



Barasat Government College

Department of Economics

Internal Assessment – CC2

F.M. 20

Answer any four (4) of the following (5 marks each)

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* $= \frac{\delta v}{\delta M}$, where v = indirect 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?



Department of Economics

Barasat Government College

Internal – CC7 (Mathematical Methods for Economics II)

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.



Barasat Government College

Department of Economics

Internal Assessment – CC2

F.M. 20

Answer any four (4) of the following (5 marks each)

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* $= \frac{\delta v}{\delta M}$, where $v =$ indirect 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

23/11/22

Internal Examination

EC-6. Intermediate
Macroeconomics
F.M = 20



Time = 1 H.

Answer any four questions 5x4 = 20

1. Explain quantity theory of money
2. What How will you explain supply of loanable fund and demand for loanable fund in classical theory.
3. Discuss the vertical aggregate supply curve in classical model.
4. Explain the sources of wage rigidity in Keynesian model.
5. Explain in your own words the difference between classical and Keynesian theory. ~~systems~~ Aggregate Demand function.
6. How demand for labor curve be determined in Keynesian system.
7. How the change in income tax rate will affect the equilibrium output and price level in classical model.
8. Discuss the effects of supply shocks in Keynesian 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.



Barasat Government College

Department of Economics

Internal Assessment – CC2

F.M. 20

Answer any four (4) of the following (5 marks each)

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 $y=10$, $q = xy - 0.2x^2 - 0.8y^2$
4. 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



Barasat Government College

Department of Economics

Internal Assessment – CC2

F.M. 20

Answer any four (4) of the following (5 marks each)

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
Department of Economics
Class Test
Semester 3
Economics(Honours)

Time : 1 hour

F.M. = 20

Answer any **four** questions

(5 x 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 normal 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 Examination

EC-6. Intermediate
macroeconomics

Time = 1 H.

RM = 20.

Answer any four questions 574220

1. Explain Quantity theory of money.
2. What How will you Explain supply of loanable fund and demand for loanable fund in classical theory.
3. Discuss the vertical aggregate supply curve in classical model.
4. Explain the sources of wage rigidity in Keynesian Model.
5. Explain in your own words the difference between classical and Keynesian theory. ~~systems~~ Aggregate Demand function.
6. How demand for labor curve be determined in Keynesian system.
7. How the change in income tax rate will affect the equilibrium output and price level in classical Model.
8. Discuss Explain the effects of supply shocks in Keynesian system.





Barasat Government College

Department of Economics

Internal Assessment – CC2(2023)

F.M. 20

Answer any four (4) of the following (5 marks each)

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.