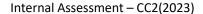
Answer any **four** questions

 (5×4)

- 1. Mention five major characteristics of the perfect competitive market.
- 2. State and interpret the second order condition for equilibrium of a firm under perfect competition.
- 3. Explain what is meant by shut down point.
- 4. What do you mean by 'normal profit' and 'super normal profit'?
- 5. Can a firm under perfect competition earn super norma profit in long run? Give reasons for your answer. (1+4)
- 6. What should be the shape of the long run market supply curve for an increasing cost industry?

Internal Exquination Time = 1 H. EC-6. Leulenrediali Answer any four questions 5x4=20 1. Explain Quantity theory of money 2. what How will you Explain supply of loanable fund and classical theore. 3. Discuss the vertical aggregate subbly curve in classical model 4. Explain the sources of wage rigidily in keepnesian model. 5. Explain en your own words the difference between classical and keynesian theory Exclesse Aggregal o Denand function. 6. How demand for labor curve be determined en keynesian system. 7. How the change in encome tex rate will affect the equilibrium wodel. 8. Oxplain the effects of supply Shocks en keynesea system.





F.M. 20

- 1. Write the lagrange function of the utility function, U=xy s.t. M=px + py. Derive the FOCs.
- 2. Find the slope and curvature of the curve; a) U=x/y, b) U=x+y
- 3. Find AFC, AVC, MC and AC for the following cost function, $TC = 10q^3 + 4q^2 2q$
- 4. State with an example the difference between implicit function and explicit function.
- 5. Define the following: sun set, universal set, null set, intersaction of a set
- 6. What is the difference between domain and range. Give example.

