

HOD Economics

From

Director General Higher Education, Haryana,  
Shiksha Sadan, Sector-5, Panchkula

To

The Principals,

1. Government College for Women, Ambala City
2. Government College Ambala Cantt
3. Government College Palwal
4. Government College for Girls Palwal (Kurukshetra)
5. Government College Chhillro (Mahendergarh)
6. Government College for Girls Gulha Cheeka (Kaithal)
7. Government College Kaithal
8. Government College Behrampur (Bapauli) (Panipat)
9. Government College Meham (Rohtak)
10. Government College Raipur Rani (Panchkula)
11. Government College for Women Badhra (Charkhi Dadri)
12. Government College Siwani (Bhiwani)
13. Government College for Women Ateli (Mahendergarh)
14. Government College Naraingarh (Ambala)
15. Government College for Women Narnaul (Mahendergarh)
16. Government College Chhachhrauli (Yamuna Nagar)
17. Government College for Women Shahzadpur (Ambala)
18. Government College for Women Ratia (Fatehabad)
19. Government College Hisar
20. Government College for Women Tosham (Bhiwani)
21. Government College Chhara (Jhajjar)
22. Government College for Girls Ballabgarh (Faridabad)
23. Government College for Girls Datta (Hisar)
24. Government College for Murthal (Sonipat)
25. Government College for Women Sirsa
26. Government College for Women Sector-14, Panchkula
27. Government College for Women Sampla (Rohtak)
28. Government College Charkhi Dadri
29. Shri Mata Mansa Devi Sanskrit Government College Panchkula
30. Government College for Women Sonipat
31. Government College for Women Hisar
32. Government College for Women Rohtak
33. Government College Tigaon (Faridabad)
34. Government College Karnal
35. Government College Sector-1, Panchkula
36. Government College Matak Majri (Karnal)
37. Government College Rania (Sirsa)
38. Government College Kheri Gujran (Faridabad)
39. Government College for Women Bhodia Khera (Fatehabad)
40. Government College Rohtak

Memo. No. DHE-020002/2/2021-College-I DHE  
Dated, Panchkula, the 13/8/2021

Subject:- Regarding introducing new courses/subjects/seat increase for the academic session 2021-22.

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Kindly refer to the subject cited above.

I have been directed to inform you that State Government has decided to start various courses/subjects/seat increase with one unit as per norms of Affiliating Universities mentioned against each Government College for the academic session 2021-22 which are as under:-

Sr. No.	Name of College	Subject/Stream
1.	Government College for Women Ambala City	Maths in B.A
2.	Government College Ambala Cantt	B.A Hons (English) MA History- Medieval and Modern

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3.	Government College Palwal	History (Option)
4.	Government College for Girls Kurukshetra	MA English BCA B.Sc Non-Medical MA History M.Com M.A. Hindi
5.	Government College Chhillro	B.Sc Non Medical B.Sc Medical
6.	Government College for Girls Gulha Cheeka, Kaithal	Music I Elective subject
7.	Government College Jagdishpura, Kaithal	BA General BA Hons. English MA English
8.	Government College Behrampur (Bapauli) (Panipat)	B.Sc (Non-Medical) & Maths in BA
9.	Government College Meham	B.Sc Hons. Maths. Physical Education
10.	Government College Raipur Rani	B.Com (CAV) Computer Science in BA Punjabi as subject in BA
11.	Government College for Women Badhra	MA History MA Political Science MSc Geography
12.	Government College Siwani	B.A Hons. Geography MA in Sociology B.Sc. (Med & Non-Medical)
13.	Government College Women Ateli	Home Science in B.A.
14.	Government College Naraingarh	MA English M.Sc Geography BCA
15.	Government College for Women, Narnaul	B.Sc (N.M) B. Sc. (Med)
16.	Government College Chhachhrauli	M.Com M.Sc Computer Science
17.	Government College for Women Shahzadpur (Ambala)	BA Computer Science B.Com (CAV) B.Sc. Computer Science
18.	Government College for Women, Ratia	Maths in BA
19.	Government College Hisar	B.Sc. Hons. Mathematics M.Sc Mathematics
20.	Government College for Women Tosham	M.Com
21.	Government College Chhara	B.Com
22.	Government College for Girls Ballabgarh	Sociology
23.	Government College for Girls Datta	Computer Science subject in BA
24.	Government College for Women Murthal	M.Sc. Geography
25.	Government College for Women Sirsa	B.Sc with Computer Science
26.	Government College for Women Sector-14, Panchkula	Genetics in B.Sc. Medical MA English
27.	Government College for Women, Sampla	BA Hons (History)
28.	Government College Charkhi Dadri	English, Hindi (Compulsory), History, Political Science, Geography, Economics, Mathematics, Sociology in B.A and B.Com (all compulsory subjects)
29.	Sh. Mata Mansa Devi Sanskrit College Panchkula	Diploma in Jyotish (Evening Class)
30.	Government College for Girls Sonapat	Maths Economics Sociology
31.	Government College for Women Hisar	M.Com

32.	Government College for Women Rohtak	M.A Economics
33.	Government College Tigaon	M.Com
34.	Government College Karnal	BA (Additional unit)
35.	Government College Sector-1, Panchkula	PG Diploma in Yoga, Nutrition & Dietetics Fine Arts in BA
36.	Government College Matak Majri (Karnal)	B.Sc. Medical
37.	Government College Rania (Sirsa)	Psychology in B.A.
38.	Government College Kheri Gurjan (Faridabad)	MA Psychology
39.	Government College for Women, Bhodia Khera (Fatehabad)	MA Political Science
40.	Government College Rohtak	MA Political Science M.Com

It is also directed to all the concerned Principals that the students strength should be maintained twenty or more as per prescribed norms, if the students strength is less than twenty, the subject/stream will closed. Necessary approval of Affiliating Universities be ensured.

*finf 13/8/21*  
Deputy Director-I

for Director General Higher Education,  
Haryana, Panchkula

Endst. No. Even

Dated, Panchkula, the 13/8/2021

A copy is forwarded to the following for information & necessary action please:-

1. PS to W/PSHE for information of W/PSHE.
2. PS to W/DGHE for information of W/DGHE.
3. The Registrar, Affiliating University concerned.
4. Incharge Online Admission portal
- ✓ 5. Incharge IT Cell for uploading on the web portal.

*finf 13/8/21*  
Deputy Director-I

for Director General Higher Education,  
Haryana, Panchkula



**MAHARSHI DAYANAND UNIVERSITY, ROHTAK**  
(A State University established under Haryana Act No. XXV of 1975)  
'A' Grade University Accredited by NAAC

Mr. V. K. Datta  
President

Registered

No. CB-1/F-205/2021/ 10373  
Dated: 29/10/21

To  
The Principal,  
Govt.(P.G) College for Women,  
Rohtak

**Sub: Grant for Provisional affiliation for Introduction of M.A (Economics) 1<sup>st</sup> year Course at Govt (P.G) College for Women, Rohtak w.e.f. the session 2021-22**

Sir,

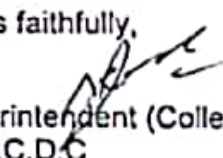
I am directed to inform you that on the basis of report of the Inspection Committee dated 11.09.2021, the Vice-Chancellor has been pleased to grant Provisional affiliation for Introduction of the following course at Govt.(P.G) College for Women, Rohtak w.e.f. the session 2021-22:-

1. Introduction of M.A (Economics) 1<sup>st</sup> year course with an intake of 60 seats w.e.f the session 2021-22.

The above Provisional affiliation is further subject to the condition that your College shall make full compliance of the shortcomings/deficiencies pointed out in the inspection report (copy enclosed) before the start of new academic session for further verification by the University.

Yours faithfully,

D.A.: As above

  
Superintendent (Colleges)  
for D.C.D.C

Endst. No. CB-1/F-205/2021/ \_\_\_\_\_

Dated : \_\_\_\_\_

Copy of the above is forwarded to the following for information and necessary

action:-

1. Controller of Examinations, M.D.University, Rohtak.
2. Director, Computer Centre, M.D.University, Rohtak.
3. A.R./D.R./ Incharge (R-I,R-II/Secrecy/R&S/Acad./Conduct), MDU, Rohtak.
4. SAP Dealing Person , Colleges Branch, M.D.U. Rohtak

Superintendent (Colleges)  
for D.C.D.C



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16/11/2022

Dr. P. L. ...  
Distt./Pg. Govt. Coll. Rohtak  
Principal  
16/11/2022

**MAHARSHI DAYANAND UNIVERSITY, ROHTAK**

(A State University established under Haryana Act No. XXV of 1975)  
'A' Grade University Accredited by NAAC

Registered

No CB-I/2022/21163

Dated: 7-11-2022

To

The Principal,  
Govt P.G College for Women,  
Rohtak

**Sub: Grant of extension in Provisional Affiliation for M.A (Economics) 2<sup>nd</sup> year Courses and its Continuation in 1<sup>st</sup> year at w.e.f. the session 2022-23**

Sir/Madam,

I have been directed to inform you that on the basis of the report of the Inspection Committee dated 13.07.2022, the Vice-Chancellor has been pleased to grant Extension/Continuation in Provisional Affiliation for the following Courses at Govt. P.G College for Women, Rohtak w.e.f. the session 2022-23

1. Extension in Provisional Affiliation for M.A (Economics) 2<sup>nd</sup> year and its Continuation in 1<sup>st</sup> year with an intake of 60 seats for the session 2022-23

The above extension in Provisional affiliation is further subject to the condition that your College shall make full compliance of the shortcomings/deficiencies pointed out in the inspection report (copy enclosed) and the compliance will be check by the same inspection committee at the earliest

Yours faithfully,

Encl. As Above

Superintendent (Colleges)  
for D.C.D.C.

Endst. No. CB-I/2022/\_\_\_\_\_

Dated : \_\_\_\_\_

Copy of the above is forwarded to the following for information and necessary action:-

1. Controller of Examinations, M.D. University, Rohtak.
2. Director, Computer Centre, M.D. University, Rohtak.
3. A.R./D.R./ Incharge (R-I, R-II/Secrecy/R&S/Acad./Conduct), MDU, Rohtak.

Superintendent (Colleges)  
for D.C.D.C.



# MAHARSHI DAYANAND UNIVERSITY, ROHTAK

(A State University established under Haryana Act No. XXV of 1975)  
'A' Grade University Accredited by UGC

Mr P.H. Sharma  
Principal  
- 21/04/2023

Registered

1919  
21/04/2023

No. CB-172023/ 4676

Dated 11-4-2023

To

The Principal,  
Govt (PG) College for Women,  
Rohtak

**Sub: Regarding inspection report in your College**

Sir/Madam,

This has reference to the inspection committee which visited your college on 01.03.2023 to re-check the compliance of deficiencies in your college pointed out by the previous inspection committee. The inspection committee has submitted its report and the Vice-Chancellor has also approved the same. A copy of inspection report is enclosed herewith.

Yours faithfully

Superintendent (Colleges)  
For Dear Colleges Dev. Council

**Department of Economics**  
**M.A Economics (Semester I, II, III & IV)**

**(As per Choice Based Credit System w.e.f. the academic year 2016-17)**

The entire course will be of four semesters. In Semester I, there would be five hard core papers. In Semester II there would be five Hard core papers. In semester III there would be two hard core papers and three soft papers, in semester IV there would be two hard core papers and three soft core papers. Each student will opt for at least one foundation course (minimum 2 credits) either in semester I or in semester-II. Each student will opt for at least two elective courses, one in 2<sup>nd</sup> & another in 3<sup>rd</sup> semester. The soft core courses offered in lieu of open electives are designed by the department for those students who do not opt for open electives, the students will take two such soft core papers i.e. one from 2<sup>nd</sup> semester and another from 3<sup>rd</sup> semester from the given scheme. Soft Core Paper/Soft Core Courses will be floated according to the administrative and academic convenience of the Department.

Sem	Paper Code	Nomenclature	Hours/ week L+T+ P	Marks			Exami nation Hours	Credits L=T=P
				Int. Mark s	Sem. Exam	Total		
1 <sup>st</sup>	16ECO21HC1	Micro Economics-I	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO21HC2	Macro Economics-I	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO21HC3	Economics of Growth and Development-I	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO21HC4	Mathematics for Economists-I	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO21HC5	Statistical Methods-I	3+1+0	20	80	100	3 hrs.	3+1+0
	<b>Credits</b>	<b>HC=20 FE=2-3</b>	<b>Total Credits: 20-22/23</b>					
2 <sup>nd</sup>	16ECO22HC6	Micro Economics-II	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO22HC7	Macro Economics-II	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO22HC8	Economics of Growth and Development-II	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO22HC9	Mathematics for Economists-	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO22HC10	II	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO22OE-	Statistical Methods-II	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO22SO1	Basics of Economics	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO22SO2	Gender Economics	3+1+0	20	80	100	3 hrs.	3+1+0
			Managerial Economics					
	<b>Credits</b>	<b>HC=20; SC=8; FE=2-3; OE=4</b>	<b>Total Credits= 20-28/30-31/35</b>					

**Note: 1. Student can opt FE in either semester I or II.**

**2. Student can opt one Soft Open Elective in lieu of Open Elective Paper.**

**3. Open Elective Paper to be chosen from common pool of University common.**

<b>3<sup>rd</sup></b>	16ECO23HC11	Indian Economy-I	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO23HC12	International Trade and Finance-I	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO23SA1	Agricultural Economics-I	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO23SB1	Econometrics-I	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO23SC1	Financial Institutions and Markets-I	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO23SD1	Mathematical Economics-I	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO23SE1	Public Economics-I	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO23SF1	Urban Economics-I	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO23OE- 16ECO23SO3	Principles of Economics Haryana Economy	3+1+0 3+1+0	20 20	80 80	100 100	3 hrs. 3 hrs.	3+1+0 3+1+0
		<b>Credits</b>	<b>HC=8, SA=12; SC=8, OE=4</b>	<b>Total Credits= 28-32</b>				
<p><b>Note: 1. Student can opt three Soft Core Papers.</b></p> <p><b>2. Student can opt one soft open elective in lieu of open elective paper.</b></p> <p><b>3. Open Elective Paper to be chosen from common pool of University common.</b></p>								
<b>4<sup>th</sup></b>	16ECO24HC13	Indian Economy-II	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO24HC14	International Trade and Finance-II	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO24SA2	Agricultural Economics-II	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO24SB2	Econometrics-II	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO24SC2	Financial Institutions and Markets-II	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO24SD2	Mathematical Economics-II	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO24SE2	Public Economics-II	3+1+0	20	80	100	3 hrs.	3+1+0
	16ECO24SF2	Urban Economics-II	3+1+0	20	80	100	3 hrs.	3+1+0
	<b>Credits</b>	<b>HC=8; SC=12;</b>	<b>Total Credits= 20</b>					
<p><b>Note: 1. Student can opt three Soft Core Papers</b></p>								



**MA (Economics)**  
**Semester-I**  
**16ECO21HC1 -Microeconomics-I (Hard Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

Nature and scope of Economics and Microeconomics. Positive and normative analysis. Role of assumptions in economic analysis. Circular flow of economic activity. Concepts of: household, firm, factors of production, equilibrium – partial and general, static, comparative static and dynamic analysis, margin and slope.

Elasticity – need and measures – Relationship between revenue and elasticity.

**Unit-II**

Analysis of consumer behaviour, demand function, law of demand – cardinal, ordinal and revealed preference approaches, income-consumption curve, Engel curve, substitute and complimentary goods.

Market demand curve; consequences of Bandwagon, Snob and Veblen effect. Concept of consumer surplus.

**Unit-III**

Laws of Production: short run and long run. Internal and External economies and diseconomies. Concept of cost, derivation of short and long run cost curves. Optimum input combination Simple case of a multiproduct firm. Technical progress and production function – Hick's classification. Elasticity of substitution. Properties of Cobb-Douglas and CES production function.

**Unit-IV**

Pricing process and equilibrium of firm and industry under perfect competition, monopoly (including discriminating and bilateral monopoly), monopolistic competition. Welfare effects of price control, price support and production quota.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

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**Reading List:**

- Koutsoyiannes. A. "Modern Microeconomics" (Macmillan)
- Lipsey, R.G. and Chrysal, K. Alec "An Introduction to Positive Economics" (OUP)
- Salvatore, D. "Microeconomics Theory" (Schaum's Outline series, Tata McCraw Hill)

**MA (Economics)**  
**Semester-I**  
**16ECO21HC2- Macro Economics-I (Hard Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

Determination of Output and Employment: Classical Approach – Output and Employment in Classical Theory; The Quantity Theory of Money and the Price Level; Classical Model without saving and investment; Classical Model with saving and investment;

Keynesian Approach \_ Two Sector Model, Three Sector Model and Four Sector Model.

**Unit-II**

Determination of Output and Employment: The Extended Model (Hicks-Henson Synthesis): Fixed Price Level – The goods Market and The Money Market; Equilibrium in Goods Market and Money Market; Changes in Aggregate Demand; Govt. spending, Taxation and Aggregate Demand; The IS-LM Elasticities and Monetary Fiscal Policies.

**Unit-III**

The Extended Model: Variable Price Level – Deviation of Aggregate Demand Curve and Determination of equilibrium price and output levels; wage-price flexibility and the Full Employment equilibrium; Monetary – Fiscal policies and the Full-Employment Equilibrium.

**Unit-IV**

Behavioral Foundation: Theories of consumption – The Absolute Income Hypothesis, The Relative Income Hypothesis; The Permanent Income Theory of Consumption; The Life cycle theory of consumption; Theories of Investment – The Present Value of Criterion for investment; The Marginal Efficiency of Capital and Investment; the accelerator theory; financial Theory of investment.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Ackley, G (1978), *Macroeconomics: Theory and Policy*, Macmillan, New York.
- Banson, W.A. (1989), *Macroeconomic Theory and Policy, (3<sup>rd</sup> Edition)*, Harper and Row, New York.
- Dorn Busch, R. and F. Stanley (1997), *Macroeconomics*, McGraw Hill, Inc. New York.
- Heijdra, B.J. and V.P. Fredericck (2001), *Foundation of Modern Macroeconomics*, Oxford University Press, New Delhi.
- Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
- Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publication, New Delhi.

- Survey, M.J.C. (Ed.) (1976), *Macroeconomic Themes*, Bo and Reed Geoffrey (1994), *International Economics*, Macmillan Press Ltd.
- Peterson, W.C. (1978), *Income, Employment and Economic Growth*, Norton, New York.
- Sheffrin, Steven M. (1996), *Rational Expectations*, 2<sup>nd</sup> edition, Cambridge University Press.

**MA (Economics)**  
**Semester-I**  
**16ECO21HC3 -Economics of Growth and Development – I (Hard Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit 1**

**Economic Growth and Development**

Factors affecting Economic Growth: capital, labour and technology; Historical Perspective of Economic Growth and its relevance; Structural Diversity and common characteristics of developing nations.

**Unit-II**

**Development and Underdevelopment**

Measuring Development: Income Measures, Basic Needs Approach, PQLI and HDI and Capabilities Approach; Poverty, Inequality and Development: Measurement, Impact and Policy options; Development Gap: concepts and measurement.

**Unit-III**

**Classical Theories of Development**

Contributions of Adam Smith, Ricardo, Karl Marx and Schumpeter.

**Unit-IV**

**Growth Models**

Harrod and Domar: Instability of equilibrium; Neo Classical Growth Models: Solow and Meade; Growth Models of Joan Robinson and Kaldor.

**Basic Reading List**

- Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.
- Barro, R. and X. Sala-i-Martin, Economic Growth, McGraw Hill, New York.
- Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics, Vol. 3, Elsevier, Amsterdam.
- Brown, M. (1966), On the Theory and Measurement of Technical Change, Cambridge, University Press, Cambridge, Mass.
- Chakravarti, S. (1982), Alternative Approaches to the Theory of Economic Growth, Oxford University Press, New Delhi.
- Chenery, H. and T.N. Srinivasan (Eds.) (1989), Handbook of Development Economics, Vols. 1 & 2, Elsevier, Amsterdam.
- Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.
- Gillis, M., D.H. Perkins, M. Romer and D.R. Snodgrass (1992), Economics of Development, (3rd Edition), W.W. Norton, New York.
- Higgins, B. (1959), Economic Development, W.W. Norton, New York.
- Jones, H.G. (1975), An Introduction to Modern Theories of Economic Growth, Nelson, London.
- Kindleberger, C.P. (1977), Economic Development, (3rd Edition), McGraw Hill, New York.

- Meier, G.M. and J.E.Rauch (2005), *Leading Issues in Economic Development*, (8<sup>th</sup> Edition), Oxford University Press, New Delhi.
- Sen, A.K. (Ed.) (1990), *Growth Economics*, Penguin, Harmondsworth.
- Todaro, M.P. and S.C. Smith (2003), (8th Edition), *Economic Development*, Pearson Education, Delhi.
- Thirwal, A.P. (1999), (6th Edition), *Growth and Development*, Macmillan, U.K

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Meir, G.M. (1995), *Leading Issues in Economic Development*, Oxford University Press, New Delhi.
- Mishra S.K. and V.K. Puri, *Economics of Development and Planning*, Himalaya Publishing House, Mumbai.
- Todaro, M.P. *Economic Development*, Latest Edition, Longman, London.
- Thiwal, A.P. (2003), (6<sup>th</sup> Edition), *Growth and Development*, Seventh Edition, Macmillan, New York.
- Hogendorn, J. (1996), *Economic Development*, Addison, Wesley, New York.

**MA (Economics)**  
**Semester-I**  
**16ECO21HC4 -Mathematics for Economists-I (Hard Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

Basics: real number system, sets and set operations, relations and functions, inverse functions; solution of linear equations in two variables, solution of quadratic equations, logarithms and exponents; exogenous and endogenous variables.

**Unit-II**

Fundamentals of Matrices; Determinants. Solution of a system of upto 3 equations by matrix inversion and Cramer's rule. Input-Output analysis – Static open model.

**Unit-III**

Differentiation – idea of limit (but not its evaluation) meaning and economic interpretations of derivative. Rules of differentiation including logarithmic and exponential functions. Unconstrained optimization – single choice variable, global and local.

**Unit-IV**

Calculus of multivariable functions, higher order derivatives, constrained optimization with upto 2 equality constraints

**Note 1: Purpose of the course is to learn application of mathematical tools with understanding in economics. Derivations and proofs are to be avoided.**

**Note 2:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit)).

**Reading List:**

- Chiang, Alpha C. "Fundamental Methods of Mathematical Economics" (Mc-Graw Hill)
- Dowling, Edward T "Mathematics for Economists" (Schaum's outline Series, Tata Mc-Graw Hill)

**MA (Economics)**  
**Semester-I**  
**16ECO21HC5- Statistical Methods-I (Hard Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit –I**

Diagrammatic and graphic representation of statistical data. Measures of central tendency: A.M., G.M., H.M., Median, quartiles, deciles, percentiles, mode, relationship between A.M., G.M. and H.M., Selection of an average, Limitations of Averages.

**Unit-II**

Measures of dispersion: range, interquartile range, quartile deviation, mean deviation, standard deviation, standard deviation of the combined series, variance, coefficient of variation, relation between various measures of dispersion, Lorenz curve, skewness and Kurtosis, moments

**Unit-III**

Index numbers: Problems and methods of construction of various types of indices, Laspeyres, Pasche's and Fisher's ideal index numbers, Time reversal, factor reversal and circular tests; chain base indices, base shifting splicing and deflating the index nos., costs of living index numbers and consumer price index numbers. Time series: components of time series and their decomposition, Methods of measuring trend, cyclical, seasonal and irregular variation.

**Unit-IV**

Random experiment, random variable, sample space, events, fundamental principles of counting, classical, relative frequency and axiomatic approaches to probability, basic results on probability, conditional probability, Baye's theorem.

**Note:**

- (A) Nine questions would be set in all.
- (B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.
- (C) There would be two questions (16 marks each) from each of four units.
- (D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Gupta S.C. "Fundamentals of Statistics" S. Chand & Sons New Delhi (1993)
- Spiegel, Murry R "Theory and problems of Statistics" (Schaum's outline series, McGraw Hill, 1992)
- Karmal P.H. and Polasek M. "Applied Statistics for Economists (4<sup>th</sup> edition), Pitman, Australia.



**MA (Economics)**  
**Semester-II**  
**16ECO22HC6 –Micro Economics-II (Hard Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

Oligopoly: non collusive models – Cournot, Bertrand, kinked demand model; collusive models – joint profit maximising, market sharing and leadership cartels. Critique of neo-classical theory of firm. Theory of Games – Two-person, Zero-sum game, Pure and Mixed strategy, Saddle Point Solution.

**Unit-II**

Alternative theories of firm: Baumol's Sales maximization model (simple, static without advertisement model) Morris and Williamson Average/full cost pricing, Bain's limit pricing model, behaviouralist model of Cyert and March.

**Unit-III**

Neoclassical theory of factor pricing under competitive conditions, with monopolistic power in product market, monopsonistic power in factor market, bilateral monopoly in factor market, monopoly in factor market. Product exhaustion problem. Neoclassical theory of rent, quasi-rent, interest and profit. Issues in General Equilibrium analysis.

**Unit-IV**

Concept of social welfare, some early criteria, Pareto optimality criterion and efficiency conditions, Bergson's social welfare function, idea of theory of second best and Arrow's impossibility theorem, compensation criterion. Market structure and welfare maximization. Market failure – case of externality and public goods; and ways of correcting it.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Koutsoyiannes. A. "Modern Microeconomics" (Macmillan)
- Lipsey, R.G. and Chrystal, K. Alec "An Introduction to Positive Economics: (OUP)
- Salvatore, D. "Microeconomics Theory" (Schaum's Outline series, Tata McCraw Hill)

**MA (Economics)**  
**Semester-II**  
**16ECO22HC7 –Macro Economics-II (Hard Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

The Demand for and supply of money: Classical Approach to Demand for Money – Quantity Theory Approach; Fisher's equilibrium; Cambridge Quantity theory; Keynes Liquidity Approach – Transaction; Precautionary and Speculative Demand for Money Aggregate Demand for Money; Friedman, Patinkin Baumol and Tobin.

Determinants of money supply, High-powered money, Money multiplies.

**Unit-II**

Inflation: Definition of Inflation; Economics effects of Inflation – The effect of Inflation on the distribution of Income and Wealth, The effect of Inflation on output, Employment and the Growth Rate; Demand Side and Supply Side theories of inflation.

**Unit-III**

Inflation and unemployment: The Phillips Curve, The Inflationary Pressure Curve: Phillips Curve, Inflationary Pressure Curve and the Rate of Inflation. The Phillips Curve; Trade off and Non Trade Off. Adaptive Expectation and Rational Expectation Keynesianism Vs Monetarism.

**Unit-IV**

Trade Cycles – Models of Samuelson, Hicks and Kaldor, Economic Growth: Harrod- Doman Model; Neo-Classical Model (with money & without money). International Adjustment: The Determination of National Income in Open Economy; The International Transmission of Disturbance: Transmission under Fixed Exchange Rate; Transmission under Floating Exchange Rate (Mudel Fleming Model).

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Ackley, G (1978), *Macroeconomics: Theory and Policy*, Macmillan, New York.
- Banson, W.A. (1989), *Macroeconomic Theory and Policy, (3<sup>rd</sup> Edition)*, Harper and Row, New - York.
- Dorn Busch, R. and F. Stanley (1997), *Macroeconomics*, McGraw Hill, Inc. New York.
- Heijdra, B.J. and V.P. Fredericck (2001), *Foundation of Modern Macroeconomics*, Oxford - University Press, New Delhi.
- Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.

- Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publication, New Delhi.
- Survey, M.J.C. (Ed.) (1976), *Macroeconomic Themes*, Bo and Reed Geoffrey (1994), *-International Economics*, Macmillan Press Ltd.
- Peterson, W.C. (1978), *Income, Employment and Economic Growth*, Norton, New York.
- Sheffrin, Steven M. (1996), *Rational Expectations*, 2<sup>nd</sup> edition, Cambridge University Press.

**MA (Economics)**  
**Semester-II**  
**16ECO22HC8 -Economics of Growth & Development – II (Hard Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit –I**

Sectoral Aspects of development; Importance of agriculture and industry in economic development.

Role of institutions – government and markets.  
Poverty – indicators and measurement.

**Unit-II**

Trade and development: trade as an engine of growth, two gap analysis, Prebisch, Singer and Murdal views, gains from trade and LDCs; Role of foreign Direct investment (FDI) and Multi-national corporations (MNCs) in the emerging scenario.

**Unit-III**

Objects and role of monetary and fiscal policies in economics development; Choice of techniques and appropriate technology; Investment Criteria; Cost-benefits analysis.

**Unit-IV**

Techniques of planning; Plan Models in India; Planning in a market-oriented economy; Endogenous growth; role of education research and knowledge – Explanation of Cross country differentials in economic development and growth.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

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**Reading List:**

- Behrman, S. and T.N. Srivasan (1995), *Handbook of Development Economics*, Vol.-3, Elsevier, Amsterdam.
- Chenery, H.B. et. al. (Eds.) (1974), *Redistribution with Growth*, Oxford University Press, Oxford.
- Higgins, B. (1959), *Economic Development*, W.W. Norton, New York.
- Chatak, S. (1986), *An introduction to Development Economics*, Allen and Unwin, London.
- Kindleberger, C.P. (1977), *Economic Development*, (3<sup>rd</sup> Edition), McGraw Hill, New York.
- Todaro, M.P. (1996), (6<sup>th</sup> Edition), *Economic Development*, Longman, London.
- Thiwal, A.P. (1999), (6<sup>th</sup> Edition), *Financing Economic Development*.
- Singh S.P (ed.), *From underdevelopment to Development*.

**MA (Economics)  
Semester-II**

**16ECO22HC9 -Mathematics for Economists-II (Hard Core Paper)**

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

**Unit-I**

Integration – meaning and economic interpretation. Indefinite and definite integration. Simple techniques including integration by substitution and integration by parts.

**Unit-II**

Differential equation – basic concepts, solution of first order linear differential equation. Non-linear differential equation – exact and variable separable type only. Linear differential equation of second order with constant coefficient and term.

**Unit-III**

Difference equation – basic concepts, solution of first and second order linear difference equation with constant term and coefficient.

**Unit-IV**

Linear Programming – Relevance and basic concepts, Graphic, simplex and dual solution.

Economic interpretation of dual

**Note 1: Purpose of the course is to learn application of mathematical tools with understanding in economics. Derivations and proofs are to be avoided.**

**Note 2:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Chiang, Alpha C. “Fundamental Methods of Mathematical Economics” (Mc-Graw Hill)
- Dowling, Edward T “Mathematics for Economists” (Schaum’s outline Series, Tata Mc-Graw Hill)

**MA (Economics)**  
**Semester-II**  
**16ECO22HC10 -Statistical Methods-II (Hard Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit –I**

Probability distribution of a random variable, concept and use of mathematical expectation, mean and variance of a distribution in terms of expectation, moments, density functions. Joint and marginal probability distributions. Binomial, Poisson and Normal distributions, properties and inter relationships. Fitting of distributors.

**Unit-II**

Census versus sample enumeration. Methods and types of sampling, sampling error, small and large sample, concept of an estimator and its sampling distribution; properties of a good estimator, concepts of point and interval estimation, OLS and ML estimators of regression parameters.

**Unit-III**

Elements of statistical Inference: Parameter and estimators; concepts of sampling distribution of a statistic, standard error, hypothesis testing, tests of significance, Type I and Type II errors, level of significance, Power of a test, z, t, chi-square and F tests.

**Unit-IV**

Correlation and regression: simple correlation, Pearson, spearman's correlation coefficients, multiple and partial correlation analysis, specification of a simple linear regression model, least square estimation of linear regression coefficients, interpretation of correlation and regression coefficients and their properties.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Gupta S.C. "Fundamentals of Statistics" S. Chand & Sons New Delhi (1993)
- Spiegel, Murry R "Theory and problems of Statistics" (Schaum's outline series, McGraw Hill) (1992)
- Karmal P.H. and Polasek M. "Applied Statistics for Economists (4<sup>th</sup> edition), Pitman, Australia.

**MA (Economics)**  
**Semester-II**  
**16ECO22OE - Basics of Economics (Open Elective Paper)**

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

**Unit -1**

What is an Economy? Control problems of an Economy: What, how and for whom to produce, concept of production possibility function and opportunity cost.

**Unit-II**

Consumer's equilibrium – meaning of utility, marginal utility, conditions of consumer's equilibrium.

**Unit-III**

Demand, market demand, determinants of demand, demand schedule, price elasticity of demand, factors effecting price elasticity of demand.

**Unit-IV**

Cost and Revenue: Total cost, Total fixed cost, Total variable cost.

Average cost: Average fixed cost, average variable cost

Revenue- Total revenue and marginal revenue, -meaning their relationship

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit).

**Reading List:**

- D.N. Divedi: Principles of Economics, 2<sup>nd</sup> Edition, Vikas Publication House.
- R Dutta and K P M Sundaram: Indian Economy, S Chand
- A.N.Agarwal: Indian Economy, Problems of Development and Planning, New Age.
- Mishra and Puri: Indian Economy, Himalaya.

**MA (Economics)**  
**Semester-II**  
**16ECO22SO1 – Gender of Economics (Soft Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

Defining Gender; Debate on Women and Development (1970s and 1980s)  
The origin of gender development theory – women in development (WID), Women and Development (WAD) and Gender and Development (GAD); Critique of WID; Gender in Economics Development.

**Unit-II**

**Gender and Agrarian Structure**

Gender – Segregated role and responsibilities in agriculture sector; Gender – Segregated agriculture labour - market; new farm technology and its gendered implications with special reference to India displacement of labour

**Unit-III**

**Gender and Industrial Structure**

Formal and informal manufacturing – Orientation of industrial production and generation of employment; Gender differentiated impact of economic liberalization and trade oriented growth

**Unit-IV**

**Gender and Economic Policy**

Poverty, Unemployment and Development; Feminization of urban labour market-concepts, debate and evidence from India; Committee on Status of Women in India; National Commission on Self Employed Woman and Women in the Informal Sector.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit)).

**Reading List:-**

- Aggarwal Bina, Patriarchy and modernizing State: An introduction in aggarwal Bina (ed.) Structure of Patriarchy, Kali for women, New Delhi, 1988
- Banks, Olive, Faces of Feminism : A Study of Feminism as a Social Movement, St. Martin's Press, New York, 1981
- Bhasin and Khan, Some Questions on Feminism, Kali of Women, New Delhi, 1986.
- Caplan, pat (ed.) The Cultural Construction of Sexuality, Rout ledge, New York, 1987.
- Desai Neera and Krishnaraj, Maithrehi (ed.), Women and Society in India, Ajamta Publication, New Delhi, 1987.



- Eisentein, Zillah, Capitalist Patriarchy and the Case for Socialist Feminism, Monthly Review Press, New York, 1979.
- Ghadially, Rehane, Women in Indian Society, Sage Publications, New Delhi, 1989.
- Goel, Aruna Organization and Structure of Women Development and Empowerment, Deep & Deep, Delhi, 2004.
- Jayawardane, Kumari Feminism and Nationalism in the Third World, The Institute of Social Studies, The Hague, Netherlands, 1987.
- Julia Cleves Mosse, Half the World, Half A Chance : An Introduction to Gender Development, What is Gender ? Pp 1-8, Oxfam, UK, 1993.
- Krishnaraj, Maithreyi, Chanana Karuna, Gender and Household Domain (Social and Cultural Dimensions), Sage Publication, New Delhi, 1989.
- Krishnaraj, Maithreyi (ed.) Feminist Concepts : Part 1, 2 and 3, Contributions to Women's Studies Series-7, Research Centre for Women's Studies, SNDT Women's University, Bombay, 1990.
- Lerner, Gerda The Creation of Patriarchy, Oxford University Press, New Delhi, 1986.
- Mies, Maria, Indian Women and Patriarchy, Concept Publishing Company, New Delhi, 1980.
- Oakley, Ann and Mitchell, Juliet (ed.), Who's Afraid of Feminism Seeing Through the Backlash, London, Penguin, 1998.
- Rajput Pam & Kaur, Manvinder, "Women's Studies in Higher Education in India: some Reflections", Samyukta, Vol. III, No. 1, January 2003.
- Ruth, Sheila, Issues in feminism : An Introduction to Women's Studies, Mayfield Publishing Company, California, 1990.
- Shulamith, Firestone, The Dialectic of Sex, N. Y., Bantam Books, 1971.
- Ann Thompson and Helen Wilcox, Teaching Women : Feminism an English Studies (Manchester : Manchester University Press 1989).
- Helen Roberts, Doing Feminist Research, New York, Routledge, 1981.
- Hester Eisenstein : Contemporary Feminist Thought, London : Unwin ECNbacks, 1984.
- J.M. Everett, Women and social Change in India, New Delhi : Heritage Publishers, 1985.
- Jo Freeman, The Politics of Women's Liberation (A Case Study of an emerging social movement and its relations), New York, Long Man Inc., 1975.
- Kumari Jayawardana , Feminism and Nationalism in the Third World, New Delhi, Kali for women, 1986.
- Valentine Moghadam, The Feminization of Poverty ? Notes on a Concept and Trends, 1996.
- Iftikhar Ahmed, "Technology and Feminization of Work", Economic and Political Weekly, Vol. 29, No. 18, April 30, 1994.
- Naila Kabeer, Reversed Realities : Gender Hierarchies in Development Thought, Kali for Women, 1994, pp 1-39.
- Govt. of India, Towards Equality : Committee on the Status of Women in Indian New Delhi, 1975
- Govt. of India, National Commission on Self – Employed Women and Women in the Informal Sector, 1994.
- E. Boserup, "Introduction" in E. Boserup women's Role in Economic Development, 1970.

**M.A. Economics**

**Semester-II**

**16ECO22SO2 -Managerial Economic (Soft Core Courses)**

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

**Unit-I**

Meaning and nature of Managerial Economics; How does economics contribute to Managerial functions, Business decisions and Economic analysis, the scope of Managerial Economics: Application of Micro Economics to operational issues, Applications of Macro Economics to Business environment, The gap between theory and practice and the Role of Managerial Economics.

**Unit-II**

Analysis of Market Demand: Meaning of Market Demand, Types of Demand, Determinants of market Demand, Demand Elasticities: importance of the elasticity concept, Price elasticity of demand, measuring price elasticity from a Demand function, Determinants of price elasticity of Demand, Price elasticity and total revenue, Price elasticity and marginal revenue, cross-elasticity of demand, Income-Elasticity of Demand, Elasticity of Price Expectations, Promotional elasticity of sales.

**Unit-III**

Demand forecasting: why demand forecasting, Techniques of demand forecasting survey methods: complete enumeration, sample survey and end-use methods, opinion poll methods: Expert-opinion method, Delphi method and market studies and experiments, statistical methods: Trend projections methods based on time series data, Econometric Methods.

**Unit-IV**

Cost and Break-even Analysis - Some Accounting and Analytical cost concepts; Economies and diseconomies of scale; Break-even Analysis: linear and non-linear cost and Revenue functions; Contribution Analysis, Profit Volume Ratio, Margin of Safety.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Haynes and Benry, Managerial Economics
- Baumol, Economic Theory and Operations Analysis
- Koutsoyiannis, Modern Micro Economics
- J. Dean, Managerial Economics
- Mote, Paul and Gupta, Managerial Economics
- Biarman & Smith, The Capital Budgeting Decisions.
- Varsghney and Maheswari, Managerial Economics

**Semester-III**  
**16ECO23HC11 -Indian Economy-I (Hard Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

Features of Indian economy; Nature and Characteristics of Indian economy; Planning; objectives and strategies; failures and achievements of plans.

Basic economic indicators-National income, performance of different sectors. Trends in prices and money supply.

**Unit-II**

Institutional structure: Land-reforms in India; Agricultural marketing and warehousing; Issues in food security - policies for sustainable agriculture; Agricultural finance policy; Agricultural price policy.

**Unit-III**

Malthusian theory of population, optimum theory of population, theory of demographic transition, population as 'Limits to Growth' and as 'Ultimate Source'

Concepts of Demography- Vital rates, life tables, composition and uses.

Measurement of fertility - Total fertility rate, gross and net reproduction rate - Age pyramids, population projection stable, stationary and quasi-stationary population; Characteristics of Indian population through recent census.

**Unit-IV**

Financial Sector: Monetary policy of RBI; Money and Capital markets; Growth and problem; Role of commercial banks in India; Banking sector reforms since 1991

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Bardhan. P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi. .
- Brahmanada, P.R. and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-State Perspectives, Bookwell, Delhi.
- Datta, R. and KP.M. Sundhram (2003), Indian Economy. S. Chand & Company Ltd. New Delhi.
- Government of India, Economic Survey, (AnnuaJ), Ministry of Finance, New Delhi.
- Mishra, S.K and V.K Puii Indian Economy- 151 Development Experience, Himalaya Publishing House, Mumbai, Latest Edition.
- Rudra Ashok, Indian Plan Models.
- Todaro, P. Development Planning: Models and Methods.
- United Nations, Guidelines for Project Evaluation.

**Semester-III**  
**16ECO23HC12 -International Trade and Finance-I (Hard Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

The pure theory of international trade - Theories of absolute advantage, comparative advantage and opportunity costs, modern theory of international trade; Theorem of factor price equalization; Empirical testing of the theory of absolute cost and comparative cost-Heckscher-Ohlin theory of trade. Kravis and Linder theory of trade Role of dynamic factors, i.e. change in tastes, technology and factor endowments in explaining the emergence of trade;

**Unit-II**

The Rybczynski theorem-concept and policy implications of immiserizing growth; Causes of emergency and measurement of intra-industry trade and its impact on developing economies. Measurement of gains from trade and their distribution; Concepts of terms of trade, their uses and limitations for less developed countries; Trade as an engine of economic growth; Welfare implications - empirical evidence and policy issues;

**Unit-III**

The Theory of interventions (Tariffs, Quotas and non-tariff barriers); Economic effects of tariffs and quotas on national income, output, employment, terms of trade, income distribution and Balance of payments on trading partners both in partial and general equilibrium analysis. The political economy of non-tariff barriers and their implications; Trade under imperfectly competitive market.

**Unit-IV**

Meaning and components of balance of payments; Equilibrium and disequilibrium in the balance of payments; The process of adjustment under system of gold standard, fixed exchange rates and flexible exchange rates; Expenditure-reducing and expenditure-switching policies and direct controls for adjustment; Policies for achieving internal and external equilibrium simultaneously under alternative exchange rate regimes; a critical review of the Absorption and monetary approaches to the theory of balance payment adjustment;

**Note:**

- (A) Nine questions would be set in all.
- (B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.
- (C) There would be two questions (16 marks each) from each of four units.
- (D) Candidates would be required to attend five questions ( one compulsory and selecting one

from each unit))

**Reading List:**

- Bhagwani, J. (Ed.) (1981), International Trade, Selected Readings, Cambridge University press, Massachusetts.
- Carbouth, M. (1999), International Economics, International Thompson Publishing, New York.
- Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
- Dana, M.S. (2000), International Economics: Study Guide and Work Book (5th Edition), Rutledge Publishers, London.
- Dunn, R.M. and J.H. Mutt (2000), International Economics, Rutledge Publishers, London.
- Kenen, P.B. (1994), The international Economy, Cambridge University Press, London.
- Kindleberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.
- King, P.G. (1995), International Economics and International Economic Policy: A Reader, McGraw Hill International, Singapore.
- Krufnran, P.R. and M. Obstfeld (1994), International Economic: Theory and Policy, Glenview, Foresman.
- Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J. New York.
- Soderston, BO (1991), International Economics, The Macmillan Press Ltd., London

**M.A. Final  
Semester-III  
16ECO23SA1 -Agricultural Economics-I (Soft Core Paper)**

**Max. Marks: 100  
Time: 3 Hrs.**

**Written Exam:80  
Internal Assessment: 20**

**Unit-I**

Agricultural Economics and Economic Development: Definition of agricultural Economics, its scope and nature; Regional disparities in Indian agriculture; Difference between agriculture and Industry; Need for a separate study of Agricultural Economics. Agriculture and Economic Development: Role of agriculture in Economic Development; Contribution of industry to the development of agriculture; Interdependence of agriculture and industry.

**Unit-II**

Approaches to Agriculture Development: Schultz, Mellor, Boserup, Lewis and Ranis-Fie.

**Unit-III**

Economics of Agriculture Production: The Production Function; Factor-Product Relationship; Factor-Factor Relationship; Product- Product Relationship. Equilibrium of the capitalist form, peasant family farm and share tenant farm.

**Unit-IV**

Analysis for Farm Management: The Production Function Approach; Farm-budgeting Approach. Measures of Farm Efficiency; Supply response in agriculture; Size of the farm and Productivity Debate.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit)).

**Reading List:**

- South-worth, H.M. and B.F. Johnston (ed.) Agricultural Development and Economic Growth (Cornell University Press, London, 1974).
- Heady, E.O. Economics of Agricultural Production and Resources Use (Prentice Hall India Ltd. New Delhi - 1964).
- Schult, T.Z. Transforming Traditional Agriculture (Yale University Press, 1964).
- Metacalf D. The Economics of Agriculture.
- Basu, K. Agrarian Structure and Economic Under Development (Harwood Academic, London 1980).
- Sadhu, AN. and A Singh, Agricultural Problems in India (Himalaya Publishing House, Bombay).
- Mellor, J. W. The Economics of Agricultural Development (Vora and Co. Bombay, 1966).
- Donner, Peter: Land Reforms and Economic Development.
- Kahlon, AS. and Tyagi, D.S. Agricultural Price Policy in India (Allied Pub. New Delhi, 1983).

- Patnaik, Utsa (ed) Agrarian Relations and Accumulation. The mode of production in India.
- Kaur, Rajbans Agricultural Price Policy in Economic Development.
- The Indian Society of Agricultural Economics, Agricultural Development in Developing Countries in Asia and south East Asia since World War II.
- Ellis, Frank Peasant Economics (Cambridge University Press 1963).
- Bhalla G.S. and Y.K. Alagh Performance of Indian Agriculture a district-wise Study.
- Rao, C.H.H. Technological change and Distribution of gains in Indian Agriculture.
- Lehman, Davir (ed) Agrarian Reform and Agrarian reformism in India.
- Ghatak, S. and Ken Ingersent Agriculture and Economic Development.
- Bilgrami, SAR An Introduction to Agricultural Economics (Himalaya Pub. House, Bombay).
- Rudra Ashok Indian Agricultural Economics: Myth and Realities (Allied Pub. New Delhi 1982).
- Soni, RN. Leading Issues in Agricultural Economics (Sohan Lal Nagin Chand Co. Jalandhar, 2006).
- Khusro, AM. Reading in agricultural Development.
- Vandana Shiva The Violence of Green Development.
- Frankel, Francis, R India's Green Revolution, Economic Gain and Political Costs (OUP Bombay 1971).
- Dantwala, M.L. (ed.). Indian Agricultural Development Since Independence.
- Hayami, Y and Rattan, V.W. Agricultural Development: An International Perspective.
- ICSSR Alternative in Agricultural Development.
- Ellis, F. Agricultural Policies in Developing Countries.
- Lekhi R.K. & Singh Joginder, Agricultural Economics, Kalyani Publishers, New Delhi.
- Sankhayan P.L., Introduction to the Economics of Agricultural Production, Prentice Hall of India Private Limited, New Delhi.
- Johl S.S. & Kapur T.R, Fundamentals of Farm Business Management, Kalyani Publishers, Ludhiana. .
- Reddy S. Subha, Raghu Ram P. Sastry T.V. Neelakanta & Devi I Bhavani, Agricultural Economics, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.
- Acharya, S.S. & Agarwal N.L., Agricultural Prices - analysis and policy, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.



**M.A. Final  
Semester-III  
16ECO23SB1 -Econometrics-I (Soft Core Paper)**

**Max. Marks: 100  
Time: 3 Hrs.**

**Written Exam:80  
Internal Assessment: 20**

**Unit-I**

Nature and meaning of econometrics; Difference between mathematical economics, statistics and econometrics; Goals of econometrics; classical linear regression model (Two variable) Sources of disturbance terms, assumption and their significance, least square estimators and their properties; Gauss markov's theorem.

**Unit-II**

General linear regression model: Definition, assumptions, least - squares estimation, Gauss markov's theorem; testing significance of regression coefficients, concepts of R<sup>2</sup> and adjusted R<sup>2</sup>

**Unit-III**

Problems of multicollinearity, autocorrelation and hetroscedasticity: Nature, consequences, test and remedies (proofs not required)

**Unit-IV**

Simple Applications of Least Square: Estimation of consumption function, Cobb-Douglas and CES production functions, Estimation of semi-log and double log function; simple and compound rates of growth.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit)).

**Reading List:**

- Gujarati, D.N. (1995), Basic Econometrics (2nd Edition), McGraw Hill, New Delhi.
- Koutsoyiannis, A. (1997), Theory of Econometrics (2nd Edition), The Macmillan Press Ltd., London.
- Johnston, J. (1991), Econometric Methods, McGraw Hill Book Company, London.
- Maddala, G.S. (1993), Econometrics Methods and Applications, (2 Vol.), Alder shot, U.K.
- Krishna K.L. (1997), Econometrics Application in India, Oxford University Press, New Delhi.
- Kmenta, J. (1997), Elements of Econometrics, University of Michigan Press, New York.
- Intrilligator, M.D. (1978), Econometrics Techniques and Applications, Prentice Hall, New Jersey.

- Pindyck, R.S. and D.L. Rubinfeld (1976), *Econometric Models and Economic Forecasts*, McGraw Hill, Tokyo.
- Frances, P. H. (1998), *Time Series Models/or Business and Economic Forecasting*, Cambridge University Press, Cambridge.
- Harvey, A.C. (1981), *Econometric Analysis o/Time Series*, Phillip Allen, London.
- Madnani, G.M.K. (1999), *Introduction o/Econometrics*.
- Intrilligator, M.J. and Hasio Badkin (1996), *Econometric Models, Techniques and Applications*, Prentice Hall.

**M.A. Final  
Semester-III  
16ECO23SC1 -Financial Institutions and Markets-I (Soft Core Paper)**

**Max. Marks: 100  
Time: 3 Hrs.**

**Written Exam:80  
Internal Assessment: 20**

**Unit-I**

Nature and Role of Financial System and Structure of Interest Rates - Money and finance-Money and near-money-Financial intermediation and financial intermediaries - The structure of the financial development.

**Unit-II**

Equilibrium in Financial Markets - Financial System and Economic Development Criteria to evaluate assets: Risk and financial assets, types of risk, return on assets, Risk - Return trade off - Valuation of securities.

**Unit-III**

Theories of interest rate determination - Level of interest rates - Long period and Short period rates Term Structure of Interest rates - Theories of interest rates structure - Expectational theory - Segmentation theory; Administered interest rates - Appropriate interest rate policy.

**Unit-IV**

Banks, Monetary Policy and Non-Bank Financial Interest diaries: Functions of Central Bank - The aims and objectives of the monetary policy in developed and developing countries.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit)).

**Reading List:**

- Bhole, L.M. (1999), Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi.
- Bhole, L.M. (2000), Indian Financial System, Chugh Publications, Allahabad.
- Edminster, R.O. (1986), Financial Institutions, Market and Management, McGraw Hill, New York.
- Goldsmith, R.W. (1969), Financial Structure and Development, Yale, London.
- Hanson, J.A. and S. Kathuria (Eds.) (1999), India: A Financial Sector for the Twenty-first Century, Oxford University Press, New Delhi.

- Karker, P.T. and S.A. Zenios (2000) (Ed.), Performance of Financial Institutions, Cambridge University Press, Cambridge.
- Johnson, H.J. (1993), Financial Institutions and Markets, McGraw Hill, New York.
- Khan M. Y. (1996), --Indian Financial Systems, Tata McGraw Hill, New Delhi.
- Machiraju, M.R. (1999), Indian Financial System, Vikash Publishing House, New Delhi.
- Ohlson, J.A. (1987), The Theory of Financial Markets and Institutions, North Holland, Amsterdam.
- Prasad, -K.N. (2001), Development of India's Financial System, Sarup & Sons, New Delhi.
- Robinson, R.I. and D. Wrightman (1981), Financial Markets, McGraw Hill, London.
- Smith, P.F. (1978), Money and Financial Intermediation: The Theory and Structure of Financial System, Prentice Hall, Englewood-Cilffs, New Jersey.

**M.A. Final**  
**Semester-III**  
**16ECO23SD1 -Mathematical Economics-I (Soft Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

Cardinal and ordinal utility maximization: Slutsky equation, compensated demand function, income, substitution, and price effects; Concept of elasticities; Consumer services.

**Unit-II**

Separable and additive utility functions; homogeneous and homothetic utility functions; Indirect utility functions; transcendental logarithmic utility functions; duality theorem;

**Unit-III**

Theory of revealed preference and index numbers; Linear expenditure systems; Treatment of demand for durable goods; Empirical demand functions; Consumer behaviour under risk and uncertainty.

**Unit-IV**

Production function - homogeneous and non-homogeneous; Laws return & return to scale; Properties of Cobb-Douglas production function; CES/VES and Translog (TL) production;

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Allen, R.G.D. (1976), Mathematical Economics, Macmillan, London.
- Arrow, KJ. and M. Intrilligator (Eds.) (1982), Handbook of Mathematical Economics, Volumes I, II and III, North Holland, Amsterdam.
- Henderson, J.M. and R.E. Quandt (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
- Chung, J.W. (1993), Utility and Production: Theory and Applications Basil Blackwell, London.
- Ferguson, C.E. (1976), Neo-Classical Theory of Production and Distribution.

**M.A. Final  
Semester-III  
16ECO23SE1 -Public Economics – I (Soft Core Paper)**

**Max. Marks: 100  
Time: 3 Hrs.**

**Written Exam:80  
Internal Assessment: 20**

**Unit-I**

Economic rationale of government, fiscal functions; market failures: imperfections, decreasing costs, externalities and public goods; concepts of private goods, pure public goods, mixed goods and merit goods; theory of public goods; free Rider's problem, the optimal provision of public goods, contributions of Samuelson and Musgrave. Lindhal equilibrium; public choice and fiscal decision making, voting systems, majority voting.

**Unit-II**

**Budgeting:** various concepts, reforms in expenditure budgeting, zero based budgeting and performance budgeting. Budgets of the Union Government in India, budget making process in India; public expenditure in India: trends and issues.

**Unit-III**

**Public Expenditure:** structure and growth of public expenditure; Wagner's hypothesis, Peacock-Wiseman hypothesis; economic effects of public expenditure; criteria for public investment, social cost-benefits analysis: valuation of benefits and costs, discount rate.

**Unit-IV**

**Theory of Taxation:** Various approaches to taxation, neutrality, equity, ability to pay, benefit principle, revenue maximization, income maximization; analysis of incidence of taxes, elasticity, buoyancy and taxable, capacity, efficient tax design: optional taxation, effects of taxation on work effort, savings, investment and growth; classification of taxes: direct and indirect taxes, progressive, proportionate and regressive taxes, Advalorem and specific taxes; tax systems in India; structure, composition and various economic issues.

**Note: (A)** Nine questions would be set in all.

**(B)** Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

**(C)** There would be two questions (16 marks each) from each of four units.

**(D)** Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Masgrave R.A and Masgrave P.B., Public Economics in Theory and Practice, McGraw Hill.
- Stiglitz, J.E., Economics of Public Sector, J.W. Norton & Company.
- Singh, S.K., Public Finance in Theory and Practice, S. Chand & Co.
- Government of India, Ministry of Finance: Economics Survey (of various years).
- Raja J. Chaliah, Towards Sustainable Growth, Essays in Fiscal and Financial Sector Reforms in India,

- Oxford University Press, Delhi, 1996
- Deena Khatkhate (ed.), Money and Finance: Issue, Institutions, Policy, Sameeksha Trust, Orient Longman, 1998.
- Kunal Sen & Rajendra R. Vidya (ed.), Process of Financial Liberalization in India, Oxford University Press, 1997.
- Mundel Sudipto (ed.) Public Finance: Policy Issue of India.
- Brown C.V. and Jackson P.M. (1990), Public Sector Economic, Basil Blackwell, Oxford.
- M. Govindia Rao and Tapan Sen (1998), Financial Federalism in India.
- Atkinson A.B. and Stiglitz, J.E. (1980), Lectures on Public Finance, Tata Mcgraw Hill
- Auerbach, A.J. and M. Feldstern (ed.) (1985), Handbook of Public Economics, Vol-I, North Holland,
  - Amsterdam.
- Raghavendra Jha (1999), Modern Public Economics, Rotledge, London.
- Srivaslava D.K. (ed.) (2000), Fiscal Federalism in India, Har-Anand Publication Ltd., New Delhi.
- Bhargava P.K. (1991), India's Fiscal Crisis, Ashish Publishing House, New Delhi.
- Govt. of India, Ministry of Finance (1988), Sarkaria Commission Report on Centre-State Finance Relations.

**Semester-III**  
**16ECO23SF1 -Urban Economics-I (Soft Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

The concept and definition of *urban* and urbanisation.  
Analytical and historical perspective of the origin and evolution of urban settlements.

**Unit-II**

Analytical and historical perspective of the patterns of urbanisation.  
Urban transition and the components of urban growth.

**Unit-III**

Economic development and urbanisation: The role of urbanisation in economic development ; Role of economic development in redistribution of population.

**Unit-IV**

Rural-urban relationship: theory of urban bias, terms of trade and resource flow; the over-urbanisation debate.

**Note: (A)** Nine questions would be set in all.

**(B)** Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

**(C)** There would be two questions (16 marks each) from each of four units.

**(D)** Candidates would be required to attend five questions ( one compulsory and selecting one from each unit)

**Reading list:**

- O'Sullivan, A (2003) *Urban Economics* (3<sup>rd</sup>Edn.), IRWIN, London. (Chapters 1-4)
- HABITAT, 1996, *An Urbanizing World- Global Report on Human Settlements 1996*, Oxford University Press: New York
- Richardson, H.W (1988) *New Urban Economics*, Dryden Press, Hinsdale
- Balchin, Paul N, Issac, David and Chen, Jean (2000) *Urban Economics: a global perspective*, Palgrave, New York.
- United Nations, Department of Economic and Social Affairs, Population Division (2015). *World Urbanization Prospects: The 2014 Revision*, United Nations New York, 2015.
- Ratnoo, H.S. (2016) *Migration of Labour in India: The Squatter Settlements of Delhi* routledge: Abingdon, Oxford.

Note: A more comprehensive reading list will be provided during the course.



### Semester-III

#### 16ECO23OE- Principles of Economics (Open Elective Paper)

Max. Marks: 100

Written Exam:80

Time: 3 Hrs.

Internal Assessment: 20

#### Unit -1

Why study economics? The scope and method of economics; scarcity and choice; questions of what, how and for whom to produce and how to distribute output.

#### Unit-II

Indian Economy on the eve of Independence, British rule and its impact on Indian Economy, Emergence and development of Planning exercise in India – historical debates.

#### Unit-III

Trends and patterns in structure of population over time – growth rate, gender, rural-urban, literacy, regional; Structure and trends of Poverty and Inequality (interpersonal and regional); Inflation – trends, structure and causes; Unemployment – trends, structure and types.

#### Unit-IV

Trends in Agricultural Production and Productivity; Land Reforms – Genesis, Progress and current status; Green Revolution – Measures and its effects. Trends and Patterns of Industrial Sector; Changes in the structure of Indian Industry.

#### Note:

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit).)

#### Reading List:

- D.N. Divedi: Principles of Economics, 2<sup>nd</sup> Edition, Vikas Publication House.
- R Dutta and K P M Sundaram: Indian Economy, S Chand
- A.N.Agarwal: Indian Economy, Problems of Development and Planning, New Age.
- Mishra and Puri: Indian Economy, Himalaya.
- Planning Commission: Twelfth Five Year Plan, Vol I, II and III, Academic Foundation.
- Government of India: Economic Survey (latest issue).



### Semester-III

#### 16ECO23SO3 Haryana Economy (Soft Core Course)

Max. Marks: 100

Time: 3 Hrs.

Written Exam:80

Internal Assessment: 20

#### Unit-I

Regional Economics: Concept, Scope and Framework; Regional Economic Problems; Different Approaches to Regional Economic Analysis; Role of Transport Costs in Locational Decisions; Weber and Isard's theories, Agglomeration Economies and Diseconomies

#### Unit-II

Economic Structure of Haryana Economy; Agriculture in Haryana, Green Revolution Strategy, Growth and Productivity Levels; Irrigation strategy & levels, Agricultural Diversification, Rural Credit and Rural Indebtedness, Agricultural Marketing, Alternative Sustainable Agricultural Development Approaches; W.T.O. and Haryana Agriculture

#### Unit-III

Industry in Haryana: Pattern, Performance, Constraints and Challenges; Small Scale Industries: Role, Problems and future prospects; State and Industrial Development.  
State Finances: Sources of Revenue and Expenditure Pattern, Budgetary Deficits/Surplus, Financial Health of the State.

#### Unit-IV

Infrastructure: Power Sector: Organisational Structure, Performance, Haryana Electricity Regulatory Commission, Pricing Policies & Finances; Rural Electrification, Transport Sector, Urban Infrastructure, Haryana Urban Development Authority.

**Note:** (A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit)

#### Reading List:

- Harry W. Richardson: Regional Economics, Weidenfeld and Nicolson, London.
- Edger M. Hoover: An Introduction to Regional Economics, Alfred A. Knopf, New York.
- Harry W. Richardson: Elements of regional economics Penguin.
- D.R. Choudhary (2007), Haryana At Cross Roads: Problems and Prospects National Book Trust, India, New Delhi.
- S.P. Gupta, Three Decades of Haryana Economy, S P Publications, 144, Shivalik Enclave (NAC) Manimajra – 160101

- Ministry of Finance; Government of Haryana: Haryana Statistical Abstract (various issues)
- Ministry of Finance; Government of Haryana: Economic Survey (various Issues)
- Planning Commission, Govt. of India (2009): Haryana Development Report, Govt. of India, New Delhi.
- Various research papers and research studies.

## Semester- IV

### 16ECO24HC13 Indian Economy-II (Hard Core Paper)

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

#### Unit -I

Agriculture: Role and features of Indian agriculture; Technological change in agriculture; Trends in agricultural productions and productivity; WTO and Indian agriculture.

Poverty in India - Absolute and relative analysis of poverty.

#### Unit-II

Industry: Growth and pattern of industrialization; New industrial policy and liberalisation - impact on Indian economy; Public Sector enterprises - trends and performance; Small and cottage industries; issues of privatization.

Unemployment and Migration in India.

#### Unit-III

External sector: Structure and direction of foreign trade; Balance of payments; Issues in export-import policy and FEMA Exchange rate policy; Foreign capital and MNCs in India.

#### Unit-IV

Environment as necessity-amenity and public goods; causes of environmental and ecosystem degeneration-policies for controlling pollution-economic and persuasive; their relative effectiveness in LDCs; Relation between population, poverty and environment degradation-micro-planning for environment and eco-preservation-water sheds, joint forest management and self-help groups.

Role of State in environmental preservation -f Review of environmental legislation in India.

#### Note:

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit)).

#### Reading List:

- **Sen, R.K. and B. Chatterjee (2001), Indian Economy: Agenda/or 21st Century:**
- **Dhar, P.K., Indian Economy - Its growing dimensions, Kalyani Publishers, New Delhi (Latest Edition) Mishra, S.K. and V.K. Puri Indian Economy - 1st Development Experience, Himalaya Publishing House, Mumbai, Latest Edition.**
- **Economic Surveys, Governrnnet of India, various issues.**
- **Reserve Bank ofIndia, Report on Currency and Finance (Annual).**

**Semester-IV**  
**16ECO24HC14 International Trade and Finance-II (Hard Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

Foreign trade multiplier with and without foreign repercussions and determination of national income and output; Relative merits and demerits of fixed and flexible exchange rate in the context of growth and development in developing countries. Forms of economic cooperation; Static and Dynamic effects of a custom union and free trade areas.

**Unit-II**

International Monetary System and Trade Policies in India: Multilateralism and WTO; Rise and falloff gold standard and Bretton-Wood system; Need, adequacy and determinants of international reserves; Conditionality clause of IMP; Emerging International Monetary System with special reference to Post Maastricht developments and developing countries; Reforms of the International Monetary System, Theory of regionalism at global level - collapse of Brettonwood system. Optimum currency Areas - Theory and impact in the developed and developing countries.

**Unit-III**

Indian and developing countries; Functions of GATT/WTO (TRIPS; TRIMS); Recent changes in the direction and composition of trade and their implication; Rationale and impact of trade reforms since 1991 on balance of payments, employment and growth.

**Unit-IV**

Problems of India's International debt; Working and regulations of MN9 in India, Instrument of export promotion and recent import and export policies and agenda for future.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Bhagwani, J. (Ed~) (1981), International Trade, Selected Readings, Cambridge University press, Massachusetts.

- Carbouth, M. (1999), International Economics, International Thompson Publishing, New York.  
Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
- Dana, M.S. (2000), International Economics: Study Guide and Work Book (5/1 Edition), Rutledge Publishers, London.'
- Dunn,R.M. and I.H. Mutt (2000), International Economics, Rutledge Publishers, London.
- Kenen, P.B. (1994), The International Economy, Cambridge University Press, ~ondon.



**Semester-IV**  
**16ECO24SA2 Agricultural Economics-II (Soft Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

Land Reforms in India: Agricultural Development and Tenurial conditions: Land Reforms - The Theoretical Issues (Meaning, Important changes caused by Land Reform and Objectives of Land Reforms); Land Reforms; Ceiling on Land Holdings; Implementation of Land Reforms in India. Strategy for Development of Indian Agriculture; The Green Revolution; Factors responsible for Green Revolution; Economics Benefits of Green Revolution; Measures for making Green Revolution all pervasive; Regional disparities created by Green Revolution; Inter-farm disparity in Income; Green Revolution and Employment. Trends in Migration and Labour markets; Minimum Wages Act.

**Unit-II**

Terms of Trade between Agriculture and Industry: Meaning; Impact of change in terms of trade in favour of and against agriculture; changes in terms of trade between agriculture and industry during the course of economic development; Terms of trade between agriculture and industry in India since Independence; Agricultural Marketing: Need for an efficient system of agricultural marketing; Efficiency of agricultural Marketing system in India; Measures to improve the efficiency of agricultural marketing in India. Cooperative movement in India - organization structure and development of different types of cooperatives in India.

**Unit-III**

Agricultural Credit: Importance of agricultural credit; Sources (formal and informal), problems and Government policies since Independence. Capital formation in the rural sector - savings, assets and credits. Issues in Agriculture price policy: objectives of Agricultural Price Policy; Main elements of Agricultural Price Policy; Agricultural Price Policy in India: Its evolution; objectives of Price policy in India; Important constitution of Agriculture Price Policy in India; Critical Evaluation of India's Agriculture Price Policy; Need for Revision of Agricultural Price Policy in India.

**Unit-IV**

The New Economic Policy and Indian Agriculture: Macro Economic Stabilization measures; structural Adjustments in the Agricultural Sector. World Trade Organization and Indian Agriculture; Model of Production Debate: Private V /s Public investment in Agriculture; Trends in public and private investment in Indian Agriculture.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:** As suggested in Semester 3<sup>rd</sup>.

## Semester-IV

### 16ECO24SB2 Econometrics –II (Soft Core Paper)

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

#### Unit-I

Dynamic Econometric Models: Autoregressive and distributed lag models - Koyck Model, Adaptive expectation and Partial Adjustment approaches for rationalization of Koyck models, Estimation of Autoregressive models, Granger causality and cointegration.

#### Unit-II

Dummy variable Regression Models: The Nature of Dummy variable, caution in the use of Dummy variables, ANOVA MODELS with two qualitative variables, ANCOVA MODELS, The use of Dummy variables in seasonal analysis and Interaction Effects.

#### Unit-III

Simultaneous equations model: The simultaneous equation bias and inconsistency of OLS estimators; The identification problem; Rules of identification - order and rank conditions (statement only), Methods of estimating simultaneous equation system: Indirect Least squares (ILS), 2 SLS (Two state least squares), Least variance ratio method, Sure (seemingly unrelated regression method). Estimation of Translog Production and Translog cost function.

#### Unit-IV

Time series Econometrics: Key concepts - stochastic process; stationarity and non stationarity process, purely random process, Random walk models co-integration, Integrated variables, Deterministic and stochastic trends and unit root.

Techniques of forecasting - ARMA, VARIMA Models, Box-Jenkins methodology.

#### Note:

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit)).

#### Reading List:

- Gujarati, D.N. (1995), Basic Econometrics (2nd Edition), McGraw Hill, New Delhi.
- Koutsoyiannis, A. (1997), Theory of Econometrics (2nd Edition), The Macmillan Press Ltd., London.
- Johnston, J. (1991), Econometric Methods, McGraw Hill Book Company, London.
- Maddala, G.S. (1993), Econometrics Methods and Applications, (2 Vol.), Alder shot, U.K.

- Krishna K.L. (1997), *Econometrics Application in India*, Oxford University Press, New Delhi.
- Kmenta, J. (1997), *Elements of Econometrics*, University of Michigan Press, New York.
- Intrilligator, M.D. (1978), *Econometrics Techniques and Applications*, Prentice Hall, New Jersey.
- Pindyck, R.S. and D.L. Rubinfeld (1976), *Econometric Models and Economic Forecasts*, McGraw Hill, Tokyo.
- Frances, P. H. (1998), *Time Series Models for Business and Economic Forecasting*, Cambridge University Press, Cambridge.

**Semester-IV**  
**16ECO24SC3 Financial Institutions and Markets-II (Soft Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

Proliferation of banking and non-bank financial intermediaries - Effectiveness of monetary Policy - Credit creation and its control; Profitability and efficiency of banks.

Commercial banks and Co-operative banks.

**Unit-II**

Development banks- Role and functions; Investment and merchant banking; Financial sector reforms in India - Definition and types of non-bank financial institutions: Their growth and impact on India's economic development, Measures taken to control their operations.

**Unit-III**

Role of money market and capital market: Call money market, Treasury bill market, Commercial bill market including commercial ECN and certificate of deposits, Discount market - Government securities market - Market for derivation: future and options, and other derivatives: types, uses and pricing of derivation - Primary and secondary market for securities.

**Unit-IV**

SEBI: its impact on the working of capital market in India; IRDA and its role in financial markets - Theory of optimum currency areas - Euro-dollar and Euro-Currency markets - Their development role at international level.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit)).

**Reading List:**

- Bhole, L.M. (1999), Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi.
- Bhole, L.M. (2000), Indian Financial System, Chugh Publications, Allahabad.
- Edminster, R.O. (1986), Financial Institutions, Market and Management, McGraw Hill, New York.
- Goldsmith, R.W. (1969), Financial Structure and Development, Yale, London.

- Hanson, J.A. and S. Kathuria (Eds.) (1999), *India: A Financial Sector for the Twenty-first Century*, Oxford University Press, New Delhi.
- Karker, P.T. and S.A. Zenios (2000) (Ed.), *Performance of Financial Institutions*, Cambridge University Press, Cambridge.
- Johnson, H.J. (1993), *Financial Institutions and Markets*, McGraw Hill, New York.
- Khan M. Y. (1996), --*Indian Financial Systems*, Tata McGraw Hill, New Delhi.
- Machiraju, M.R. (1999), *Indian Financial System*, Vikash Publishing House, New Delhi.
- Ohlson, J.A. (1987), *The Theory of Financial Markets and Institutions*, North Holland, Amsterdam.
- Prasad, -K.N. (2001), *Development of India's Financial System*, Sarup & Sons, New Delhi.
- Robinson, R.I. and D. Wrightman (1981), *Financial Markets*, McGraw Hill, London.
- Smith, P.F. (1978), *Money and Financial Intermediation: The Theory and Structure of Financial System*, Prentice Hall, Englewood-Cilffs, New Jersey.
- Harvey, A.C. (1981), *Econometric Analysis of Time Series*, Phillip Allen, London.
- Madnani, G.M.K. (1999), *Introduction of Econometrics*.
- Intrilligator, M.J. and Hasio Badkin (1996), *Econometric Models, Techniques and Applications*, Prentice Hall.

**Semester-IV**  
**16ECO24SD2 Mathematical Economics-II (Soft Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

Constrained optimization of a producer; Generalization of n variable case; Input demand function; Adding up theorem; Technical progress through production function; Analysis of joint profit maximization and multiproduct firm; Production possibility curve; Empirical uses of production function analysis.

**Unit-II**

Idea of self dual functional form; derivation of short run -long run cost function; Cobb-Douglas (CD) and Translog (TL) cost functions.

**Unit-III**

Price determination in perfect competition, monopoly, monopolistic competition, duopoly, oligopoly; Pricing of factors of production; Bilateral monopoly; Single market equilibrium - Marshallian and Walrasian equilibrium conditions; Lagged market equilibrium: Multi-market equilibrium system of Walras;

**Unit-IV**

Classical and Keynes' macro system; Static and dynamic multiplier; Determinants of investment; Accelerator; trade cycle model of Samuelson and Hicks; harrod problem; Neoclassical model of growth; Solow and Meade growth models with technical progress; Optimal growth; and golden rule of accumulation.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit)).

Suggested Reading

- Allen, R.G.D. (1976), *Mathematical Economics*, Macmillan, London.
- Arrow, K.J. and M. Intrilligator (Eds.) (1982), *Handbook of Mathematical Economics*, Volumes I, II and III, North Holland, Amsterdam.
- Henderson, J.M. and R.E. Quandt (1980), *Microeconomic Theory: A Mathematical Approach*, McGraw Hill, New Delhi.
- Chung, J.W. (1993), *Utility and Production: Theory and Applications* Basil Blackwell, London.
- Ferguson, C.E. (1976), *Neo-Classical Theory of Production and Distribution*.



**Semester-IV**  
**16ECO24SE2 Public Economics-II (Soft Core Paper)**

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

**Unit-I**

**Fiscal Federalism:** Principles of multi-unit finance; principles of grant design; Indian fiscal federalism, vertical and horizontal imbalances, assignment of functions and sources of revenue; constitutional provisions; Finance . Commissions and Planning Commission.

**Unit-II**

Centre-State financial relations in India, problems of State's resources and indebtedness; transfer of resources from Union to States and, States to Local Bodies. Public Finance - Trends in revenue and expenditures of the Central and State Governments.

**Unit-III**

**Fiscal Policy:** Instruments and transmission mechanisms; fiscal policy for stabilization-automatic vs. discretionary stabilization; various concepts of budgetary deficits; fiscal deficit in India: extend, trend and, implication.

**Unit-IV**

Public debts: India's public debt since 1951-growth, composition, ownership pattern and debt management.

Fiscal reforms in India.

**Note:**

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions ( one compulsory and selecting one from each unit))

**Reading List:**

- Masgrave R.A and Masgrave P.B., Public Economics in Theory and Practice, McGraw Hill.
- Stiglitz, J.E., Economics of Public Sector, J.W. Norton & Company.
- Smgh, S.K., Public Finance in Theory and Practice, S. Chand & Co.
- Government of India, Ministry of Finance: Economics Survey (of various years).
- Raja J. Chaliah, Towards Sustainable Growth, Essays in Fiscal and Financial Sector Reforms in India, Oxford University Press, Delhi, 1996
- Deena Khatkhate (ed.), Money and Finance: Issue, Institutions, Policy, Sameeksha Trust, Orient Longman, 1998. .
- Kunal Sen & Rajendra R. Vidya (ed.), Process of Financial Liberalization in India, Oxford University , Press, 1997.
- Mundel Sudipto (ed.) Public Finance: Policy Issue of India.
- Brown C.V. and Jackson P.M. (1990), Public Sector Economic, Basil Balackwell, Oxford.
- M. Govindia Rao and Tapan Sen (1998), Financial Federalism in India.
- Atkinson A.B. and Stightz, J.E. (1980), Lectures on Public Finance, Tata McGraw Hill.

- Auerbach, A.J. and M. Feldstern (ed.) (1985), Handbook of Public Economics, Vol-I, North Holland, Amsterdam.
- Raghavendra Jha (1999), Modern Public Economics, Rotledge, London.
- Srivastava D.K. (ed.) (2000), Fiscal Federalism in India, Har-Anand Publication Ltd., New Delhi.
- Bhargava P.K. (1991), India's Fiscal Crisis, Ashish Publishing House, New Delhi.
- Govt. of India, Ministry of Finance (1988), Sarkaria Commission Report on Centre-State Finance Relations.

## Semester-IV

### 16ECO24SF2: Urban Economics-II (Soft Core Paper)

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

#### Unit-I

Migration and urbanisation: The concept and definition of migration. Classical and Marxist understanding of labour migration. Theories of migration in the context of the developing countries: Hoselitz; Harris and Todaro.

#### Unit-II

The alternative perspectives on labour migration: Williamson, Ellis and Harris, Stark.

#### Unit-III

Salient features of urbanisation: the World, India and the National Capital Region of India

#### Unit-IV

Issues and problems in the urbanisation: Urban poverty and productivity; Urban land and housing; Urban environment; Urban governance.

**Note: (A)** Nine questions would be set in all.

**(B)** Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

**(C)** There would be two questions (16 marks each) from each of four units.

**(D)** Candidates would be required to attend five questions (one compulsory and selecting one from each unit.)

#### **Reading list:**

- O'Sullivan, A (2003) *Urban Economics* (3<sup>rd</sup>Edn.), IRWIN, London. (Chapters 1-4)
- HABITAT, 1996, *An Urbanizing World- Global Report on Human Settlements 1996*, Oxford University Press: New York
- Richardson, H.W (1988) *New Urban Economics*, Dryden Press, Hinsdale
- Balchin, Paul N, Issac, David and Chen, Jean (2000) *Urban Economics: a global perspective*, Palgrave, New York.
- United Nations, Department of Economic and Social Affairs, Population Division (2015). *World Urbanization Prospects: The 2014 Revision*, United Nations New York, 2015.
- Breman, J. (2010). *Outcast labour in Asia: Circulation and informalization of the work force at the bottom of the economy*. New Delhi: Oxford University Press.
- Buchanan, D.H. (1966). *The development of capitalist enterprise in India*. London: Frank Cass & Co. Ltd.
- Ellis, F. and Harris, N. (2004). *Development patterns, mobility and livelihood diversification*. Keynote Paper for DFID Sustainable Development Retreat, University of Surrey, Guildford.

**Note: A more comprehensive reading list will be provided during the course.**



