

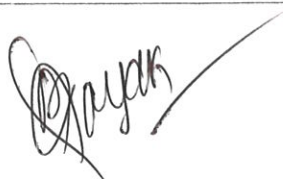
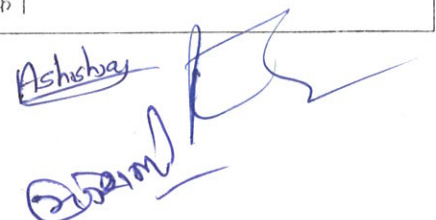
Course Code	Development and Environment Economics (DSE/GE/15A)	L	T	P	C
BEC0N20Y301	विकास एवं पर्यावरण अर्थशास्त्र	3	2	0	5
Pre-Requisite	Nil	Syllabus Version			
		50 Marks			
Course Objectives :-					
<ul style="list-style-type: none"> • To enable the students to understand the theories and strategies of growth and development • To impart knowledge about the issues relating to sustainable development, environmental protection and pollution control measures. 					
Course Outcome :-					
<p>This course will help in analyzing the Linkages between economics and environment. In recent years economic development is closely linked up with environmental concerns. Development and market linkages are important issues to know. Moreover, the global environmental issues are also important issues to have knowledge.</p> <ul style="list-style-type: none"> • understand Nature and scope of environmental economics, Economy-environment interaction • Analyze Market failure, externality, public good-Environment as a public good, Tragedy of Commons • Understand Environmental Kuznets's Curve, Pollution Control Policies: Command and control Approach, Incentive based approach: Taxes, Liability Law and tradeable permits • Understanding Global Environmental Issues: Climate Change – Implications and Mitigation 					
Student Learning Outcome :-					
A Master's candidate is expected to acquire in-depth and specialized disciplinary competence through their education in a Social Science research environment. The candidate is expected to have comprehensive knowledge of their discipline's methodology and scientific foundations. The Master's degree program prepares a candidate for participation in research projects and for doctoral studies.					
UNIT - I					15 hour
Economics Growth and Development - Concept, Characteristics of Developing Countries, Factors of Economics Development and Growth- Capital, Physical and Human Recourses, Research & Development and Technology.					
आर्थिक वृद्धि और विकास – अवधारणा, विकासशील देशों की विशेषताएं, आर्थिक वृद्धि और विकास के तत्व – पूंजी, भौतिक और मानव संसाधन, अनुसंधान और विकास एवं तकनीक।					
UNIT - II					15 hour
Theories of Economic Development - Adam Smith, Karl Marx and Schumpeter, Restow's Stages of Economics Growth, Investment Criteria of Economic Development, Human Resource Development.					
आर्थिक विकास के सिद्धांत – एडम स्मिथ, कार्ल मार्क्स, शुम्पीटर। रोस्टोव की आर्थिक विकास की अवस्थाएं। आर्थिक विकास के निवेश मापदण्ड। मानव संसाधन विकास।					
UNIT - III					15 hour
Balanced Vs. Unbalanced Growth -Theories of Big push (Rodan). A.L. ewis, Herschman, Leibenstein, Gunnar Myrdal, and Harrod - Domar, Kuznets Model.					
संतुलित बनाम असंतुलित विकास – बड़े धक्के का सिद्धांत (रोडान), ए.लुईसा हर्ष गैन, लीबिसटीन, गुन्नार मिर्डल, हैरोड – डोमर, कुजनेट्स मॉडल।					

Mayar

Achshay
विकास

UNIT - IV	15 hour
Economics Development and Gender Equality, Gender Gender Development Index (GDI) Women Empowerment, Choice of Techniques of Development - Capital Intensive and Labour intensive Techniques, Human Development Index.	
आर्थिक विकास और लिंग समानता। महिला सशक्तिकरण, लैंगिक विकास सूचकांक (जीडीआई) विकास की तकनीक का चुनाव - पूंजी प्रधान एवं श्रम प्रधान तकनीक। मानव विकास सूचकांक।	
UNIT - V	15 hour
Environment Economics - Concepts, Components and Factors affecting Environments, Environment - Economy Linkage, Population - Environment linkage, Market Failure for Environment Goods. Concept of Sustainable Development, Valuation of Environment Damages - Land, Water, Air and Forest, Prevention and Control, Prevention of Pollution. Renewable and non- Renewable Resources, Green Index - Concept.	
पर्यावरण अर्थशास्त्र - अवधारणा, घटक एवं पर्यावरण को प्रभावित करने वाले कारक अर्थव्यवस्था - जनसंख्या अंतर्संबंध, जनसंख्या - पर्यावरण अंतर्संबंध, बाजार विफलता के रूप में पर्यावरणीय वस्तु। धारणीय विकास की अवधारणा, पर्यावरणीय क्षति का आकलन - भूमि, जल, वायु और वन। पर्यावरण प्रदूषण निवारण और रोकथाम। पुनरुत्पादनीय एवं गैर पुनरुत्पादनीय संसाधन, हरित सूचकांक की अवधारणा।	
REFERENCES BOOKS	
1. Ray, Debraj (2009). Development Economics, Oxford University Press, 2009 2 Dasgupta, Partha (2007), Economics, A Very Short Introduction, Oxford University Press, 2007. 3 Banerjee, Abhijit (2006), Roland Benabou and Dilip Mookerjee, Understanding Poverty, Oxford University Press, 2006.	

Course Code	Statistics (DSE/GE/15B)	L	T	P	C
BEC0N20Y302	सांख्यिकी	3	2	0	5
Pre-Requisite		Syllabus Version			
		50 Marks			
Course Objectives					
<ul style="list-style-type: none"> • To enhance the ability of decision making in uncertain situation • To develop the skill of scientific investigation (using Hypothesis Testing) for statistical Inference • Course Learning Outcomes On completion of this course 					
Course Outcome					
<ul style="list-style-type: none"> • Explain the concepts of Statistical Method and its application in energy sector • Associate the current economic phenomenon with existing theory of Statistics. • Apply the principle of Statistics in explaining the behaviour of energy market. • Extend the concepts of Statistics in unfolding the dynamics of energy sectors. 					
Student Learning Outcome					
<p>Students will be able to explain the concepts of base & functional areas of management.</p> <p>Students will demonstrate effective oral and written communication skills in the professional context.</p> <p>Students will be able to work effectively in teams and demonstrate team building capabilities.</p> <p>Students will be able to evaluate the legal, social and economic environments of business.</p> <p>Students will be able to describe the global environment of business</p> <p>Students will demonstrate sensitivity towards ethical and moral issues and have ability to address them in the course of business.</p> <p>Students will be able to apply decision-support tools to business decision making.</p> <p>Students will be able to apply knowledge of business concepts and functions in an integrated manner.</p> <p>Students will demonstrate conceptual knowledge of Energy Economics</p>					
UNIT - I					15 hour
Meaning and Definition of Statistics, Nature and Scope, Functions, Importance and Limitations of Statistics, Universe and Sample, Techniques, of Data Collection, Classification, Tabulation, Graphic Representation of Data, Frequency Distribution, Cumulative Frequency.					
सांख्यिकी का अर्थ एवं परिभाषा, प्रकृति एवं क्षेत्र, सांख्यिकी के कार्य, महत्व एवं सीमाएं समग्र एवं न्यादर्श, समंक संकलन की विधियां, वर्गीकरण, सारणीयन, समकों का बिन्दु रेखीय प्रदर्शन, आवृत्ति वितरण, संचयी आवृत्ति ।					
UNIT - II					15 hour
Measures of Central Tendency : Mean, Median, Mode, Geometric Mean and Harmonic Mean, Measures of Dispersion :- Range, Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of Variation.					
केन्द्रीय प्रवृत्ति के मापन – माध्य, माध्यिका, बहुलक, ज्यामितीय माध्य, हरात्मक माध्य, अपकिरण के मापन – विस्तार, चतुर्थक विचलन, माध्य विचलन, प्रमाप विचलन, विचलन गुणांक।					
UNIT - III					15 hour
Correlation - Karl Pearson's Co-efficient of Correlation, Spearman's Rank difference, Regression Analysis, Regression Equation, Co-efficient of Regression. Use of Regression and Correlation Analysis.					
सहसंबंध – कार्ल पियरसन का सहसंबंध गुणांक, स्पियरमैन का कोटि अंतर सहसंबंध गुणांक, प्रतीपगमन विश्लेषण, प्रतीपगमन समीकरण, प्रतीपगमन गुणांक, प्रतीपगमन एवं सहसंबंध का उपयोग।					
UNIT - IV					15 hour
Time Series Analysis, Concept and Component, Additive and Multiplicative Model, Index Numbers - Concept, Type, Importance, Problems. In the Construction of Index Number of Their limitations. Laspaire, Passche's and Fisher's Index Numbers.					
काल माला का विश्लेषण, संकल्पना एवं घटक, योगात्मक एवं गुणात्मक प्रादर्श, सूचकांक की अवधारणा, प्रकार महत्व सूचकांक निर्माण की समस्याएं एवं सीमाएं लैस्पायर, पाश्चे एवं फिशर का सूचकांक।					

प्रायिकता : अवधारणा, प्रायिकता के नियम, सशर्तक प्रायिकता, अनुसंधान अवधारणा एवं प्रकार, अनुसंधान चयन की समस्या। परिकल्पना – अवधारणा एवं प्रकार, अनुसंधान प्रतिवेदन लेखन।

REFERENCE BOOKS

1. Hogg, R.V., Tanis, E.A. and Rao J.M. (2009): Probability and Statistical Inference, Seventh Ed, Pearson Education, New Delhi.
2. Gupta, S. P. & Gupta, M. P. (2014), Business Statistics, Sultan Chand Publishing House, ISBN: 9788180549458.
3. Miller, Irwin and Miller, Marylees (2006): John E. Freund's Mathematical Statistics with Applications, (7th Edn.), Pearson Education, Asia.
4. Myer, P.L. (1970): Introductory Probability and Statistical Applications. Oxford & IBH Publishing, New Delhi