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**ECONOMICS**

**( Major )**

Paper : 6.1

**( Public Economics )**

*Full Marks : 60*

*Time : 3 hours*

*The figures in the margin indicate full marks  
for the questions*

**1. Answer the following questions : 1×7=7**

- (a) What do you mean by incidence of tax?
- (b) What do you mean by regressive tax?
- (c) Define taxable capacity.
- (d) Define government budget.
- (e) State one important objective of fiscal policy.
- (f) Bring out the meaning of federal finance.
- (g) What do you mean by tax-sharing as far as fiscal federalism is concerned?

( 2 )

2. Answer the following questions :  $2 \times 4 = 8$

- (a) Bring out the distinction between direct and indirect tax.
- (b) Bring out the difference between balanced and unbalanced budget.
- (c) Differentiate between proportionate tax and progressive tax.
- (d) State two important principles of federal finance.

3. Answer any *three* questions from the following :  $5 \times 3 = 15$

- (a) Explain four factors determining taxable capacity.
- (b) Write a note on the Benefit Principle of Taxation.
- (c) Differentiate between revenue and capital budget.
- (d) Explain the various components of fiscal policy in brief.
- (e) Write a short note on zero-base budgeting.

( 3 )

4. Answer any *three* questions from the following :  $10 \times 3 = 30$

- (a) What are the various canons of taxation? Explain.
- (b) Critically analyze the distributional effect of taxation.
- (c) Critically examine the role of taxation in developing countries.
- (d) Give an overview of the classification of public budget. Also explain the various types of government budget.
- (e) Critically analyze the role of fiscal policy in a developing economy.
- (f) Briefly explain the various recommendations of the 13th Finance Commission of India.

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*Total number of printed pages : 11*

**3(Sem 6) ECOM2**

**2014**

**ECONOMICS**

(Major)

**Paper : M-602**

*Full Marks : 60*

Time : Three hours

*The figures in the margin indicate full marks  
for the questions.*

**(FOR SCIENCE STREAM)**

*(Econometrics Methods)*

1. Answer the following questions :  $1 \times 7 = 7$

- (a) Heteroscedasticity means equal variance.  
*True / False*
- (b) In time series, heteroscedasticity occurs  
mostly. *True / False.*
- (c) In autocorrelation, independent variables  
are related to each other. *True / False.*

*Contd.*

- (d) If there is no autocorrelation, then Durbin-Watson of statistics value should be
- (i) equal to 0
  - (ii) equal to 4
  - (iii) equal to 2
- (e) If  $R^2$  value is very high and most of the independent variables are insignificant, then what will be the problem ?
- (f) If more observations are included after detecting multicollinearity in a regression model, the multicollinearity will
- (g) Seasonal variations of a time series occur
- (i) within a month
  - (ii) within a week
  - (iii) within year
  - (iv) within day

2. Answer the following : 2×4=8

- (a) What does the heteroscedasticity mean ?
- (b) Why autocorrelation mostly occur in time series ?

- (c) Why there is type II error problem in multicollinearity ?
- (d) Mention *any two* uses of adaptive expectation model.

3. Answer *any three* from the following : 5×3=15

- (a) Why OLS cannot be used in the presence of heteroscedasticity ?
- (b) Will OLSE be still BLUE in the presence of autocorrelation ? Justify your answer.
- (c) What is dummy variable trap ? How can we overcome it ?
- (d) Show how OLSE have large variances in case of multicollinearity.
- (e) Mention the advantages of using Koyck approach in log models.

3. Answer *any three* from the following : 10×3=30

- (a) Explain the consequence of autocorrelation.

(b) Explain the detection proceedings of multicollinearity.

(c) Explain the partial adjustment model.

(d) Consider the following regression results

$$Y_i = 286.12 + 104.97X_{1i} + 10.2X_{2i} - 173.17D_{1i} - 326.46D_{2i}$$

Where  $Y_i$  = Salary of school teacher

$X_{1i}$  = teaching experience

$X_{2i}$  = Marks in Degree in percentage

$D_{1i} = 1$ , Female

$= 0$ , Male

$D_{2i} = 1$ , Rural

$= 0$ , Urban

(i) Why Dummy variables are used ? 3

(ii) Why there are two dummy variables ?  
3

(iii) Interpret the results of all the independent variables. 4

(e) Explain the use of least square-method in time series analysis.

(f) Discuss the methods of measuring trend by logarithms.

## (FOR ARTS STREAM)

### (Applied Statistics)

1. Answer the following :

1×7=7

(a) Laspeyre's and Paasche's price index numbers will be equal if the prices of all the goods considered for construction of the indices change in the same ratio.

(Write true or false)

(b) In a particular period, cost of living index number is found to be 150 and money wage of a worker is Rs. 6,000. What will be the worker's real wage at that period ?

(c) Moving average completely eliminates oscillatory movements in a time series if the period of the moving average is more than the period of the cyclic movements in the series. (Write true or false)



(d) In a production time series, value of production was 98,000 tons in a particular time period. If the estimated trend value of production at that period is 95,315 tons, find trend eliminated value of production using multiplicative model.

(e) Define Net Reproduction Rate.

(f) Point out a limitation of Crude Birth Rate as a measure of fertility of a country.

(g) What do you mean by a statistic ?

2. Give short answer to the following :  $2 \times 4 = 8$

(a) Index numbers are economic barometers. Explain.

(b) What is de-seasonalisation of a time series ?

(c) Mention *two* uses of vital statistics.

(d) Distinguish between a population and a sample.

3. Answer *any three* from the following :

$5 \times 3 = 15$

(a) Show that Fisher's index number lies between Laspeyre's index number and Paasche's index number.

(b) Briefly explain various components of a time series.

(c) Calculate trend values using 4 yearly moving average for the time series below :

Year :	2008	2009	2010	2011	2012	2013	2014	2015	2016
Production(k.g.):	506	620	1036	673	588	696	1116	738	663

- (d) Calculate age-specific fertility rates and total fertility rate from the data given below :

$$3+2=5$$

Age Group	Female population	Number of births to females in the age group
15-19	84,796	2,349
20-24	70,018	14,547
25-29	72,660	16,746
30-34	75,924	10,229
35-39	75,109	5,257
40-44	71,625	1,432
45-49	66,660	93

- (e) Enumerate the advantages and disadvantages of sample survey method of collection of data.

4. Answer *any three* of the following :  $10 \times 3 = 30$

- (a) What is chain base index number? Mention *two* uses of chain base index number. Compute chain base index numbers, taking 2001 prices as base, from the following data on average wholesale prices of three commodities.

$$2+2+6=10$$

Average wholesale prices (in. Rs.)					
Commodities	2001	2002	2003	2004	2005
Rice	20	16	28	35	21
Wheat	25	30	24	36	44
Sugar	20	25	30	24	33

- (b) (i) Using the principle of Least Squares, estimate trend Values and fit a straight line trend curve for the following data on annual profits (in Lakh Rs.) in a manufacturing unit.  $5+2+1+2=10$

Year	Profit (in lakh Rs.)
1998	80
1999	90
2000	92
2001	83
2002	94
2003	98
2004	93

- (ii) Do the trend values show a rising trend ?
- (iii) Estimate profit of the unit for the year 2015 assuming the same trend to prevail.

- (c) Explain the methods of measurement of mortality. Calculate crude and standardised death rates for Area 1 and Area 2 considering the population of Area 1 as standard population.  $6+2+2=10$

Age group	Area 1		Area 2	
	Population	Deaths	Population	Deaths
0 – 15	500	20	400	18
15 – 25	1500	25	1500	28
25 – 60	1000	22	2000	40
60 & above	800	10	600	14

- (d) What is simple random sampling ? Mention *two* methods of selecting random samples. Distinguish between simple random sampling and systematic sampling. Briefly discuss the merits of stratified random sampling.  $1+2+2+5=10$

- (e) Write short notes on ***any two*** of the following :  $5+5=10$

- (i) Complete enumeration
- (ii) Cost of living index number
- (iii) Method of exponential trend curve fitting.
- (iv) Life Table.



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ECONOMICS

( Major )

Paper : 6.3

( Economics of Natural Resources and  
Sustainable Development )

Full Marks : 60

Time : 3 hours

*The figures in the margin indicate full marks  
for the questions*

1. Answer as directed : 1×7=7

- (a) Can natural environment be included as a natural resource?
- (b) On what basis resources are classified as renewable or non-renewable?
- (c) What does the green accounting refer to?
- (d) Give the full form of UNCED.
- (e) In the following equation, what does  $mc$  stand for?

$$p = mc + uc$$

( 2 )

- (f) Identify the renewable resource from the following :  
tree, coal, petroleum
- (g) Common property resources are open access resources.

( Write True or False )

2. Answer the following questions :  $2 \times 4 = 8$

- (a) Identify any two human activities that have caused depletion of forest resources.
- (b) What are potential resources?
- (c) Define sustainable development.
- (d) State why minerals are non-renewable and forests are renewable.

3. Answer any *three* of the following questions :  $5 \times 3 = 15$

- (a) Distinguish between Biotic resources and Abiotic resources.
- (b) Briefly state the concept of optimal rate of harvest.
- (c) What are exogenous extraction costs? Explain briefly.

( 3 )

- (d) Explain any one problem of integrated economic and environmental accounting.
- (e) Bring out the differences between classical economic ideas of development and sustainable development.

4. Answer any *three* of the following questions :  $10 \times 3 = 30$

- (a) Bring out the distinction between Renewable and Non-renewable resources. Describe their characteristics.
- (b) Explain the Hotelling model of resource depletion in a competitive market.
- (c) Elaborate the idea of sustainable yield of renewable resources.
- (d) What are backstop resources? Explain the role of a backstop resource in price fixation of a non-renewable resource.
- (e) What is integrated environmental and economic accounting? How does it differ from the conventional system of national account?
- (f) Give a description of the indicators of sustainable development.

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Or

Discuss the measures to correct the Balance of Payment deficit under a non-gold fixed exchange rate regime.

- (c) Explain the determination of equilibrium exchange rate under free market mechanism.

Or

Establish the direct connection between disequilibrium in the Balance of Payment and disequilibrium in the Exchange Rate.

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ECONOMICS

( Major )

Paper : 6.4

( International Economics )

Full Marks : 60

Time : 3 hours

*The figures in the margin indicate full marks for the questions*

1. Answer the following as directed : 1×7=7

(a) Pick the odd one out :

(i) Japanese yen

(ii) US dollar

(iii) UK pound sterling

(iv) Russian rouble

(b) Fill in the blank :

Price of a currency in terms of another currency is commonly known as its ——— vis-à-vis the other currency.

( 2 )

( 3 )

(c) Write True or False :

An Indian company acquiring an American company is negative to India's capital account.

(d) Match the following :

- |                            |                      |
|----------------------------|----------------------|
| (i) Flexible exchange rate | (1) c.i.f.           |
| (ii) Exports               | (2) Managed floating |
| (iii) Gold standard        | (3) f.o.b.           |
| (iv) Imports               | (4) Gold points      |

(e) Where is the Headquarter of WTO situated?

(f) Name the 'soft loan window' of the World Bank.

(g) What is an open economy?

2. Answer the following questions :  $2 \times 4 = 8$

(a) Distinguish between the Spot and the Forward exchange rate.

(b) What is 'trade deflection'?

(c) How does the Balance of Payment of a country always balance?

(d) What is 'managed floating'?

3. Answer any *three* of the following questions :

$5 \times 3 = 15$

(a) State five causes of a Balance of Payment deficit.

(b) Explain the impact of a fall in gold import on the exchange rate of the domestic currency.

(c) What is 'forex reserve'? Point out the benefits of a healthy forex reserve.

(d) Explain the concept of 'trade creation' with the help of a numerical example.

(e) Write four important functions of the World Bank.

4. Answer the following questions :  $10 \times 3 = 30$

(a) Present the Balance of Payment (BoP) Account of a hypothetical country.

Or

Distinguish between BoP (Current Account) and BoP (Capital Account). How are they related?

(b) Explain the automatic correction of a Balance of Payment deficit under gold standard.

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ECONOMICS

( Major )

Paper : 6.5

Full Marks : 60

Time : 3 hours

*The figures in the margin indicate full marks  
for the questions*

1. Fill in the blanks/Answer the following questions : 1×7=7

- (a) *Money and Mechanism of Exchange* (1875) was written by —.
- (b) Who wrote the book, *The Making of Index Numbers; A Study of their Varieties, Tests and Reliability* (1922) ?
- (c) — was the third member of the Austrian Trio and is probably the best known member to that school, especially for his scholarly works.
- (d) What is Sarvodaya?
- (e) — has formulated a welfare criterion based on compensating payment from the losers' point of view.



( 2 )

- (f) What was the real name of Kautilya?
- (g) Wicksell was a contemporary of the economists who were making a revolution in economics through —.

2. Answer the following questions :  $2 \times 4 = 8$

- (a) Define Paretian concept of the optimality of distribution.
- (b) What is Leontief's input-output analysis?
- (c) Define the Walrasian general equilibrium.
- (d) Differentiate between Gandhian Socialism and Communism.

3. Answer any *three* from the following questions :  $5 \times 3 = 15$

- (a) Write a short note on the economic ideas of Mahadev Govind Ranade.
- (b) Explain, in brief, Gopal Krishna Gokhale's views on public expenditure and financial reforms.
- (c) Examine critically Wicksell's theory of interest.
- (d) Analyze A. C. Pigou as an establisher of a scientific welfare economics.
- (e) Explain, in brief, J. B. Clark's theory of wages.

( 3 )

4. Answer any *three* from the following questions :  $10 \times 3 = 30$

- (a) Critically examine Marshall's main contribution to the economic theory. 10
- (b) Discuss the main contributions of Karl Menger to economic thought of the Austrian School. 10
- (c) Explain Keynes' general theory of employment. How is Keynesian theory of employment different from the classical theory?  $5 + 5 = 10$
- (d) Explain the main themes of Kautilya's *Arthashastra*. 10
- (e) Discuss the ideas of M. K. Gandhi on economic thought. How far are these ideas relevant today in Indian economy?  $6 + 4 = 10$
- (f) Give an account of the salient features of the economic ideas of Dadabhai Naoroji. 10

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ECONOMICS

( Major )

Paper : 6.6

( Planning for Development : India and the  
North-East )

Full Marks : 60

Time : 3 hours

*The figures in the margin indicate full marks  
for the questions*

1. Answer the following questions : 1×7=7

- (a) Justify the importance of economic planning for economic development.
- (b) What is the role of voluntary organization in economic development?
- (c) What are FDI and FII?
- (d) What is the position of India in global economy?

( 2 )

- (e) What is shifting cultivation?
- (f) What is the policy of inclusive growth in India?
- (g) Why is the importance of economic planning declining in the post-liberalization period?

2. Answer the following questions :  $2 \times 4 = 8$

- (a) Explain the importance of FDI in capital market in India.
- (b) Compare the advantages of FDI with FII.
- (c) State the reasons of poor industrialization in North-East India.
- (d) State the reasons of low per capita income in North-East.

3. Answer any *three* of the following questions :  $5 \times 3 = 15$

- (a) Agricultural transition in the Hill area of North-East is economically necessary. Explain.
- (b) Poor industrial policy is responsible for poor industrialization in North-East India. Explain.
- (c) Explain the basic features of globalization of Indian economy.

( 3 )

- (d) State the reasons of slow economic growth rate in North-East compared to other Indian States.
- (e) State the problems of agricultural growth in North-East India.

4. Answer any *three* of the following questions :  $10 \times 3 = 30$

- (a) Give an overview of economic planning in India during 1951–1990.
- (b) How are the strategies and goals of planning in India changed in the post-liberalization period?
- (c) Explain the role of FDI and FII in India's economic development.
- (d) Discuss the trend and composition of foreign trade of India in post-economic liberalization period.
- (e) Give a comparative picture of developmental experiences of North-Eastern States with rest of India with respect to growth rate, per capita income, human development, etc.
- (f) What are the problems and opportunities of economic development through foreign trade in North-East?

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