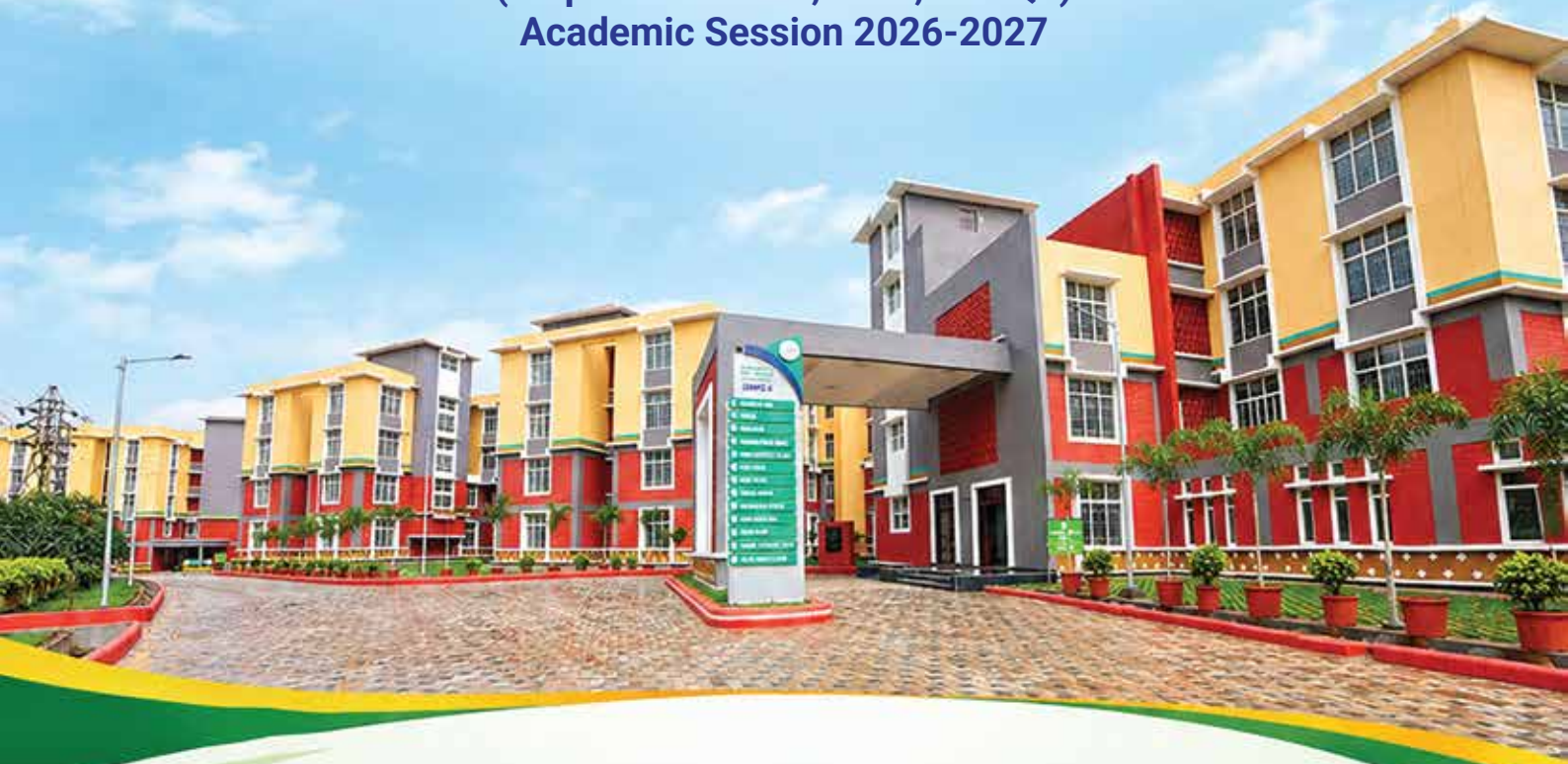
KISS

KALINGA INSTITUTE OF SOCIAL SCIENCES

CURRICULUM AND CREDIT FRAMEWORK FOR POSTGRADUATE PROGRAMME

SCHOOL OF TRIBAL RESOURCE MANAGEMENT (STRM)

(As per NEP-2020, NCrF, NHEQF)
Academic Session 2026-2027



DEPARTMENT OF ECONOMICS

SCHOOL OF TRIBAL RESOURCE MANAGEMENT

KALINGA INSTITUTE OF SOCIAL SCIENCES (KISS)
DEEMED TO BE UNIVERSITY

Higher Education Campus, KISS Campus-3, Bhubaneswar, Odisha, 751024
https://university.kiss.ac.in | https://kiss.ac.in

About the Department / School and Programme

About the School

The School of Tribal Resource Management (STRM), KISS Deemed to be University, established in 2027-18, addresses emerging academic, developmental, and societal needs through interdisciplinary and multidisciplinary programmes. The school strives to meet local, regional, national, and global standards while advancing tribal resource management, indigenous knowledge systems, and sustainable development.

About the Department

The Department of Economics, under the School of Tribal Resource Management (STRM), KISS Deemed to be University, established in 2008, addresses emerging academic, developmental, and societal needs through interdisciplinary and multidisciplinary programmes. The School strives to meet local, regional, national, and global standards while advancing tribal resource management, indigenous knowledge systems, and sustainable development.

Vision & Mission of the School

Vision

Emerge as an internationally acclaimed School recognized for excellence in teaching, research, consultancy, outreach, skill development, and social entrepreneurship, while promoting cultural heritage and diversity.

Mission

- Foster all-round development through multi-faceted education.
- Focus on sustainable resource management through innovative courses.
- Engage with communities to promote entrepreneurship and leadership.
- Manage resources effectively to create employment and self-employment opportunities.

Programme Overview

Programme Title:

MA Economics

Programme Type:

Postgraduate

Programme Description

The Master of Arts (M.A.) in Economics is a two-year postgraduate programme designed in accordance with the National Education Policy (NEP) 2020 and the UGC Curriculum and **Credit** Framework for Postgraduate Programmes (CCFPG)**.** The programme provides advanced knowledge of economic theories, quantitative techniques, policy analysis, and research methodologies while fostering analytical thinking, ethical values, innovation, and lifelong learning. It equips students with the conceptual understanding and practical skills required to analyse contemporary economic issues at the local, national, and global levels.

The programme adopts an interdisciplinary and multidisciplinary approach, integrating Economics with Tribal Resource Management, Public Policy, Data Analytics, Artificial Intelligence, Environmental Studies, Health, Education, Sustainable Development, and Research Ethics. It enables students to apply economic principles in addressing complex developmental challenges through evidence-based analysis, field engagement, and policy-oriented research. The curriculum emphasizes experiential learning through internships, academic excursions, fieldwork, dissertation, case studies, seminars, and the application of modern digital tools for economic analysis.

A distinctive feature of the programme is its tribal development orientation, reflecting the vision and mission of KISS Deemed to be University. The curriculum incorporates courses on Sustainable Tribal Development, Tribal Resource Management, Economics of Tribal Resources, Odisha Economy, and Indian Economic Policy**,** enabling students to understand the socio-economic conditions of tribal and marginalized communities. It promotes inclusive growth, sustainable livelihood development, indigenous knowledge systems, natural resource management, and participatory development planning. Students are encouraged to undertake field-based research and community engagement to formulate practical and sustainable solutions to real-world developmental challenges.

The programme is aligned with the United Nations Sustainable Development Goals (SDGs)**,** particularly SDG 1 (No Poverty), SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure), SDG 10 (Reduced Inequalities), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), and SDG 16 (Peace, Justice and Strong Institutions)**.** It integrates sustainability, social responsibility, environmental awareness, and ethical decision-making across the curriculum to prepare graduates capable of contributing to inclusive and sustainable development.

In alignment with **NEP 2020**, the programme follows an **Outcome-Based Education (OBE)** framework that emphasizes flexibility, multidisciplinary learning, digital literacy, research competence, innovation, entrepreneurship, and experiential learning. Students develop advanced competencies in economic modelling, econometric analysis, policy evaluation, research design, communication, leadership, and professional ethics. The programme prepares graduates for careers in academia, research institutions, government organizations, financial institutions, development agencies, non-governmental organizations, corporate sectors, public policy, and entrepreneurship, while also providing a strong foundation for doctoral studies and lifelong learning.

Process of Curriculum Development

All Schools shall follow the standard KISS-DU curriculum development protocol:

1. Formation of Syllabus Committee with domain experts.
2. Consultation with stakeholders (students, alumni, employers, community).
3. Review and approval by School faculty.
4. Vetting by Board of Studies (BoS) with external experts.
5. Final approval by the Academic Council.
6. Integration of NEP-2020, CBCS, NCrF, and NHEQF guidelines.

Definitions of Components

a) Academic Bank of Credits (ABC):

The Academic Bank of Credits (ABC) is a digital repository introduced by the University Grants Commission (UGC) to facilitate academic mobility. It enables students to earn, accumulate, transfer, and redeem credits earned from recognized Higher Educational Institutions (HEIs) through multiple modes of learning, thereby promoting flexibility in higher education in accordance with the National Education Policy (NEP) 2020.

b) Academic Year:

An academic year consists of **two consecutive semesters**, each of approximately **90 teaching days**, excluding examinations.

c) Credit-Based Semester System (CBSS):

The Credit-Based Semester System organizes the curriculum into semesters and measures student learning in terms of credits. The award of the postgraduate degree is based on the successful completion of the prescribed number of credits.

d) Credit:

A credit is a unit for measuring the academic workload of a student. Generally, one credit is equivalent to one hour of lecture/tutorial or two hours of practical, laboratory, fieldwork, internship, or project work per week during a semester**,** as per UGC norms.

e) Core Course (CC):

Core Courses are compulsory courses that provide advanced theoretical knowledge, analytical ability, and practical understanding in Economics. These courses constitute the fundamental academic foundation of the postgraduate programme.

f) Discipline-Specific Elective (DSE):

Discipline-Specific Elective courses allow students to choose advanced areas of specialization within Economics, enabling them to deepen their knowledge in selected domains according to their academic interests and career aspirations.

g) Specialization Course:

Specialization courses provide focused knowledge and practical skills in a specific area of Economics, such as **Tribal Resource Management**, enabling students to address contemporary socio-economic and developmental challenges through interdisciplinary approaches.

h) Skill Enhancement Course (SKC):

Skill Enhancement Courses are designed to develop practical, technical, analytical, digital, and professional competencies that enhance employability, entrepreneurship, research capability, and lifelong learning. These courses include hands-on training in software, artificial intelligence, data analytics, and economic applications.

i) Research Methodology and Research Ethics:

These courses develop competencies in scientific research, research design, quantitative and qualitative methods, academic writing, publication ethics, intellectual property rights, plagiarism awareness, and responsible conduct of research.

j) Internship / Academic Excursion / Fieldwork:

Internship, academic excursion, and fieldwork provide experiential learning opportunities that expose students to real-world economic, social, institutional, and tribal development issues. These activities strengthen analytical, observational, communication, and problem-solving skills through interaction with government departments, industries, research organizations, NGOs, financial institutions, and tribal communities.

k) Dissertation:

The dissertation is an independent research project undertaken under the supervision of a faculty member. It enables students to identify research problems, review literature, collect and analyse data, apply appropriate research methodologies, and present findings in accordance with accepted academic and ethical standards.

l) Outcome-Based Education (OBE):

The programme follows the Outcome-Based Education framework, where teaching, learning, and assessment are aligned with clearly defined **Course Outcomes (COs), Programme Outcomes (POs), and Programme Specific Outcomes (PSOs)** to ensure measurable learning achievements.

m) Indian Knowledge System (IKS):

The curriculum integrates relevant aspects of the Indian Knowledge System, including indigenous economic practices, traditional resource management, tribal knowledge systems, and sustainable development approaches, thereby promoting culturally relevant and context-specific learning.

n) Multidisciplinary and Experiential Learning:

The programme encourages multidisciplinary learning by integrating Economics with Public Policy, Data Analytics, Artificial Intelligence, Environmental Studies, Tribal Development, and Management. Experiential learning is promoted through case studies, field visits, internships, research projects, seminars, and community engagement.

NCRF-Aligned Components (National Credit Framework)

1. Operational Definition of Credit (NCrF Standard)

In accordance with the **National Credit Framework (NCrF), 2024**, **National Higher Education Qualification Framework (NHEQF)**, **UGC Curriculum and Credit Framework for Postgraduate Programmes (CCFPG)**, and **National Education Policy (NEP) 2020**, the academic workload of students is measured in terms of **Notional Learning Hours (NLH)**.

One (1) Credit = 30 Notional Learning Hours (NLH).

The notional learning hours include all structured and self-directed learning activities such as classroom lectures, tutorials, practical sessions, laboratory work, fieldwork, internships, seminars, workshops, case studies, project work, dissertation, independent study, assignments, presentations, online learning, and examination preparation.

Accordingly:

- **2 Credit Course = 60 Notional Learning Hours**
- **4 Credit Course = 120 Notional Learning Hours**
- **20 Credit Dissertation/Fieldwork = 600 Notional Learning Hours**

2. NCrF-Compliant Course Engagement Table

Example: 4-Credit Theory Course (120 Notional Learning Hours)

Component	Operational Definition	Notional Learning Hours
Face-to-Face Teaching	Lectures, interactive discussions, seminars and concept delivery	45
Tutorials / Practical / Laboratory / Fieldwork	Data analysis, case studies, software applications, field exercises and practical learning	30
Independent Learning	Self-study, journal articles, literature review, assignments and presentations	20
Continuous Internal Assessment	Assignments, quizzes, seminars, case analysis, class tests and presentations	12
End Semester Examination Preparation	Revision, report writing, project completion and examination preparation	13
Total Notional Learning Hours	**30 Hours × 4 Credits**	**120**

3. Research, Internship and Dissertation Components

The postgraduate curriculum emphasizes **research-oriented and experiential learning** through structured coursework, field engagement, internship, and dissertation.

The programme includes:

- Research Methodology
- Research and Publication Ethics
- Academic Excursion / Internship Programme
- Field-based Data Collection
- Dissertation and Viva-Voce Examination

The **20-credit Dissertation** comprises approximately **600 Notional Learning Hours**, including proposal preparation, literature review, research design, fieldwork, data collection, statistical analysis, interpretation, dissertation writing, seminar presentation, and viva-voce.

4. MOOCs through SWAYAM and SWAYAM Plus

In accordance with the **UGC Guidelines for Online Learning** and the **Curriculum and Credit Framework for Postgraduate Programmes (CCFPG)**, students may earn academic credits through **SWAYAM** and **SWAYAM Plus**.

Higher Educational Institutions (HEIs) may permit students to earn **up to 40% of the total credits prescribed for a semester** through approved online courses, subject to the University's academic regulations and equivalence approved by the competent authority.

Credits earned through SWAYAM/SWAYAM Plus shall:

- be mapped to the appropriate **NHEQF Level**;
- be deposited in the student's **Academic Bank of Credits (ABC)**;
- be eligible for credit transfer and redemption towards the award of the postgraduate degree, in accordance with University and UGC regulations.

Students are encouraged to pursue MOOCs in emerging areas such as:

- Artificial Intelligence in Economics
- Applied Econometrics
- Data Analytics and Statistical Software
- Public Policy
- Sustainable Development
- Financial Markets
- Environmental and Climate Economics
- Digital Economy
- Entrepreneurship and Innovation
- Research Methodology

to strengthen interdisciplinary learning, employability, research competence, and lifelong learning.

5. Integration with Academic Bank of Credits (ABC)

The programme is integrated with the **Academic Bank of Credits (ABC)** to facilitate credit accumulation, transfer, redemption, and academic mobility. Credits earned through approved classroom learning, internships, research projects, SWAYAM courses, and other recognized learning platforms shall be digitally stored in the ABC and may be utilized in accordance with the provisions of **NEP 2020**, **NCrF**, **NHEQF**, and UGC regulations.

6. Alignment with NEP 2020 and NCrF

The M.A. Economics programme follows the principles of **Outcome-Based Education (OBE)** and is fully aligned with the **National Education Policy (NEP) 2020**, **National Credit Framework (NCrF)**, **National Higher Education Qualification Framework (NHEQF)**, and the **UGC Curriculum and Credit Framework for Postgraduate Programmes (CCFPG)**. The curriculum promotes multidisciplinary learning, research excellence, digital competency, experiential learning, professional ethics, sustainability, entrepreneurship, and lifelong learning while ensuring flexibility through the Academic Bank of Credits (ABC).

NCrF Category Wise Credit Distribution (UGC CCFUP Compatible) (for PG Programme)

M.A. Economics (90 Credits

Semester	Core Courses	Specialization Courses	Discipline Specific Electives (DSE)	Skill Enhancement Courses (SEC)	Research Components	Internship / Fieldwork / Dissertation	Total Credits
	No. of Courses / Credits	No. of Courses / Credits	No. of Courses / Credits	No. of Courses / Credits	No. of Courses / Credits	No. of Courses / Credits	
Semester I	4 / 16	1 / 4	–	1 / 4	–	–	**24**
Semester II	4 / 16	–	–	1 / 4	–	1 / 4	**24**
Semester III	–	1 / 4	1 / 4	1 / 4	2 / 6	–	**22**
Semester IV	–	–	–	–	–	1 / 20	**20**
Grand Total	**8 / 32**	**2 / 8**	**1 / 4**	**3 / 12**	**2 / 6**	**2 / 24**	**90**

Credit Distribution by Category

Course Category	No. of Courses	Credits
Core Courses	8	32
Specialization Courses	2	8
Discipline Specific Electives (DSE)	1	4
Skill Enhancement Courses	3	12
Research Components (Research Methodology & Research and Publication Ethics)	2	6

Internship / Academic Excursion	1	4
Dissertation / Fieldwork	1	20
Grand Total	**18**	**90 Credits**

Multiple Entry–Exit and Academic Mobility

The **M.A. Economics** programme is designed in accordance with the **National Education Policy (NEP) 2020**, the **National Credit Framework (NCrF)**, the **National Higher Education Qualification Framework (NHEQF)**, and the **UGC Curriculum and Credit Framework for Postgraduate Programmes (CCFPG)**. Academic credits earned by students shall be digitally stored in the **Academic Bank of Credits (ABC)** to facilitate credit accumulation, transfer, mobility, and lifelong learning.

The programme leads to the award of the **Master of Arts (M.A.) in Economics** upon successful completion of **90 credits**. Any provision for multiple entry and exit shall be implemented in accordance with the regulations of **KISS Deemed to be University** and the applicable UGC guidelines.

NCrF Compliance

The curriculum incorporates **Core Courses, Skill Enhancement Courses, Specialization Courses, Discipline Specific Electives, Research Methodology, Research and Publication Ethics, Internship, Fieldwork, and Dissertation** as credit-bearing components in accordance with the **National Credit Framework (NCrF)**. These components promote academic excellence, experiential learning, research competence, professional ethics, community engagement, digital literacy, and employability. Each course is assigned credits based on **30 Notional Learning Hours per Credit**, ensuring alignment with **Outcome-Based Education (OBE)** and the **UGC CCFPG**.

vii. Eligibility for Admissions with No. of Seats

As per the admission guidelines and brochure of the KISS Deemed to be University.

viii. Examination Pattern for PG as per NEP 2020

The medium of examination is English which will be reflected in their final grade sheet/certificate. Provided that for a language subject answers are to be in that language. Sanskrit may be written in Odia script but language has to be Sanskrit.

Duration of the Examinations-Mid Semester & End Semester:

Duration of examination for all term End examination shall be for 2.5 hours and for all Mid Term examination for 1 hour irrespective of full marks in the course/subjects and irrespective of credit. The practical examinations shall be of 2 hours duration.

Each School shall have a designated faculty as Examination Coordinator to be decided by the Vice Chancellor in addition to the Controller of Examinations of the University.

Continuous Evaluation and Mid Semester Examination:

a) Mid semester examination will be of 1-hour duration for 20/10 marks (20 for subjects having no practical and 10 for subject with practical papers). There shall be no pass mark in Mid Semester examination.

b) The Mid-Semester Examination shall be conducted and valued by the faculty who are teaching the corresponding paper. A student who fails to appear in a Mid-Semester Examination **will be allowed one more chance to** take the same examination before appearing the concerned term-end examination. There will be no provision to re-appear in the Mid-Semester Examination for improvement.

c) For subjects with practical there will be a Mid-Semester practical examination carrying 10 marks.

d) The University authority of the valuation zones will preserve the answer Script of the End Semester examination for 06 months from the date of publication of result for reference.

e) A student has to appear the mid semester examination positively. Absence in the mid semester examination will be considered as fail however the candidate may be allowed to appear the mid semester examination before commencement of the concerned Term-End examination under special case duly considered by the HoD (for the ***candidates who represent the University or State for Inter- University or inter-state competitions in Games and Sports or attending different recognized National level camps/any critical medical case duly certified by the designated medical officer).***

Distribution of Marks in End Semester and Continuous Evaluation: (Irrespective of credit in a course/Paper)

Course Type	Maximum Marks	Semester-End theory Mark	Continues Evaluation Marks /Sessional	Mid Semester theory Mark	Semester-End and Practical mark	Mid Semester Practical Mark
Without Practical	**100**	**60**	**20**	**20**	**----**	**--**
With Practical	**100**	**50**	**10**	**10**	**20**	**10**
Thesis/ Dissertation/ Seminar/Field Work	**100**	**------**	**-------**	**-------**	**-------**	**-------**

The modes of evaluation of **Thesis/ Dissertation/ Seminar/Field Work** shall be as follows:

Literature Review
Synopsis Presentation
Field Work / Data Collection and Data Analysis
Findings and Conclusions
Presentation and Viva-Voce

Distribution of Sessional Marks:(Continuous Evaluation)

Course Type	Maximum Mark	Mid Semester	Attendance	Surprise Test/Quiz/Viva	Assignment/ Presentation
Without Practical	**20**	**20**	**Above 95%-5 Marks 85%-94%-4 Marks 75%-84%-3 Marks**	**10**	**05**
With Practical	**20**	Theory 10 + Practical (10)=20		**05**	**Nil**

Examination Question Pattern of End Term Examination and Mark Distribution:

The evaluation process may cover summative and formative aspects and assess understanding applications, articulation, program and course outcome.

Question Pattern		With Practical	Without Practical
Part-I –Objective	Answer in MCQ/ in one word/in one sentence as directed	1x5=5	1x6=6
Part-II- Very Short Type	Answer within 50 words. Answer any 3 out of 5 questions (with practical) and Answer any 5 out of 7 question (without practical)	2x3=6	2x5=10
Part-III- Short Type	Answer within 250 words Answer any 3 out of 5 questions (with practical) and Answer any 4 out of 6 question (without practical)	5x3=15	5x4=20
Part-IV- Long Type	Answer within 800 words. Answer any 3 out of 5 questions	8x3=24	8x3=24
Total		50	60
For Practical Paper		One Major Experiment-10 Record- 05 Viva voce-05	---------

Examination Question Pattern of Mid Semester Examination and Mark Distribution

Question Pattern		With Practical	Without Practical

Part-I –Objective	**Answer in MCQ/ in one word/in one sentence as directed**	**1x3=3**	**1x6=6**
Part-II- Very Short Type	**Answer within 50 words. Answer any 1out of 2 questions (with practical) and Answer any 2 out of 3 question (without practical)**	**2x1=2**	**2x2=4**
Part-III- Short Type	**Answer within 250 words Answer any 1 out of 2 questions (with practical) and Answer any 2 out of 3 question (without practical)**	**5x1=5**	**5x2=10**
Total		**10**	**2 0**
For Practical Paper		**One Major Experiment-5 Record- 02 Viva voce-03**	---------

ix. Attendance Requirement

Attendance in Lecturer, tutorials, seminars etc. arranged by the school from time to time, is mandatory according to the Internal Assessment requirement as per University rules.

The marks for attendance shall be as follows		
(i)	For 75%	1 Marks
(ii)	More than 75% but less than 80%	2 Marks
(iii)	80% or more but less than 85%	3 Marks

(iv)	85% or more but less than 90%	4 Marks
(v)	90% and above	5 Marks

Award of Degree:

A Degree certificate under the official seal of the university and signed by the Vice-Chancellor shall be presented at the Convocation or in absentia to each of the successful students of particular degree. The Controller of Examinations shall issue the mark/grade sheet of each semester to the candidates in the sheet of each semester to the candidates in the prescribed format.

Duration and Types of Courses and Process of Multiple Entry and Exit

NHEQF-Aligned Components (National Higher Education Qualifications Framework)

1. NHEQF Level Mapping for Multi-Entry / Multi-Exit

"This programme is structured according to the multi-entry, multi-exit parameters defined by UGC. The progressive qualification bands map directly onto the National Higher Education Qualifications Framework (NHEQF)."

Insert the following table:

Milestone / Year Completed	Exit Award	NHEQF Level	Standard Credit Range
Year 1 (Sem I–II)	UG Certificate	Level 4.5	~40 + 4 credits in work based vocational courses offered during summer term or internship / Apprenticeship in addition to 6 credits from skill-based courses earned during first and second semester.
Year 2 (Sem III–IV)	UG Diploma	Level 5.0	~80 + 4 credit in skill based vocational courses offered during first year or second year summer term

Year 3 (Sem V–VI)	UG Degree (3-Year)	Level 5.5	~120
Year 4 (Sem VII–VIII) **Year 1(Sem I-II)**	UG Honours / Honours with Research Post-Graduate Diploma	Level 6.0	~160
Year 2(Sem III-V)	Master's degree (e.g. M.A., M.Com., M.Sc., etc.)	Level 6.5	80 Credits
	Doctoral Degree	Level 8.0	Credits for coursework and, a thesis and published work

Programme Educational Objectives (PEO)

(Schools may adapt these based on discipline.)

Programme Educational Objectives (PEOs)

The **Master of Arts (M.A.) in Economics** programme aims to prepare graduates with advanced disciplinary knowledge, analytical competence, research aptitude, professional ethics, leadership qualities, and a commitment to sustainable and inclusive development. Within **5–6 years** of graduation, graduates are expected to achieve the following Programme Educational Objectives:

PEO1: Professional Excellence and Employability: Develop competent professionals with advanced knowledge of Economics, quantitative and analytical skills, and digital competencies to build successful careers in academia, government, financial institutions, development organizations, industries, entrepreneurship, and public policy.

PEO2: Research, Innovation and Lifelong Learning: Cultivate research aptitude, critical thinking, innovation, and evidence-based decision-making to pursue doctoral studies, undertake interdisciplinary research, contribute to policy formulation, and engage in lifelong learning.

PEO3: Leadership, Entrepreneurship and Problem Solving: Develop leadership qualities, entrepreneurial mindset, communication skills, and analytical abilities to identify and solve complex socio-economic problems and contribute effectively to organizational and community development.

PEO4: Ethical Values, Social Responsibility and Sustainable Development: Instill professional ethics, constitutional values, environmental consciousness, and social responsibility to promote inclusive growth,

sustainable development, and equitable resource management with special emphasis on tribal and marginalized communities.

PEO5: Multidisciplinary Learning and Indigenous Knowledge Integration: Promote multidisciplinary learning by integrating modern economic theories with the **Indian Knowledge System (IKS)**, indigenous knowledge, tribal resource management, digital technologies, and sustainable development practices to address contemporary local, national, and global challenges.

NHEQF-Aligned Programme Educational Objectives (PEOs)

The Programme Educational Objectives are aligned with the **National Higher Education Qualification Framework (NHEQF)**, **National Education Policy (NEP) 2020**, and the **UGC Curriculum and Credit Framework for Postgraduate Programmes (CCFPG)**. They describe the achievements expected of graduates within **5–6 years** after completing the programme.

NHEQF Dimension	Programme Educational Objective
Employability	Equip graduates with advanced disciplinary knowledge, analytical ability, digital literacy, and professional competencies for successful careers in academia, government, financial institutions, development organizations, industries, and entrepreneurship.
Entrepreneurship	Develop entrepreneurial thinking, leadership qualities, innovation, and decision-making skills to create sustainable economic opportunities and contribute to socio-economic development.
Research Readiness	Foster research competence, critical inquiry, scientific temper, publication ethics, and evidence-based policy analysis for higher studies, doctoral research, and professional research careers.
Social Responsibility	Promote ethical values, constitutional principles, community engagement, inclusive development, environmental sustainability, and commitment to the welfare of tribal and marginalized communities.
Indian Knowledge System (IKS) & Indigenous Knowledge Integration	Integrate modern economic theories with the Indian Knowledge System, indigenous knowledge, tribal resource management, and sustainable development practices to address contemporary developmental challenges.

Programme Outcomes (PO)

The graduates of the **Master of Arts (M.A.) in Economics** programme shall be able to demonstrate the following Programme Outcomes upon successful completion of the programme:

PO	Graduate Attribute	Description
PO1	**Moral and Ethical Values**	Demonstrate integrity, professional ethics, constitutional values, academic honesty, research ethics, and social responsibility while addressing economic, developmental, and societal challenges.
PO2	**Disciplinary Knowledge**	Apply advanced theoretical and empirical knowledge of Economics, including microeconomics, macroeconomics, econometrics, public economics, development economics, environmental economics, tribal economics, and policy analysis to understand and solve complex economic issues.
PO3	**Communication Skills**	Communicate economic ideas, research findings, policy recommendations, and analytical reports effectively through oral presentations, academic writing, digital platforms, and professional interactions with diverse stakeholders.
PO4	**Critical Thinking, Problem Solving and Analytical Reasoning**	Critically evaluate economic theories, analyse socio-economic problems using quantitative and qualitative techniques, interpret empirical evidence, and formulate innovative, evidence-based solutions for real-world economic and developmental challenges.
PO5	**Indian Knowledge Systems (IKS)**	Integrate modern economic principles with the Indian Knowledge System, indigenous knowledge, tribal resource management, and traditional sustainable practices to promote inclusive and context-specific development.
PO6	**Research-Related Skills**	Design and conduct independent research by identifying research problems, reviewing literature, collecting and analysing data, applying appropriate research methodologies, adhering to publication ethics, and communicating findings effectively.
PO7	**Cooperation and Teamwork**	Work effectively as an individual and as a member or leader of multidisciplinary teams by demonstrating collaboration, interpersonal skills, mutual respect, and collective responsibility in academic, professional, and community settings.

PO8	**Digital Literacy**	Utilize modern digital technologies, statistical software, econometric tools, artificial intelligence, data analytics, and ICT applications for economic analysis, research, policy evaluation, and informed decision-making.
PO9	**Experiential and Lifelong Learning**	Demonstrate the ability to acquire, update, and apply knowledge continuously through experiential learning, internships, fieldwork, independent study, professional development, and lifelong learning practices.
PO10	**Leadership Qualities**	Exhibit leadership, innovation, entrepreneurship, accountability, resilience, empathy, and strategic decision-making while contributing to organizational effectiveness, public policy, and sustainable socio-economic development.
PO11	**Professional and Decision-Making Skills**	Apply professional competence, analytical reasoning, ethical judgment, adaptability, and evidence-based decision-making to address multidisciplinary economic and managerial issues in diverse professional environments.
PO12	**Environment Awareness and Sustainability**	Promote environmental stewardship, sustainable resource management, climate resilience, and inclusive development by integrating sustainability principles into economic planning, policy formulation, and community development initiatives.

Programme Specific Outcomes (PSO)

Upon successful completion of the **Master of Arts (M.A.) in Economics** programme, graduates shall be able to:

PSO1: Advanced Economic Knowledge and Policy Analysis

Demonstrate advanced knowledge of economic theories, quantitative methods, econometrics, public policy, development economics, environmental economics, tribal economics, and related disciplines to analyse contemporary economic issues at local, national, and global levels.

PSO2: Research, Data Analytics and Evidence-Based Decision Making

Design and conduct scientific research by applying appropriate quantitative and qualitative research methodologies, statistical and econometric techniques, digital tools, and data analytics to interpret economic phenomena and formulate evidence-based policy recommendations.

PSO3: Sustainable Development and Tribal Resource Management

Apply economic principles to promote sustainable development, inclusive growth, natural resource management, tribal development, livelihood enhancement, and community-based planning by integrating modern economic approaches with indigenous knowledge systems.

PSO4: Professional Competence, Employability and Entrepreneurship

Demonstrate professional competence, communication, leadership, digital literacy, problem-solving, and entrepreneurial skills required for careers in academia, research organizations, government, financial institutions, industries, development agencies, and self-employment.

PSO5: Ethical Leadership and Lifelong Learning

Exhibit ethical values, social responsibility, environmental consciousness, constitutional principles, and lifelong learning abilities while adapting to emerging technologies, multidisciplinary knowledge, and evolving socio-economic challenges.

Course Structure of the Post Graduate Programme

Semester	Credits
Semester I	24
Semester II	24
Semester III	22
Semester IV	20
Grand Total	**90 Credits**

Semester-I

Course Code	Course Title	Credit Hours (Weekly)			Total Credit
		L	T	P	
SR40001	Social Research Methods	3	1	0	4
EC40003	Financial Institution and Market	3	1	0	4
EC40005	Welfare Economics	3	1	0	4

EC40007	Industrial Economics	3	1	0	4
EC40009	Artificial Intelligence in Economics	3	0	1	4
	Specialization: Tribal Resource Management				
TR40051	Sustainable Tribal Development	3	1	0	4
	Total				24

Semester-II

Course Code	Course Title	**Credit Hours (Weekly)**			**Total Credit**
		L	**T**	**P**	
EC40002	Applied Econometrics	3	1	0	4
EC40004	Labour Economics	3	1	0	4
EC40006	Economic of Health and Education	3	1	0	4
EC40008	Odisha Economy	3	1	0	4
EC40010	Indian Economic Policy	3	1	0	4
	Specialization: Tribal Resource Management				
TR40082	Academic Excursion through Internship Programme	1	0	3	4
	Total				24

Semester-III

(Coursework and Research)

Course Code	Course Title	**Credit Hours (Weekly)**			**Total Credit**
		L	**T**	**P**	

RM50001	Research Methodology	3	1	0	4
RE50003	Research and Publication Ethics	2	0	0	2
CA50005	Computer Application and Data Analysis	3	0	1	4
	Specialization: Tribal Resource Management (Choose Any one)				
TR50051	Management of Tribal Resource	3	1	0	4
TR50053	Economics of Tribal Resource	3	1	0	4
TR50055	Resource Management and Tribal Development	3	1	0	4
	Discipline Specific Elective (Choose Any one Group)				
	Group: Econometric Methods and Application				
EM50031	Econometric Methods	3	1	0	4
EM50033	Computer Application for Economic Analysis	3	1	0	4
	Group: Development Economics				
DE50031	Population and Development	3	1	0	4
DE50033	Economics of Environment	3	1	0	4
	Total				22

Semester-IV

Course Code	Course Title	**Credit Hours (Weekly)**			**Total Credits**
		L	**T**	**P**	
FD50082	Fieldwork and Dissertation	0	0	20	20
	Total				20

Grand Total: 90 Credits

Course Structure (Semester-wise)

Semester I

Code	Course Title	Credit	L-T-P
SR40001	Social Research Methods	4	3-1-0

Prerequisites

Candidates seeking admission to the **M.A. Economics** programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a basic understanding of Microeconomics, Macroeconomics, Mathematical Economics, Statistics, Indian Economy, and quantitative techniques. Familiarity with computer applications and elementary data analysis will be advantageous for research-oriented and analytical courses.

Course Learning Objectives:

To infuse the idea of understanding the environment through social research employing the methodologies for driving into the findings accurately..

Pedagogy: Lectures, Process of writing an article and project proposal, and projects

Course Outcomes: On successful completion of this course, the student shall be able to:

CO1: Understand the role and responsibilities of a Researcher.

CO2: Formulate the research problem and research design.

CO3: Design research plan and collect relevant data applying sampling techniques.

CO4: Develop data collection process, manage fieldwork and to report research findings.

CO5: Communicate the results to society at large and follow up and report the findings of the research with suggestions and apply the research ethics in the research process.

CO-PO- PSO Mapping

Course Outcomes \ Program Outcomes	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**	**PSO 1**	**PSO 2**	**PSO 3**	**PSO 4**
CO1	3	2	1	1	–	2	1	2	1	–	2	1	2	–	–	1
CO2	2	3	2	2	1	2	2	2	1	1	2	1	2	1	–	2
CO3	2	2	3	2	2	3	2	2	2	1	2	1	2	2	–	2
CO4	2	2	2	3	1	2	2	2	1	2	3	3	3	2	1	2
CO5	1	2	2	3	3	2	2	2	3	2	3	2	2	1	2	1
Average	**2.0**	**2.2**	**2.0**	**2.2**	**1.8**	**2.2**	**1.8**	**2.0**	**1.6**	**1.2**	**2.4**	**1.6**	**2.2**	**1.5**	**1.5**	**1.6**

1 – Weakly Mapped (Low)

2 – Moderately Mapped (Medium)

3 – Strongly Mapped (High)

– – No Correlation

Course Inputs:

UNIT I: Social Research: (12 Lectures)

Research Objective, Types of Research: Basic, Applied, Historical and Empirical, case study research. Steps in Social Research: Steps of research, Formulation of research problem, Literature review, Writing a research proposal, Synopsis writing.

UNIT II: Research Design: **(12 Lectures)**

Research design: Meaning, Definition and Features, Types of research design: Exploratory, Descriptive/Diagnostic, Experimental Sampling Design: Sampling: Concept, Types: Random, stratified, proportionate, quota, cluster or multistage, purposive and systematic sampling.

UNIT III: Methods of Data Collection: (12 Lectures)

Methods of primary data collection: Observation, Schedule, Questionnaire, Interview, Case study, Focused Group discussion (FGD), Participatory rural appraisal (PRA), Guidelines and methods for collection of secondary data.

UNIT IV: Statistical Analysis: **(12 Lectures)**

Frequency distribution and graphical presentation; Descriptive Statistics: Mean, Median, Mode, Standard Deviation; Co-relation and regression. Hypothesis: Research hypothesis, Testing of Hypothesis, t, F,Z, ANOVA and Chi-Square tests.

UNIT V: Report Writing: (12 Lectures)

Format/structure of research report, Techniques of report writing, Bibliography, Referencing. Research and Publication Ethics

Recommended Learning Resources:

Textbooks

Kothari, C. R.(2020) Research Methodology, Methods and Techniques -Wiley Eastern Limited - New Delhi.

Reference Materials & Digital Resources:

1. Ahuja, Ram (2018), Research Methods. Jaipur: Rawat Publication.
2. Dash, P.R. (2017). Research Methodology using SPSS, Vrinda Publications, New Delhi.
3. Gupta, C.B and Gupta, V.(2019) An Introduction to Statistical Methods, New Delhi: Vikas Publishing House PVT Ltd
4. Seale, C. (2018). Social Research Methods: A Reader. London, Routledge.
5. Swain A.K.P.C (2018), " A Textbookof Research Methodology", Kalyani Publications
6. Wlliam G. Zicmund (2018), Business Research Methods, S. Chand and Company Ltd.

Swayam link- https://onlinecourses.swayam2.ac.in/nou24_hs38/preview

Note: The latest edition of the text books should be used.

SDG Mapping with this course

SDG No.	**SDG Title**	**Nature of Contribution**
SDG 4	Quality Education	Skills for creating educational and community web resources
SDG 8	Decent Work and Economic Growth	Employable front-end / junior full-stack web development skills

SDG 9	Industry, Innovation and Infrastructure	Web apps as digital infrastructure for services and innovation
SDG 12	Responsible Consumption and Production	Efficient, responsible digital products

Code	Course Title	Credit	L-T-P
EC40003	Financial Institution and Market	4	3-1-0

Prerequisites

Candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a basic understanding of Microeconomics, Macroeconomics, Mathematical Economics, Statistics, Indian Economy, and quantitative techniques. Familiarity with banking, financial systems, and elementary data analysis will be advantageous for understanding financial institutions and markets.

Course Objectives

Each course offered under the programme shall be designed to achieve the following objectives:

1. To develop advanced theoretical and conceptual understanding of financial institutions, financial markets, and financial systems.
2. To strengthen analytical, quantitative, and problem-solving abilities for understanding financial intermediation, monetary policy, and capital markets.
3. To enhance practical, digital, and research competencies in analysing financial institutions, banking operations, securities markets, and financial regulations.
4. To foster critical thinking, ethical financial practices, innovation, and evidence-based decision-making in financial systems.
5. To promote lifelong learning, professional competence, financial literacy, leadership, and commitment towards sustainable and inclusive financial development.

Course Outcomes (COs)

Each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	Bloom's Taxonomy Level	NHEQF Cognitive Level	Expected Learning Outcome

CO1	Remember	Knowledge	Recall and explain the structure, functions, components, and significance of financial institutions, financial markets, and financial systems.
CO2	Understand	Understanding	Explain the role of banking institutions, financial intermediaries, insurance companies, mutual funds, and pension funds in financial intermediation and capital allocation.
CO3	Apply	Application	Apply concepts of securities markets, financial instruments, market operations, and investment mechanisms to analyse financial market behavior.
CO4	Analyse	Higher-order Analysis	Analyse monetary policy instruments, central banking functions, financial stability measures, and their impact on economic development.
CO5	Evaluate / Create	Evaluation and Innovation	Evaluate financial regulations, risk management practices, Basel norms, and formulate strategies for strengthening financial system stability and sustainable financial development.

CO–PO–PSO Mapping

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation)

COs/POs	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO10**	**PO11**	**PO12**	**PSO 1**	**PSO 2**	**PSO 3**	**PSO 4**	**PSO 5**
CO1	2	3	2	2	2	1	1	1	2	1	1	1	3	2	1	1	1
CO2	1	3	2	3	3	2	1	2	2	1	2	1	3	3	2	1	1
CO3	2	3	2	2	3	2	1	1	2	2	2	2	3	3	2	2	2
CO4	2	2	3	3	3	2	2	2	2	2	3	1	2	3	3	3	2
CO5	3	3	2	3	3	2	1	2	2	2	3	2	3	3	3	2	2
Average	2	2.8	2.2	2.6	2.8	1.8	1.2	1.6	2	1.6	2.2	1.4	2.8	2.8	2.2	1.8	1.6

UNIT I: Introduction to Financial Institutions and Markets (12 Lectures)

Overview of financial systems and their components; Functions of financial institutions: Financial intermediation, risk management and payment systems; Classification of financial markets: Money market, Capital market and Derivatives market.

UNIT II: Banking and Financial Intermediaries (12 Lectures)

Role of banks in the economy; Depository and lending functions; Types of banks: Commercial banks, Investment banks and Central banks; non-bank financial intermediaries: Insurance companies, Mutual funds and Pension funds.

UNIT III: Securities Markets (12 Lectures)

Types of securities: Stocks, Bonds and Derivatives; Primary and secondary markets; Issuance and trading of securities; Stock exchanges and trading mechanisms; Regulation and oversight of securities markets.

UNIT IV: Central Banking and Monetary Policy (12 Lectures)

Functions and objectives of central banks; Monetary policy tools and objectives: Interest rates, Open Market Operations and Reserve Requirements; Role of central banks in maintaining price stability and financial stability; Central bank independence and accountability.

UNIT V: Financial Regulation and Risk Management (12 Lectures)

Regulatory framework for financial institutions and markets; Basel Accords and international regulatory standards; Risk management practices: Credit risk, Market risk and Liquidity risk; Financial crises and their impact on financial institutions and markets.

Skill Development Activities / Practical Exercise

Case studies on Financial Institutions and Markets.
Group discussions on current financial market trends.
Analysis of financial statements of banks and corporate institutions.
Presentation on financial sector reforms and regulatory frameworks.
Simulation exercises on monetary policy implementation and financial decision-making.

Textbooks Recommended

Mishkin, F. S., & Eakins, S. G. (Latest Edition). *Financial Markets and Institutions*. Pearson.

Fabozzi, F. J., Modigliani, F., & Jones, F. J. (Latest Edition). *Foundations of Financial Markets and Institutions*. Pearson.

Suggested Readings

Saunders, A., & Cornett, M. M. (Latest Edition). *Financial Institutions Management: A Risk Management Approach*. McGraw-Hill Education.

Mishkin, F. S. (Latest Edition). *The Economics of Money, Banking, and Financial Markets*. Pearson.

Bhole, L. M., & Mahakud, J. (Latest Edition). *Financial Institutions and Markets*. McGraw-Hill Education.

Khan, M. Y. (Latest Edition). *Indian Financial System*. McGraw-Hill Education.

Reserve Bank of India. *Report on Trend and Progress of Banking in India* (Latest Report).

SEBI. *Annual Report* (Latest Edition).

https://youtu.be/Q8haOsqVWy4

Note: Latest edition of the textbooks should be used.

Digital Resources

Students are encouraged to utilize various digital learning platforms and online resources to supplement classroom learning, including **SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, ICSSR Data Service, the Reserve Bank of India (RBI), the Securities and Exchange Board of India (SEBI), the National Stock Exchange (NSE), and the Bombay Stock Exchange (BSE)** for accessing e-content, research publications, official reports, financial data, market statistics, regulatory updates, and contemporary developments in financial institutions and markets.**Cross-Cutting Isues of the Course**

Cross-Cutting Issue	Relevance in the Course
Professional Ethics	Promotes ethical banking practices, financial transparency, corporate governance, regulatory compliance, and responsible financial decision-making.
Gender Sensitivity	Encourages financial inclusion, women's access to banking services, entrepreneurship financing, and gender-responsive financial policies.
Environmental Sustainability	Introduces green finance, sustainable banking, ESG investing, climate finance, and responsible investment practices.
Human Values	Emphasizes financial responsibility, consumer protection, inclusive financial services, and ethical behavior in financial institutions.

SDG Mapping of the Course

SDG Goal	Relevance to the Course

SDG 4: Quality Education	Enhances financial literacy, analytical thinking, and professional competencies in financial economics.
SDG 8: Decent Work and Economic Growth	Develops knowledge of banking, financial markets, investment, and employment opportunities in the financial sector.
SDG 9: Industry, Innovation and Infrastructure	Explains the role of financial institutions in promoting industrial growth, innovation, entrepreneurship, and infrastructure financing.
SDG 10: Reduced Inequalities	Highlights financial inclusion, inclusive banking, and equitable access to financial services for marginalized communities.
SDG 12: Responsible Consumption and Production	Promotes responsible investment, ethical finance, sustainable financial practices, and informed financial decision-making.

Code	Course Title	Credit	L-T-P
EC40005	Welfare Economics	4	3-1-0

Prerequisites

Candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a basic understanding of Microeconomics, Macroeconomics, Mathematical Economics, Statistics, Indian Economy, and quantitative techniques. Familiarity with microeconomic theory, market structures, and resource allocation will be advantageous for understanding the principles and applications of welfare economics.

Course Objectives

Each course offered under the programme shall be designed to achieve the following objectives:

1. To develop an advanced understanding of welfare economics, social welfare, resource allocation, and economic efficiency.
2. To strengthen analytical and critical thinking abilities for evaluating Pareto optimality, compensation principles, and welfare criteria.
3. To enhance the ability to analyse market failures, externalities, public goods, and their implications for economic policy.
4. To foster evidence-based reasoning in evaluating welfare policies, equity, distributive justice, and sustainable development.

5. To promote professional competence in applying welfare economic principles to contemporary socio-economic and public policy issues.

Course Outcomes (COs)

Each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	**Bloom's Taxonomy Level**	**NHEQF Cognitive Level**	**Expected Learning Outcome**
CO1	Remember	Knowledge	Recall and explain the concepts of individual welfare, social welfare, welfare criteria, and general equilibrium in welfare economics.
CO2	Understand	Understanding	Explain Pareto optimality, efficiency conditions, and optimum allocation of resources in production and exchange.
CO3	Apply	Application	Apply compensation principles, welfare criteria, and theoretical frameworks to evaluate economic policies and welfare outcomes.
CO4	Analyse	Higher-order Analysis	Analyse market failures, externalities, monopoly, and public goods from the perspective of social welfare and economic efficiency.
CO5	Evaluate / Create	Evaluation and Innovation	Evaluate welfare maximization through the Grand Utility Possibility Frontier and formulate policy recommendations for equitable and sustainable resource allocation.

CO–PO–PSO Mapping

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation)

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	2	2	2	1	1	1	2	1	1	2	3	2	1	1	1
CO2	2	3	2	3	3	2	1	1	2	1	2	2	3	3	2	1	1
CO3	3	3	2	3	3	2	1	1	2	2	2	3	3	3	2	2	2
CO4	3	2	3	3	3	2	2	1	2	2	3	3	2	3	3	3	2
CO5	3	3	3	3	3	3	2	2	3	2	3	3	3	3	3	3	3
Average	**2.6**	**2.8**	**2.4**	**2.8**	**2.8**	**2.0**	**1.4**	**1.2**	**2.2**	**1.6**	**2.2**	**2.6**	**2.8**	**2.8**	**2.2**	**2.0**	**1.8**

UNIT I: Welfare Economics: An Introduction (12 Lectures)

Welfare Economics: Individual welfare and social welfare; Three concepts of social welfare; Role of value judgement in welfare economics; Partial equilibrium and general equilibrium analysis; Transformation curve and general equilibrium of production; General equilibrium of production and exchange.

UNIT II: Concept and Conditions of Pareto Optimality (12 Lectures)

Pareto criterion of social welfare; Equilibrium approach; Marginal conditions of Pareto optimality; Optimum distribution of products among consumers; Efficiency of exchange; Optimum allocation of factors.

UNIT III: New Welfare Economics: Compensation Principle (12 Lectures)

Introduction; Kaldor-Hicks Welfare Criterion; Compensation Principle; Scitovsky Paradox; Scitovsky's Double Criterion of Welfare; Critique of the Compensation Principle.

UNIT IV: Market Failures, Externalities and Public Goods (12 Lectures)

Monopoly as an obstacle in attaining Pareto Optimality; Externalities and market failure; Positive externalities in production; Externalities in consumption; Market failure arising from externalities; Public goods and market failure; Free rider problem.

UNIT V: Grand Utility Possibility Frontier and Welfare Maximization (12 Lectures)

Introduction; From factor endowments and production functions to the Production Possibility Curve; From the Production Possibility Curve to the Grand Utility Possibility Frontier; Welfare maximization and the point of Constrained Bliss.

Skill Development Activities / Practical Exercise

Group discussions and debates on contemporary welfare issues.

Quiz on welfare economics concepts and theories.

PowerPoint presentations on welfare criteria and policy analysis.

Assignment writing on welfare policies and market failures.

Seminars on public goods, externalities, and inclusive development.

Textbooks Recommended

Roger A. McCain (Latest Edition). *Welfare Economics: An Interpretive History*. Routledge, Taylor & Francis.

K. E. Boulding (Latest Edition). *Welfare Economics*. In B. E. Haley (Ed.).

Nicholas Kaldor (Latest Edition). *Welfare Propositions in Welfare Economics*. Columbia University Press.

I. M. D. Little (Latest Edition). *A Critique of Welfare Economics*. Oxford University Press.

Suggested Readings

W. J. Baumol (Latest Edition). *Economic Theory and Operations Analysis*. Prentice Hall.

M. W. Reder (Latest Edition). *Studies in the Theory of Welfare Economics*. Columbia University Press.

Pigou, A. C. (Latest Edition). *The Economics of Welfare*. Macmillan.

Sen, A. K. (Latest Edition). *Collective Choice and Social Welfare*. Penguin/Elsevier.

Stiglitz, J. E. (Latest Edition). *Economics of the Public Sector*. W. W. Norton & Company.

Note: Latest edition of the textbooks should be used.

Digital Resources

Students are encouraged to utilize various digital learning platforms and online resources to supplement classroom learning, including **SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, ICSSR Data Service, NITI Aayog, the Ministry of Statistics and Programme Implementation (MOSPI), the Reserve Bank of India (RBI), the World Bank Open Knowledge Repository, the Organisation for Economic Co-operation and Development (OECD), and the United Nations Development Programme (UNDP)** for accessing e-content, research publications, welfare reports, policy documents, statistical databases, and contemporary developments in welfare economics and public policy.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	**Relevance in the Course**

Professional Ethics	Promotes ethical decision-making, social justice, equitable resource allocation, and fairness in welfare policy formulation.
Gender Sensitivity	Examines gender equity, inclusive welfare policies, and equal access to social and economic opportunities.
Environmental Sustainability	Highlights sustainable resource allocation, environmental externalities, and welfare implications of sustainable development.
Human Values	Emphasizes social justice, equity, inclusive development, poverty reduction, and improvement of societal well-being.

SDG Mapping of the Course

SDG Goal	**Relevance to the Course**
SDG 1: No Poverty	Explains welfare policies, income redistribution, and poverty alleviation strategies for improving social well-being.
SDG 4: Quality Education	Enhances analytical understanding of welfare economics, public policy, and evidence-based decision-making.
SDG 8: Decent Work and Economic Growth	Promotes inclusive economic growth through efficient resource allocation and welfare-enhancing policies.
SDG 10: Reduced Inequalities	Focuses on equitable income distribution, social justice, and reduction of economic disparities.
SDG 12: Responsible Consumption and Production	Encourages efficient allocation and sustainable utilization of scarce resources for maximizing social welfare.

Code	Course Title	Credit	L-T-P
EC40007	Industrial Economics	4	3-1-0

Prerequisites

Candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a basic understanding of Microeconomics, Macroeconomics, Mathematical Economics, Statistics, Indian Economy, and quantitative techniques. Familiarity with market structures, firm behaviour, pricing

strategies, competition, and industrial policies will be advantageous for understanding Industrial Economics.

Course Objectives

Each course offered under the programme shall be designed to achieve the following objectives:

1. To develop advanced theoretical and conceptual understanding of industrial organization, market structures, and firm behaviour.
2. To strengthen analytical, quantitative, and problem-solving abilities for analysing market power, competition, pricing strategies, and industrial performance.
3. To enhance practical, digital, and research competencies in evaluating industrial policies, competition laws, mergers, acquisitions, and market regulation.
4. To foster critical thinking, innovation, ethical business practices, and evidence-based decision-making in industrial economics.
5. To promote lifelong learning, professional competence, leadership, entrepreneurship, and commitment towards sustainable industrial development.

Course Outcomes (COs)

Each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	Bloom's Taxonomy Level	NHEQF Cognitive Level	Expected Learning Outcome
CO1	Remember	Knowledge	Recall and explain the concepts, theories, market structures, and analytical tools used in Industrial Economics.
CO2	Understand	Understanding	Explain firm behaviour, market power, pricing strategies, non-price competition, and industrial market dynamics under different market structures.
CO3	Apply	Application	Apply game theory, industrial organization models, concentration measures, and strategic decision-making tools to analyse industrial behaviour and market outcomes.

CO4	Analyse	Higher-order Analysis	Analyse industrial policies, mergers, acquisitions, vertical integration, competition laws, and regulatory frameworks affecting industrial performance and economic welfare.
CO5	Evaluate / Create	Evaluation and Innovation	Evaluate industrial policies, competition regulations, innovation strategies, and formulate policy recommendations for promoting efficiency, competitiveness, and sustainable industrial development.

CO–PO–PSO Mapping

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation)

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	2	2	2	1	1	1	2	1	1	1	3	2	1	1	1
CO2	2	3	2	3	3	2	1	1	2	1	2	1	3	3	2	1	2
CO3	2	3	2	2	3	2	1	1	2	2	2	2	3	3	2	2	2
CO4	2	2	3	3	3	2	2	2	2	2	3	2	2	3	3	3	2
CO5	3	3	3	3	3	3	2	2	3	3	3	3	3	3	3	3	3
Average	2.2	2.8	2.4	2.6	2.8	2.0	1.4	1.4	2.2	1.8	2.2	1.8	2.8	2.8	2.2	2.0	2.0

UNIT I: Introduction to Industrial Economics (12 Lectures)

Overview of industrial organization and its relevance to economic analysis; Market structures: Perfect Competition, Monopoly, Oligopoly and Monopolistic Competition; Analytical tools: Concentration Ratios, Herfindahl-Hirschman Index (HHI), and Game Theory.

UNIT II: Market Power and Pricing Strategies (12 Lectures)

Market power and its determinants; Pricing strategies: Price discrimination, Predatory pricing and Bundling; Non-price competition through Product differentiation, Advertising and Branding.

UNIT III: Strategic Interactions and Game Theory (12 Lectures)

Basics of Game Theory: Prisoner's Dilemma and Nash Equilibrium; Strategic interactions in oligopolistic markets; Collusion and cartel behaviour; Antitrust policy and competition regulation.

UNIT IV: Vertical Relationships and Market Integration (12 Lectures)

Vertical integration and its implications for competition; Vertical restraints: Price fixing, Exclusive dealing and Tying arrangements; Merger and acquisition strategies and their economic implications.

UNIT V: Government Policies and Industrial Performance (12 Lectures)

Industrial policy: Objectives, instruments and evaluation; Regulation and deregulation and their impact on market structure and firm behaviour; Competition policy and antitrust enforcement; Intellectual Property Rights (IPR) and innovation incentives.

Skill Development Activities / Practical Exercise

- Case studies on market power, industrial competition, and strategic business decisions.
- Group discussions on competition policy, antitrust cases, and industrial reforms.
- Analysis of market concentration, industrial performance, and firm behaviour using industry data.
- Presentation on industrial policy, mergers, acquisitions, and competition regulations.
- Simulation exercises on pricing strategies, game theory, and strategic decision-making.

Textbooks Recommended

1. Tirole, J. (Latest Edition). *The Theory of Industrial Organization*. MIT Press.
2. Carlton, D. W., & Perloff, J. M. (Latest Edition). *Modern Industrial Organization*. Pearson.

Suggested Readings

1. Belleflamme, P., & Peitz, M. (Latest Edition). *Industrial Organization: Markets and Strategies*. Cambridge University Press.
2. Shy, O. (Latest Edition). *Industrial Organization: Theory and Applications*. MIT Press.
3. Shepherd, W. G. (Latest Edition). *The Economics of Industrial Organization*. Waveland Press.
4. Hay, D., & Morris, D. (Latest Edition). *Industrial Economics and Organization: Theory and Evidence*. Oxford University Press.
5. Government of India. *Economic Survey* (Latest Edition).
6. Competition Commission of India (CCI). *Annual Report* (Latest Edition).

Note: Latest edition of the textbooks should be used.

Digital Resources

Students are encouraged to utilize various digital learning platforms and online resources to supplement classroom learning, including SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, ICSSR Data Service, Competition Commission of India (CCI),

Ministry of Commerce and Industry, DPIIT, NITI Aayog, Reserve Bank of India (RBI), Annual Survey of Industries (ASI), MOSPI, and other authentic national and international databases for accessing e-content, research publications, industrial statistics, policy documents, market reports, and contemporary developments in Industrial Economics.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	Relevance in the Course
Professional Ethics	Promotes ethical business practices, corporate governance, fair competition, competition law compliance, and responsible industrial management.
Gender Sensitivity	Encourages gender-inclusive industrial employment, equal opportunity, workforce diversity, and women entrepreneurship in industrial development.
Environmental Sustainability	Introduces sustainable industrialization, green manufacturing, resource efficiency, circular economy, pollution control, and environmentally responsible production practices.
Human Values	Emphasizes fair labour practices, consumer welfare, social responsibility, industrial harmony, and inclusive economic development.

SDG Mapping of the Course

SDG Goal	Relevance to the Course
SDG 4: Quality Education	Develops analytical knowledge and practical understanding of industrial organization, competition, and policy analysis.
SDG 8: Decent Work and Economic Growth	Enhances understanding of industrial growth, employment generation, entrepreneurship, productivity, and sustainable economic development.
SDG 9: Industry, Innovation and Infrastructure	Promotes knowledge of industrial development, technological innovation, industrial competitiveness, and infrastructure-led growth.
SDG 10: Reduced Inequalities	Explains the role of competition policy, fair markets, inclusive industrial development, and equitable economic opportunities.

SDG 12: Responsible Consumption and Production	Encourages sustainable industrial practices, efficient resource utilization, responsible production systems, and environmentally sound industrial policies.

Code	Course Title	Credit	L-T-P
EC40009	**Artificial Intelligence in Economics**	**4**	**3-1-0**

Prerequisites

Candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a basic understanding of Microeconomics, Macroeconomics, Statistics, Econometrics, Mathematical Economics, and computer applications. Familiarity with statistical software, data analysis, and elementary programming concepts will be advantageous for understanding Artificial Intelligence applications in Economics.

Course Objectives

Each course offered under the programme shall be designed to achieve the following objectives:

1. To develop advanced theoretical and conceptual understanding of Artificial Intelligence (AI), Machine Learning (ML), and their applications in Economics.
2. To strengthen analytical, computational, and problem-solving abilities for analysing economic data using AI-based techniques.
3. To enhance practical, digital, programming, and research competencies through hands-on applications of AI tools in economic analysis and forecasting.
4. To foster critical thinking, innovation, ethical AI practices, and evidence-based decision-making using intelligent systems.
5. To promote lifelong learning, professional competence, digital literacy, leadership, and responsible use of Artificial Intelligence for sustainable and inclusive economic development.

Course Outcomes (COs)

Each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	Bloom's Taxonomy Level	NHEQF Cognitive Level	Expected Learning Outcome

CO1	Remember	Knowledge	Recall and explain the concepts, principles, techniques, and applications of Artificial Intelligence, Machine Learning, and Deep Learning in Economics.
CO2	Understand	Understanding	Explain machine learning algorithms, natural language processing techniques, and AI-driven analytical methods used in economic research and policy analysis.
CO3	Apply	Application	Apply AI techniques, machine learning models, and digital tools to analyse economic data, forecasting, classification, and decision-making problems.
CO4	Analyse	Higher-order Analysis	Analyse AI-based economic models, evaluate forecasting performance, interpret machine learning outputs, and assess their implications for economic systems and policy.
CO5	Evaluate / Create	Evaluation and Innovation	Evaluate ethical, regulatory, and policy issues associated with Artificial Intelligence and develop innovative AI-based solutions for sustainable economic development.

CO–PO–PSO Mapping

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation)

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	1	3	2	2	2	1	1	3	2	1	1	1	3	2	1	1	1
CO2	1	3	2	3	3	2	1	3	2	1	2	1	3	3	2	1	2
CO3	1	3	2	3	3	3	1	3	2	1	2	1	2	3	3	2	2
CO4	3	2	3	2	2	2	1	2	2	2	3	2	2	2	2	3	2

CO5	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3
Average	**1.8**	**2.8**	**2.4**	**2.6**	**2.6**	**2.2**	**1.2**	**2.8**	**2.2**	**1.6**	**2.2**	**1.6**	**2.6**	**2.6**	**2.2**	**2.0**	**2.0**

UNIT I: Introduction to Artificial Intelligence (6 Lectures + 12 Practical Hours)

Definition, scope and evolution of Artificial Intelligence; Overview of Machine Learning and Deep Learning; Applications of AI in Economics, Finance, Banking, Agriculture, Health and Public Policy; Ethical considerations and responsible use of Artificial Intelligence.

UNIT II: Machine Learning Techniques (6 Lectures + 12 Practical Hours)

Supervised learning: Regression and Classification; Unsupervised learning: Clustering and Dimensionality Reduction; Reinforcement Learning and its applications in Economics; Hands-on implementation using suitable software tools.

UNIT III: Natural Language Processing (NLP) in Economics (6 Lectures + 12 Practical Hours)

Introduction to Natural Language Processing; Text preprocessing and feature extraction; Sentiment analysis and opinion mining; Text classification and topic modelling; Applications of NLP in economic forecasting, financial markets and policy analysis.

UNIT IV: AI Applications in Economic Analysis (6 Lectures + 12 Practical Hours)

AI-driven forecasting models; AI-based decision support systems; Applications of Artificial Intelligence in financial markets, macroeconomic forecasting, consumer behaviour analysis, and business intelligence; Case studies and practical implementation.

UNIT V: AI and Policy Formulation (6 Lectures + 12 Practical Hours)

Artificial Intelligence for policy analysis and evaluation; AI in designing optimal economic policies; Regulatory challenges, governance, ethics, transparency, explainable AI, data privacy, and future applications of AI in Economics.

Skill Development Activities / Practical Exercise

- Hands-on exercises using Machine Learning software and AI tools for economic data analysis.
- Development of regression, classification, clustering, and forecasting models using economic datasets.
- Case studies on Artificial Intelligence applications in finance, banking, public policy, and macroeconomic forecasting.
- Group discussions on AI ethics, algorithmic bias, data privacy, and responsible AI.

- Presentation and seminar on emerging AI applications in Economics and digital transformation.
- Mini project involving AI-based economic forecasting or policy analysis.

Textbooks Recommended

1. Varian, H. R., & Choi, D. (Latest Edition). *Machine Learning and Economics*. Cambridge University Press.

Suggested Readings

1. Géron, A. (Latest Edition). *Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow*. O'Reilly Media.
2. Hastie, T., Tibshirani, R., & Friedman, J. (Latest Edition). *The Elements of Statistical Learning*. Springer.
3. Chollet, F. (Latest Edition). *Deep Learning with Python*. Manning Publications.
4. Goodfellow, I., Bengio, Y., & Courville, A. (Latest Edition). *Deep Learning*. MIT Press.
5. Deisenroth, M. P., Faisal, A. A., & Ong, C. S. (Latest Edition). *Mathematics for Machine Learning*. Cambridge University Press.
6. Russell, S., & Norvig, P. (Latest Edition). *Artificial Intelligence: A Modern Approach*. Pearson.

Note: **Latest edition of the textbooks should be used.**

Digital Resources

Students are encouraged to utilize various digital learning platforms and online resources to supplement classroom learning, including **SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, ICSSR Data Service, Kaggle, Google Colab, TensorFlow, Scikit-Learn, OpenAI Learning Resources, Reserve Bank of India (RBI), NITI Aayog, World Bank Open Data, IMF Data, OECD Data, and MOSPI** for accessing AI tutorials, datasets, research publications, economic databases, machine learning applications, policy reports, and contemporary developments in Artificial Intelligence and Economics.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	**Relevance in the Course**
Professional Ethics	Promotes ethical Artificial Intelligence, responsible data handling, transparency, algorithmic accountability, data privacy, and avoidance of bias in AI-based decision-making.
Gender Sensitivity	Encourages development of inclusive AI systems, gender-neutral datasets, fairness in algorithmic decision-making, and equitable access to AI technologies.

Environmental Sustainability	Introduces energy-efficient computing, green AI, sustainable digital technologies, and AI applications for environmental monitoring and sustainable development.
Human Values	Emphasizes responsible AI, fairness, accountability, social welfare, human-centred technology, and ethical use of intelligent systems for societal development.

SDG Mapping of the Course

SDG Goal	**Relevance to the Course**
SDG 4: Quality Education	Enhances digital literacy, Artificial Intelligence competencies, data analytics skills, and lifelong learning in emerging technologies.
SDG 8: Decent Work and Economic Growth	Develops AI-based analytical, computational, and employability skills required in modern industries and digital economies.
SDG 9: Industry, Innovation and Infrastructure	Promotes Artificial Intelligence, innovation, digital transformation, intelligent infrastructure, and technology-driven economic development.
SDG 10: Reduced Inequalities	Encourages inclusive AI applications, equitable access to digital technologies, and responsible use of Artificial Intelligence for inclusive development.
SDG 12: Responsible Consumption and Production	Promotes responsible use of digital technologies, ethical AI applications, efficient resource utilization, and sustainable innovation.

Code	Course Title	Credit	L-T-P
TR40051	Sustainable Tribal Development	4	3-1-0

Course Learning Objectives: The paper will offer have the course objectives viz. Concepts, approaches and opportunities of sustainable development, Knowledge about the human and natural / non-natural resources and their sustainable use, have a conceptual and theoretical understanding on sustainable development, MDGs and SDGs, bio-diversity and climate change. Also focus on socially inclusive and

environmentally sustainable, Knowledge about policies and programmes of international and national efforts pertaining to rural development.

Course Outcomes:

After completion of the course, the students will be able to:

CO1: Understand key initiatives required to enhance the contribution of an organisation towards Sustainable Development;

CO2: Analyse the significance of various steps taken by UNDP to ensure Sustainable Development;

CO3: Assess the results of Smart Cities Mission Initiative of Government of India;

CO4: Evaluate key achievements of National Programmes/Initiatives aligned with SDGs.

CO5: Judge Tribal participants sustainable growth maintaining the ecological balance for a healthy living and understand the initiatives taken by the government and the United Nations' Sustainable Development Goals for the cause of sustainable tribal development.

CO-PO- PSO Mapping

Course Outcomes \ Program Outcomes	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**	**PSO 1**	**PSO 2**	**PSO 3**	**PSO 4**
CO1	3	2	2	2	1	3	1	2	3	2	2	2	3	1	1	2
CO2	3	3	2	2	2	3	2	2	3	2	2	2	3	2	1	2
CO3	2	3	2	3	2	3	2	2	3	2	3	2	3	2	1	2
CO4	2	2	2	3	2	3	2	2	3	3	3	2	3	2	2	2
CO5	2	3	2	3	3	3	2	2	3	3	3	3	3	3	2	2
Average	**2.4**	**2.6**	**2.0**	**2.6**	**2.0**	**3.0**	**1.8**	**2.0**	**3.0**	**2.4**	**2.6**	**2.2**	**3.0**	**2.0**	**1.4**	**2.0**

1 – Weakly Mapped (Low)

2 – Moderately Mapped (Medium)

3 – Strongly Mapped (High)

– – No Correlation

Course Inputs:

UNIT I: Understanding Sustainable Development (12 Lectures)

Meaning and evolution of the concept. Sustainability of culture, identity and development; History of the sustainable development – Brundtland, Rio and Sustainable Development Goals(SDGs); Economic growth and progress; Continuing poverty; Environmental threats hitting the rich and poor alike; the business-as-usual path versus the sustainable development path,Future of sustainable development.

UNIT II: The Millennium Development Goals (MDGs) and the End of Extreme Poverty (12 Lectures)

A strategy to end extreme poverty in underdeveloped countries; The continuing challenge of the food supply in India; A closer look at official development assistance; Designing practical interventions: The case of millennium villages.

UNIT III: Basic Needs and Sustainable Development (12 Lectures)

Sustainable food supply and the end of hunger; Universal health coverage; Small holder livelihood and the role of agroforestry- Food and nutritional security Fulfillment of food, fodder, fuel wood and shelter based needs- income generation vs. subsistence production. Right to education for all.

UNIT IV: Sustainable Development and Biodiversity conservation (12 Lectures)

The need for Sustainable Development and Biodiversity conservation for a new emerging India. Hurdles in SD. Consumption and importance of Sustainable Development and Environment. Milestones towards a sustainable world.

UNIT V: SDGs and Funding for Sustainable Development (12 Lectures)

Understanding SDGs; Goal-based development; Financing (including the politics of financing) for sustainable development; Principles of good governance; is sustainable development feasible. Tribal Policy and Economy: Initiatives by the Central and the State governments- State and Scheduled Tribes; Tribal Development Administration and Management; Tribal Development: Methods and Techniques; Project Management; Tribal Quest for Rights and Entitlements; Tribal development initiatives by the Central and the State governments.

Recommended Learning Resources

Text Book Recommended:

1. Rao V.Srinivas (ed.), 2021, Challenges of Tribal Development: Contemporary Social Concerns, Rawat Publication, New Delhi.
2. Mosse, David (2005). Cultivating development: An anthropology of aid policy and practice. London: Pluto Press.

Reference Materials & Digital Resources :

1. K. Bhowmick, K., 2004, Tribal Sustainable Development, Goodreads, New Delhi.
2. Radhakrishna, Meena, 2016, "First Citizens: Studies on Adivasis, Tribals, and Indigenous Peoples in India, Oxford University Press
3. Sachs, Jeffrey D. 2005. The Age of Sustainable Development. NY: Columbia University Press.
4. e-PG Pathshala – Geography and sustainable development e-content for higher education.
5. SWAYAM Online Courses – MOOCs and study materials related to sustainability and environment.
6. eGyanKosh (IGNOU Study Material) – Free downloadable notes on sustainable development and environment.

Note: Latest edition of the text books should be used.

SDG Mapping with this course

SDG No.	SDG Title	Nature of Contribution
SDG 1	No Poverty	Improving livelihoods of tribal communities
SDG 3	Good Health and Well-being	Better healthcare and living conditions for tribal populations
SDG 5	Gender Equality	Empowerment of tribal women
SDG 10	Reduced Inequalities	Inclusion of marginalized tribal communities
SDG 13	Climate Action	Sustainable practices preserving ecological balance
SDG 15	Life on Land	Conservation of forests and biodiversity in tribal regions

Semester II

Code	Course Title	Credit	L-T-P
EC40002	**Applied Econometrics**	**4**	**3-1-0**

Prerequisites

Candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a sound understanding of Microeconomics, Macroeconomics, Mathematical Economics, Statistics, Probability Theory, and introductory Econometrics. Familiarity with statistical software packages such as MS Excel, SPSS, R, EViews, GRETL, or Stata and basic data analysis techniques will be advantageous for understanding applied econometric methods and empirical research.

Course Objectives

Each course offered under the programme shall be designed to achieve the following objectives:

1. To develop advanced theoretical and practical understanding of econometric models, statistical estimation techniques, and empirical economic analysis.

2. To strengthen analytical, quantitative, and problem-solving skills through the application of regression models, diagnostic testing, and panel data techniques.

3. To enhance practical, computational, and research competencies using econometric software for analysing real-world economic data.

4. To foster critical thinking, scientific inquiry, ethical data handling, and evidence-based policy analysis through empirical research.

5. To promote lifelong learning, professional competence, digital literacy, and research skills for academic, government, and industry applications.

Course Outcomes (COs)

Each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	Bloom's Taxonomy Level	NHEQF Cognitive Level	Expected Learning Outcome
CO1	Remember	Knowledge	Recall and explain the assumptions, estimation procedures, and theoretical foundations of classical linear regression models and applied econometric techniques.

CO2	Understand	Understanding	Explain regression diagnostics, model specification tests, panel data models, and the interpretation of econometric results using appropriate statistical methods.
CO3	Apply	Application	Apply econometric techniques, diagnostic tests, panel data estimation methods, and econometric software to analyse real-world economic data and test economic hypotheses.
CO4	Analyse	Higher-order Analysis	Analyse econometric models, evaluate empirical findings, diagnose econometric problems, and interpret results for evidence-based economic decision-making.
CO5	Evaluate / Create	Evaluation and Innovation	Design empirical research models, evaluate econometric evidence, formulate policy recommendations, and conduct independent quantitative research using econometric software.

CO–PO–PSO Mapping

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation)

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	1	3	2	2	3	2	1	2	2	1	1	1	3	2	1	1	3
CO2	1	3	2	3	3	3	1	3	2	1	2	1	3	3	2	1	3
CO3	1	3	2	3	3	3	1	2	2	1	2	1	2	3	3	2	3
CO4	2	2	3	3	3	3	2	3	2	2	3	1	2	3	3	3	3
CO5	2	3	3	3	3	3	2	3	3	2	3	2	3	3	3	3	3

Average	**1.4**	**2.8**	**2.4**	**2.8**	**3.0**	**2.8**	**1.4**	**2.6**	**2.2**	**1.4**	**2.2**	**1.2**	**2.6**	**2.8**	**2.4**	**2.0**	**3.0**

UNIT-I Regression Model: (12 Lectures)

Assumptions of the Classical Linear Regression Model, OLS Estimation, R2 and Adjusted R2 criteria, Akaike's Information Criterion and Schwarz's Information Criterion.

UNIT-II- Regression Model I: (12 Lectures)

Diagnostic Testing: Sources, Detection and remedial measures for Multi-collinearity, Autocorrelation and Heteroscedasticity in regression. Tests of Specification errors: Detecting the presence of unnecessary variables, omitted variables and incorrect functional form (Ramsey RESET and Lagrange Multiplier Test for Adding Variables), Errors of measurement: Consequences and remedial measures.

UNIT-III- Regression Model II: (12 Lectures)

Estimation of Autoregressive Models Instrumental Variable; Estimation, Omitted variables in a simple regression model, Measurement errors.

UNIT-IV- Panel Data Models: (12 Lectures)

Estimation techniques: The Pooled OLS Regression Model, the Fixed Effect Least Squares Dummy Variable Model, the Fixed Effect within Group Estimator, the Random Effects Model.

UNIT-V- Introduction to Econometric Software (GRETL/ E-Views/ R /Stata/ EXCEL: ANY ONE): (12 Lectures)

Generation of data sets and data transformation; Data analysis - Graphs and Plots, Summary Statistics, Correlation Matrix, Running an OLS regression, Collinearity, Autocorrelation, Heteroscedasticity, Normality of residuals

Skill Development Activities / Practical Exercise

- Hands-on training using EViews, GRETL, R, Stata, or MS Excel for econometric analysis.
- Regression modelling and diagnostic testing using real-world economic datasets.
- Data cleaning, transformation, and visualization exercises.
- Interpretation of econometric output and preparation of empirical research reports.
- Seminar presentations on published econometric research papers.

Textbooks Recommended

1. Gujarati, D. N. **Econometrics by Example.** Latest Edition, Palgrave Macmillan.

2. Gujarati, D. N., Porter, D. C., & Gunasekar, S. **Basic Econometrics.** Latest Indian Edition, McGraw-Hill Education.

Suggested Readings

1. Gujarati, D. N., & Porter, D. C. **Essentials of Econometrics.** Latest Edition, McGraw-Hill.

2. Wooldridge, J. M. **Introductory Econometrics: A Modern Approach.** Latest Edition, Cengage Learning.

3. Stock, J. H., & Watson, M. W. **Introduction to Econometrics.** Latest Edition, Pearson.

4. Greene, W. H. **Econometric Analysis.** Latest Edition, Pearson.

5. Hill, R. C., Griffiths, W. E., & Lim, G. C. **Principles of Econometrics.** Latest Edition, Wiley.

6. https://youtu.be/ybIcdda4ICw

Note: Latest editions of the textbooks should be used.

Digital Resources

Students are encouraged to utilize various digital learning platforms and online resources to supplement classroom learning, including **SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, ICSSR Data Service, World Bank Open Data, Reserve Bank of India (RBI) Database, MOSPI, Data.gov.in, IMF Data, OECD Data, EViews Documentation, GRETL Documentation, R Project for Statistical Computing, Stata Learning Resources, and FRED Economic Data** for accessing datasets, econometric software tutorials, research publications, official reports, empirical databases, and contemporary developments in applied econometrics.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	**Relevance in the Course**

Professional Ethics	Promotes ethical data collection, responsible statistical analysis, research integrity, transparency, plagiarism avoidance, and unbiased interpretation of empirical results.
Gender Sensitivity	Encourages gender-disaggregated data analysis, gender-responsive policy evaluation, and inclusive empirical research.
Environmental Sustainability	Applies econometric techniques to analyse environmental issues, climate change, sustainable development, and resource management policies.
Human Values	Emphasizes honesty, objectivity, scientific reasoning, responsible use of data, and evidence-based public policy formulation.

SDG Mapping of the Course

SDG Goal	**Relevance to the Course**
SDG 4: Quality Education	Enhances quantitative, analytical, computational, and econometric research skills for higher education and professional development.
SDG 8: Decent Work and Economic Growth	Develops data-driven analytical skills required for economic policy, financial analysis, and labour market research.
SDG 9: Industry, Innovation and Infrastructure	Supports empirical analysis of industrial performance, innovation, productivity, and infrastructure development through econometric modelling.
SDG 10: Reduced Inequalities	Facilitates evidence-based analysis of poverty, inequality, inclusive growth, and social welfare policies.
SDG 13: Climate Action	Applies econometric methods to evaluate environmental policies, climate change impacts, carbon emissions, and sustainable development strategies.

Code	**Course Title**	**Credit**	**L-T-P**
EC40004	Labour Economics	4	3-1-0

Prerequisites

Candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a basic understanding of Microeconomics, Macroeconomics, Labour Markets, Statistics, Human Resource Economics, and quantitative techniques. Familiarity with employment issues, wage determination, labour policies, and socio-economic development will be advantageous for understanding labour market dynamics and labour economics.

Course Objectives

Each course offered under the programme shall be designed to achieve the following objectives:

1. To develop advanced theoretical and conceptual understanding of labour markets, labour supply, labour demand, and wage determination.
2. To strengthen analytical and problem-solving abilities for examining employment, unemployment, labour productivity, and labour market inequalities.
3. To enhance practical, quantitative, and research competencies in analysing labour market data, labour policies, and institutional frameworks.
4. To foster critical thinking, ethical awareness, and evidence-based decision-making related to labour welfare, employment generation, and social justice.
5. To promote lifelong learning, professional competence, leadership, and commitment towards inclusive, equitable, and sustainable labour market development.

Course Outcomes (COs)

Each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	**Bloom's Taxonomy Level**	**NHEQF Cognitive Level**	**Expected Learning Outcome**
CO1	Remember	Knowledge	Recall and explain fundamental concepts, theories, and models related to labour supply, labour demand, wage determination, and human capital formation.
CO2	Understand	Understanding	Explain labour market institutions, employment patterns, labour market policies, and the factors influencing labour market outcomes.

CO3	Apply	Application	Apply economic theories and analytical tools to examine labour market behaviour, wage differentials, unemployment, and labour force participation.
CO4	Analyse	Higher-order Analysis	Analyse labour market inequalities, discrimination, collective bargaining, labour regulations, and the impact of technological and policy changes on employment.
CO5	Evaluate / Create	Evaluation and Innovation	Evaluate labour market policies and formulate evidence-based recommendations for promoting employment generation, labour welfare, social justice, and inclusive economic growth.

CO–PO–PSO Mapping

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation)

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	3	3	2	2	2	1	1	1	2	1	1	3	3	2	2	1	3
CO2	3	3	2	3	3	2	1	1	2	1	2	3	3	3	2	1	3
CO3	3	3	2	2	3	2	1	1	2	2	2	3	3	3	3	2	3
CO4	3	2	3	3	3	2	2	1	2	2	3	3	2	3	3	3	3
CO5	3	3	3	3	3	3	2	2	3	3	3	3	3	3	3	3	3
Average	**3.0**	**2.8**	**2.4**	**2.6**	**2.8**	**2.0**	**1.4**	**1.2**	**2.2**	**1.8**	**2.2**	**3.0**	**2.8**	**2.8**	**2.6**	**2.0**	**3.0**

Average: 2.5, 2.75, 2.25, 2.5, 2.75, 1.75, 1.25, 1, 2, 1.5, 2, 1.5, 2.75, 2.75, 2, 1.75

Course Inputs:

Unit 1: Introduction to Labour Economics (12 Lectures)

Historical development of labour economics; Basic concepts: Labour force participation, labour market equilibrium; Overview of labour market data sources and methodologies; International perspectives on labour markets

Unit 2: Labour Supply and Human Capital (12 Lectures)

Utility maximization and labour-leisure choice; Labour supply decisions over the life cycle;Investment in human capital: education, training, and skills development; Gender dimensions of labour supply and human capital investment

Unit 3: Labour Demand and Wage Determination (12 Lectures)

Theories of labour demand: marginal productivity, monophony power; Determinants of wages: skills, experience, and job characteristics; Wage differentials: factors influencing wage inequality; Impact of minimum wage laws and labor market regulations

Unit 4: Labour Market Inequalities (12 Lectures)

Labour market discrimination: theories, evidence, and measurement; Gender wage gap, racial wage gap, and other forms of inequality; Occupational segregation and its implications, Role of unions and collective bargaining in wage determination

Unit 5: Government Policies and Labour Market Dynamics (12 Lectures)

Unemployment: causes, types, and measurement; Unemployment insurance and its effects on labour market outcomes; Government interventions: minimum wage laws, job training programs; Comparative analysis of labour market policies across countries

Skill Development Activities / Practical Exercise

- Class participation and debates on contemporary labour market issues.
- Quiz on labour market theories and employment policies.
- PowerPoint presentations on labour economics and employment trends.
- Assignment writing on labour market challenges and policy interventions.
- Seminar presentations on labour reforms, labour welfare, and employment generation programmes.

Textbooks Recommended

Borjas, George J. (Latest Edition). *Labour Economics*. McGraw-Hill Education.

Suggested Readings

1. Kaufman, Bruce E. (Latest Edition). *Economics of Labor Markets*. Dryden Press.
2. Ehrenberg, Ronald G., & Smith, Robert S. (Latest Edition). *Modern Labor Economics*. Routledge.
3. Cahuc, Pierre, Carcillo, Stéphane, & Zylberberg, André (Latest Edition). *Labor Economics*. MIT Press.
4. McConnell, Campbell R., Brue, Stanley L., & Macpherson, David A. (Latest Edition). *Contemporary Labor Economics*. McGraw-Hill Education.
5. International Labour Organization (ILO). *World Employment and Social Outlook Reports*.
6. Articles from *Journal of Labor Economics*, *Labour Economics*, and *Indian Journal of Labour Economics*.

7. https://youtu.be/Q3vaZUg3lmM

Note: The latest edition of the textbooks should be used.

Digital Resources

Students are encouraged to utilize various digital learning platforms and online resources including SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, ICSSR Data Service, International Labour Organization (ILO), Ministry of Labour and Employment, Government of India, Periodic Labour Force Survey (PLFS), National Sample Survey Office (NSSO), Labour Bureau, MOSPI, World Bank Open Data, International Monetary Fund (IMF), and OECD databases for accessing labour statistics, employment reports, policy documents, research publications, and contemporary developments in labour economics.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	**Relevance in the Course**
Professional Ethics	Promotes labour rights, fair wages, ethical employment practices, workplace dignity, and compliance with labour standards.
Gender Sensitivity	Examines gender wage gaps, women's labour force participation, workplace discrimination, and gender-inclusive employment policies.
Environmental Sustainability	Highlights sustainable employment generation, green jobs, and the role of labour in environmentally sustainable development.
Human Values	Emphasizes worker welfare, social justice, dignity of labour, equity, and inclusive growth.

SDG Mapping of the Course

SDG Goal	**Relevance to the Course**
SDG 4: Quality Education	Enhances understanding of labour market dynamics, human capital formation, and skill development.
SDG 5: Gender Equality	Addresses gender disparities, women's employment, and equal opportunities in labour markets.
SDG 8: Decent Work and Economic Growth	Promotes employment generation, productive work, labour productivity, and inclusive economic growth.
SDG 10: Reduced Inequalities	Examines wage inequality, labour market discrimination, and policies for equitable labour market outcomes.

SDG 16: Peace, Justice and Strong Institutions	Supports labour rights, fair labour practices, social protection, and institutional frameworks for labour welfare.

Code	Course Title	Credit	L-T-P
EC40006	Economics of Health and Education	4	3-1-0

Prerequisites

Candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a basic understanding of Microeconomics, Macroeconomics, Development Economics, Public Finance, Statistics, and quantitative techniques. Familiarity with concepts of human capital, public policy, health systems, education systems, and socio-economic development will be advantageous for understanding the economics of health and education.

Course Objectives

Each course offered under the programme shall be designed to achieve the following objectives:

1. To develop advanced theoretical and conceptual understanding of the economics of health, education, and human capital development.
2. To strengthen analytical and problem-solving abilities for evaluating health systems, educational outcomes, public policies, and human development indicators.
3. To enhance practical, quantitative, and research competencies in analysing healthcare financing, education policies, labour productivity, and socio-economic development.
4. To foster critical thinking, ethical awareness, and evidence-based decision-making related to public health, educational equity, and inclusive human development.
5. To promote lifelong learning, professional competence, leadership, and commitment towards sustainable, equitable, and inclusive health and education systems.

Course Outcomes (COs)

Each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	Bloom's Taxonomy Level	NHEQF Cognitive Level	Expected Learning Outcome

CO1	Remember	Knowledge	Recall and explain the concepts of human capital, health economics, education economics, and their role in economic growth and human development.
CO2	Understand	Understanding	Explain the demand for health, health insurance markets, market failures, public intervention, and the role of education in human capital formation.
CO3	Apply	Application	Apply economic principles to analyse health care systems, health financing, educational investment, discrimination, and public policy issues.
CO4	Analyse	Higher-order Analysis	Analyse health and education indicators, government interventions, inequalities, financing mechanisms, and their contribution to socio-economic development.
CO5	Evaluate / Create	Evaluation and Innovation	Evaluate health and education reforms, formulate evidence-based policy recommendations, and propose innovative strategies for improving human development and social welfare.

CO–PO–PSO Mapping

(Rate correlations: 1 = Weakly Mapped, 2 = Moderately Mapped, 3 = Strongly Mapped, "_" = No Correlation)

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	2	3	2	2	2	1	1	1	2	1	1	2	3	2	1	1	2
CO2	2	3	2	3	3	2	1	1	2	1	2	2	3	3	2	1	2
CO3	3	3	2	2	3	2	1	1	2	2	2	3	3	3	2	2	2
CO4	3	2	3	3	3	2	2	1	2	2	3	3	2	3	3	3	3

CO5	3	3	3	3	3	3	2	2	3	2	3	3	3	3	3	3	3

Course Inputs:

UNIT-I (12 Lectures)

Role of Health and Education in Human Development

Importance in poverty alleviation; health and education outcomes and their relationship with macroeconomic performance, health and education for human capital: distinction between physical and human capital; complementary effect of health and education to human capital.

UNIT-II (12 Lectures)

Microeconomic Foundations of Health Economics

Demand for health; uncertainty and health insurance market; features of health care market; alternative insurance mechanisms; market failure and rationale for public intervention; equity and inequality, government intervention for health equity.

UNIT-III (12 Lectures)

Health Sector in India: An Overview

Health outcomes; health care systems in India; health financing.

UNIT-IV (12 Lectures)

Education: Investment in Human Capital

Rate of return to education: private and social; quality of education; signaling or human capital; theories of discrimination; gender and caste discrimination in India; demand and supply of education.

UNIT-V (12 Lectures)

Education Sector in India: An Overview

Status of educational outcomes: Literacy rates, school participation, school quality measures; government policy and financing of education.

Skill Development Activities / Practical Exercise

- Group discussions and debates on health and education policies.
- Quiz on health economics, education economics, and human capital.
- PowerPoint presentations on healthcare and educational reforms.

- Assignment writing on health financing, educational development, and human capital formation.
- Seminar presentations on public health programmes, educational policies, and sustainable human development.

Textbooks Recommended

1. William, Jack (Latest Edition). *Principles of Health Economics for Developing Countries*. World Bank Institute Development Studies.
2. Cohn, Elchanan (Latest Edition). *The Economics of Education*. Lexington Books.
3. Blaug, Mark (Latest Edition). *An Introduction to the Economics of Education*. Penguin Press.
4. Berman, Peter (Ed.) (Latest Edition). *Health Sector Reform in Developing Countries: Making Health Development Sustainable*. Harvard Series on Population and International Health.
5. Klarman, Herbert E. (Latest Edition). *The Economics of Health*. Columbia University Press.

Suggested Readings

1. World Bank. *World Development Report: Investing in Health* (Latest Edition).
2. Zweifel, Peter, Breyer, Friedrich, & Kifmann, Mathias (Latest Edition). *Health Economics*. Springer.
3. Schultz, Theodore W. (Latest Edition). *Investment in Human Capital*. University of Chicago Press.
4. Becker, Gary S. (Latest Edition). *Human Capital: A Theoretical and Empirical Analysis*. University of Chicago Press.
5. Todaro, Michael P., & Smith, Stephen C. (Latest Edition). *Economic Development*. Pearson.
6. UNESCO. *Global Education Monitoring Report* (Latest Edition).
7. World Health Organization. *World Health Statistics Report* (Latest Edition).
8. https://youtu.be/tCx0h8fGDr4

Note: Latest edition of the textbooks should be used.

Digital Resources

Students are encouraged to utilize various digital learning platforms and online resources including SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, ICSSR Data Service, Ministry of Health and Family Welfare, Ministry of Education, National Health Mission (NHM), National Medical Commission (NMC), National Council of Educational Research

and Training (NCERT), University Grants Commission (UGC), World Health Organization (WHO), UNESCO Institute for Statistics (UIS), World Bank Open Data, UNICEF, NITI Aayog, National Sample Survey Office (NSSO), and MOSPI for accessing research publications, policy reports, statistical databases, educational indicators, health statistics, and contemporary developments in health and education economics.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	**Relevance in the Course**
Professional Ethics	Promotes ethical healthcare delivery, equitable education systems, accountability, public service ethics, and evidence-based policymaking.
Gender Sensitivity	Emphasizes gender equality in access to quality health care, education, nutrition, skill development, and human capital formation.
Environmental Sustainability	Highlights environmental health, sanitation, public health awareness, sustainable healthcare systems, and healthy learning environments.
Human Values	Encourages social justice, inclusiveness, equal opportunities, human dignity, community welfare, and holistic human development.

SDG Mapping of the Course

SDG Goal	**Relevance to the Course**
SDG 3: Good Health and Well-being	Develops knowledge of healthcare systems, public health policies, health financing, and equitable access to quality healthcare services.
SDG 4: Quality Education	Enhances understanding of educational planning, human capital formation, learning outcomes, and inclusive education policies.
SDG 5: Gender Equality	Examines gender disparities in health and education while promoting equal access, empowerment, and inclusive development.
SDG 10: Reduced Inequalities	Focuses on reducing inequalities in health, education, and human development through equitable public policies and social inclusion.

SDG 16: Peace, Justice and Strong Institutions	Strengthens understanding of good governance, public accountability, institutional effectiveness, and evidence-based policy interventions in health and education sectors.

Code	Course Title	Credit	L-T-P
EC40008	**Odisha Economy**	4	3-1-0

Prerequisites

Candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a basic understanding of Indian Economy, Development Economics, Agricultural Economics, Public Finance, Statistics, and Regional Economics. Familiarity with the socio-economic profile of Odisha, quantitative techniques, and elementary data analysis will be advantageous for understanding regional development issues and policy analysis.

Course Objectives

Each course offered under the programme shall be designed to achieve the following objectives:

1. To develop advanced theoretical and conceptual understanding of the structure, growth, and development of the Odisha economy.
2. To strengthen analytical, quantitative, and problem-solving abilities for evaluating agriculture, industry, infrastructure, public finance, environmental resources, and social sector development in Odisha.
3. To enhance practical, digital, and research competencies through the analysis of regional economic indicators, government reports, development policies, and statistical databases.
4. To foster critical thinking, evidence-based policy analysis, ethical governance, and sustainable regional development.
5. To promote lifelong learning, professional competence, leadership, and commitment towards inclusive, balanced, and sustainable development of Odisha.

Course Outcomes (COs)

Each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	Bloom's Taxonomy Level	NHEQF Cognitive Level	Expected Learning Outcome

CO1	Remember	Knowledge	Recall and explain the structure, characteristics, resources, and major economic indicators of the Odisha economy.
CO2	Understand	Understanding	Explain the role of agriculture, industry, infrastructure, natural resources, and public finance in the economic development of Odisha.
CO3	Apply	Application	Apply regional economic concepts and statistical information to analyse sectoral performance, employment, poverty, and development programmes in Odisha.
CO4	Analyse	Higher-order Analysis	Analyse regional disparities, environmental challenges, social sector development, and government policies affecting Odisha's economy.
CO5	Evaluate / Create	Evaluation and Innovation	Evaluate development policies and formulate innovative strategies for achieving sustainable, inclusive, and balanced regional development in Odisha.

CO–PO–PSO Mapping

(Rate correlations: 1 – Weakly Mapped, 2 – Moderately Mapped, 3 – Strongly Mapped, "_" – No Correlation)

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	2	3	2	2	2	1	1	1	2	1	1	2	3	2	1	1	2
CO2	2	3	2	3	3	2	1	1	2	1	2	2	3	3	2	1	2
CO3	3	3	2	2	3	2	1	1	2	2	2	3	3	3	2	2	3
CO4	3	2	3	3	3	2	2	1	2	2	3	3	2	3	3	3	3
CO5	3	3	3	3	2	2	2	2	3	3	2	3	3	2	3	3	3

Average	2.6	2.8	2.4	2.6	2.6	1.8	1.4	1.2	2.2	1.8	2.0	2.6	2.8	2.6	2.2	2.0	2.6

Course Inputs:

UNIT-I

Macro Economy of Odisha (12 Lectures)

A macro glance of Odisha economy: aggregate income, broad sectoral decomposition, performance of districts, employment, child labour and bonded labour, employment programmes, consumption expenditure, cost of living; Odisha State public finances.

UNIT-II

Agriculture Sector Development in Odisha (12 Lectures)

Agriculture: land ownership and land tenure, agricultural wages and rural unemployment, production and productivity of major crops, agricultural inputs, agricultural policy; Animal Husbandry; Fisheries.

UNIT-III (12 Lectures)

Industry and Infrastructure in Odisha

Industry: Investment, industrial policy, and the growth of large industries, mining and quarrying; Construction; tertiary sector: tourism, transport and power;

UNIT-IV (12 Lectures)

Environment in Odisha

Land Resources, Water Resources and Forest Resources

UNIT-V (12 Lectures)

Social Sector in Odisha

Poverty: income poverty and inequality; health sector: outcomes, infrastructure, finance, public health, NRHM; education: Literacy, Primary education, secondary education, higher education, SSA; human development.

Skill Development Activities / Practical Exercise

Case studies on Odisha's economic development and regional disparities.

Preparation and presentation of district-wise socio-economic profiles using official statistical reports.

Analysis of Odisha Economic Survey, State Budget, and Human Development Reports.

Group discussions on regional development challenges, industrialization, agriculture, and sustainable development.

Preparation of policy briefs on employment generation, poverty reduction, and inclusive growth in Odisha.

Textbooks Recommended

Nayak, P., Panda, S. C., & Pattanaik, P. K. (Latest Edition). *The Economy of Odisha: A Profile.* Oxford University Press.

Suggested Readings

Government of Odisha. *(Latest Edition). Odisha Economic Survey.* Directorate of Economics and Statistics.

Government of Odisha. *(Latest Edition). Odisha Budget Documents.*

Government of Odisha. *(Latest Edition). Human Development Report.*

Das, Binod S. *(Latest Edition). Orissa's Economy in the Nineteenth Century.*

Vyasulu, V., & Arun, A. V. *(Latest Edition). Industrialisation in Orissa: Trends and Structure.*

Haan, A. de, & Dubey, A. *(Latest Edition). Poverty and Development in Odisha.*

Mohanty, B. *(Latest Edition). Economic Development and Regional Issues in Odisha.*

Economic and Political Weekly articles on Odisha's economy.

https://youtu.be/

Note: Latest edition of the textbooks should be used.

Digital Resources

Students are encouraged to utilize various digital learning platforms and official sources including SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, ICSSR Data Service, Government of Odisha, Directorate of Economics and Statistics, Odisha Economic Survey, Odisha Budget Portal, NITI Aayog, Ministry of Statistics and Programme Implementation (MoSPI), Reserve Bank of India (RBI), Census of India, and the Ministry of Rural Development for accessing e-content, statistical

databases, government reports, policy documents, research publications, and regional development indicators.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	**Relevance in the Course**
Professional Ethics	Promotes transparency, accountability, evidence-based policymaking, responsible governance, and ethical public administration in regional development.
Gender Sensitivity	Highlights gender disparities in education, employment, health, and economic participation while encouraging inclusive development policies.
Environmental Sustainability	Emphasizes conservation of natural resources, sustainable agriculture, climate resilience, ecological balance, and environmentally sustainable development.
Human Values	Promotes social justice, tribal welfare, poverty alleviation, inclusive growth, regional equity, and community participation in development.

SDG Mapping of the Course

SDG Goal	**Relevance to the Course**
SDG 1: No Poverty	Examines poverty reduction programmes, livelihood enhancement, and inclusive regional development in Odisha.
SDG 2: Zero Hunger	Focuses on agricultural development, food security, rural livelihoods, and sustainable farming practices.
SDG 4: Quality Education	Analyses educational development, literacy, human capital formation, and skill development.
SDG 8: Decent Work and Economic Growth	Promotes employment generation, industrial development, entrepreneurship, and balanced economic growth.
SDG 10: Reduced Inequalities	Addresses regional disparities, tribal development, social inclusion, and equitable access to development opportunities.

SDG 13: Climate Action	Encourages sustainable management of natural resources, climate adaptation, and environmental conservation.
SDG 15: Life on Land	Highlights conservation of forests, biodiversity, land resources, and sustainable ecosystem management.

Code	Course Title	Credit	L-T-P
EC-40010	**Indian Economic Policy**	4	3-1-0

Prerequisites

Candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a basic understanding of Indian Economy, Development Economics, Public Finance, Agricultural Economics, International Economics, Statistics, and contemporary economic issues. Familiarity with government policies, planning, and macroeconomic indicators will be advantageous for understanding Indian economic policy and development.

Course Objectives

Each course offered under the programme shall be designed to achieve the following objectives:

1. To develop advanced theoretical and conceptual understanding of Indian economic policies, planning, and development strategies.
2. To strengthen analytical, quantitative, and problem-solving abilities for evaluating economic reforms, infrastructure development, international trade, and agricultural policies in India.
3. To enhance practical, digital, and research competencies through the analysis of economic data, government reports, planning documents, and policy frameworks.
4. To foster critical thinking, ethical governance, evidence-based policymaking, and sustainable economic development.
5. To promote lifelong learning, professional competence, leadership, and commitment towards inclusive, equitable, and sustainable economic development in India.

Course Outcomes (COs)

Each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	**Bloom's Taxonomy Level**	**NHEQF Cognitive Level**	**Expected Learning Outcome**
CO1	Remember	Knowledge	Recall and explain the evolution, characteristics, institutional framework, and planning process of the Indian economy.
CO2	Understand	Understanding	Explain the objectives, strategies, achievements, and challenges of Indian economic policies, planning, and infrastructure development.
CO3	Apply	Application	Apply economic concepts to analyse economic reforms, international trade, WTO, and macroeconomic policy issues affecting the Indian economy.
CO4	Analyse	Higher-order Analysis	Analyse the performance of infrastructure, agricultural development, external sector policies, and contemporary economic challenges in India.
CO5	Evaluate / Create	Evaluation and Innovation	Evaluate public policies and formulate innovative policy recommendations for inclusive, sustainable, and balanced economic development in India.

CO–PO–PSO Mapping

(Rate correlations: 1 – Weakly Mapped, 2 – Moderately Mapped, 3 – Strongly Mapped, "_" – No Correlation)

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**

CO1	2	3	2	2	2	1	1	1	2	1	1	2	3	2	1	1	2
CO2	2	3	2	3	3	2	1	1	2	1	2	2	3	3	2	1	2
CO3	3	3	2	3	3	2	1	1	2	2	2	3	3	3	2	2	3
CO4	3	2	3	3	3	2	2	1	2	2	3	3	2	3	3	3	3
CO5	3	3	3	3	2	2	2	2	3	3	2	3	3	2	3	3	3
Average	2.6	2.8	2.4	2.8	2.6	1.8	1.4	1.2	2.2	1.8	2.0	2.6	2.8	2.6	2.2	2.0	2.6

UNIT-I: Indian Economy: Features and Issues (12 Lectures)

Issues and planning in India: Broad demographic Features of Indian Population; population policy and its development; Poverty and inequality: Various government measures; food security, PDS and TPDS.

UNIT-II: Planning in India (12 Lectures)

Objectives and strategy of planning; achievement and failures of planning in India; recent plans-objectives, allocation and targets; NITI Aayog-objectives and functions.

UNIT-III : Infrastructure and Resource Base (12 Lectures)

Physical Infrastructure in India: energy, transport, communication-development and challenges; Social Infrastructure-housing, education and health; development and issues of the service sector.

UNIT-IV: Economic Reforms and External Sector of India (12 Lectures)

Rationale for reforms and LPG policy; WTO and its impact on Indian economy; structure and direction of foreign trade.

UNIT-V: Issues in Agricultural Sector of India (12 Lectures)

Critical evaluation of land reforms in India and recent initiatives; need for second green revolution; policies for sustainable agriculture; agricultural marketing and price policy.

Skill Development Activities / Practical Exercise

Case studies on Indian economic policies and development programmes.

Analysis of Economic Survey of India, Union Budget, and NITI Aayog reports.

Preparation of policy briefs on poverty, infrastructure, agricultural reforms, and economic growth.

Group discussions on economic reforms, globalization, WTO, and contemporary policy challenges.

Presentation on recent government initiatives and sectoral policy reforms.

Textbooks Recommended

Misra, S. K., & Puri, V. K. *(Latest Edition).* **Indian Economy.** Himalaya Publishing House.

Suggested Readings

Agarwal, A. N. *(Latest Edition).* **Indian Economy.**

Dutt, R., & Sundaram, K. P. M. *(Latest Edition).* **Indian Economy.**

Dhingra, I. C. *(Latest Edition).* **Indian Economy: Resource Planning, Development and Problems.**

Jain, B. *(Latest Edition).* **The Indian Economy: Problems and Prospects.**

Joshi, V., & Little, I. M. D. *(Latest Edition).* **India: Macroeconomics and Political Economy.**

Ahluwalia, I. J., & Little, I. M. D. *(Eds.) (Latest Edition).* **India's Economic Reforms and Development.**

Government of India. *(Latest Edition).* **Economic Survey of India.**

Government of India. *(Latest Edition).* **Union Budget Documents.**

NITI Aayog. *(Latest Edition).* **Annual Report.**

https://youtu.be/

Note: Latest edition of the textbooks should be used.

Digital Resources

Students are encouraged to utilize various digital learning platforms and official sources including SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, ICSSR Data Service, NITI Aayog, Ministry of Finance, Ministry of Statistics and Programme Implementation (MoSPI), Reserve Bank of India (RBI), Economic Survey of India, Union Budget Portal, Press Information Bureau (PIB), World Bank Open Data, International Monetary Fund (IMF), World

Trade Organization (WTO), and the Government of India Open Government Data (OGD) Platform for accessing e-content, statistical databases, policy documents, official reports, and current economic developments.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	Relevance in the Course
Professional Ethics	Promotes transparency, accountability, ethical governance, evidence-based policymaking, and responsible public administration.
Gender Sensitivity	Highlights gender budgeting, women's economic empowerment, inclusive development, and equitable access to public resources and opportunities.
Environmental Sustainability	Emphasizes sustainable development, green growth, environmental regulations, climate-resilient policies, and sustainable resource management.
Human Values	Encourages social justice, inclusive growth, poverty reduction, equity, welfare-oriented development, and responsible citizenship.

SDG Mapping of the Course

SDG Goal	Relevance to the Course
SDG 1: No Poverty	Examines poverty alleviation programmes, social protection, and inclusive development policies.
SDG 2: Zero Hunger	Focuses on food security, agricultural productivity, and sustainable agricultural policies.
SDG 4: Quality Education	Promotes human capital development, educational infrastructure, and skill development.
SDG 8: Decent Work and Economic Growth	Explains employment generation, economic reforms, entrepreneurship, and sustainable economic growth.
SDG 9: Industry, Innovation and Infrastructure	Highlights infrastructure development, industrial policy, technological advancement, and innovation-led growth.

SDG 10: Reduced Inequalities	Addresses regional disparities, inclusive growth, social equity, and welfare policies.
SDG 13: Climate Action	Promotes environmentally sustainable economic policies, climate resilience, and green development strategies.

Code	Course Title	Credit	L-T-P
TR 40082	**Academic Excursion Through Internship Programme**	4	1-0-3

CO1-The students will have working knowledge in the real world and operate.

CO2- Develop an understanding of the importance and scope of industry interface.

CO3- Understand the changing micro and macro environment of organizations and the importance of industry research and forecasting.

CO4- Develop an understanding of the competitive strategies for industry.

CO5- Establish a link between academic programme and industry as a strategic tool for staying ahead in a competitive market.

CO-PO- PSO Mapping

Course Outcomes \ Program Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4
CO1	3	2	2	2	1	2	3	2	1	2	2	2	3	1	3	2
CO2	3	3	2	3	2	2	3	2	1	3	2	2	3	2	3	2
CO3	2	2	3	2	1	3	3	2	1	2	3	2	3	1	3	2
CO4	2	3	2	3	2	2	3	2	2	2	3	2	3	2	3	2
CO5	2	2	3	3	2	3	3	2	2	3	3	2	3	2	3	2
Average	**2.4**	**2.4**	**2.4**	**2.6**	**1.6**	**2.4**	**3.0**	**2.0**	**1.4**	**2.4**	**2.6**	**2.0**	**3.0**	**1.6**	**3.0**	**2.0**

1 – Weakly Mapped (Low)

2 – Moderately Mapped (Medium)

3 – Strongly Mapped (High)

– – No Correlation

Course Description:

This course is designed to develop and improve your understanding of tribal culture of India (Odisha) through the documentaries on resource management, practices on Indigenous Knowledge (IK) system and material culture. This will also help to expand your knowledge on tribal perspectives and responsibilities on the resource managers and IK practitioners.

Course Outcomes-

To produce skilled and knowledgeable students who not only develop thorough understanding of society and tribal economy, but also helps in exploring theoretical and practical knowledge on tribal resource management.

The student will be able to recognise the role and significance of tribal prospective of resource management, traditional knowledge practice and its utilization.Students will be able to explain the relationship between tribal culture with resource management and knowledge system through the documentary movies provided by the SCSTRTI, Bhubaneswar Odisha. Students will be able to distinguish between materials/tangible culture and non-tangible culture of Tribes of Odisha which includes agricultural equipment, hunting equipment, art and craft, jewellery, textile and so on. The students will be aware and more pro towards the importance and usefulness of Intellectual property right.

SDG Mapping with this course

SDG No.	**SDG Title**	**Nature of Contribution**
SDG 4	Quality Education	Experiential learning and field-based knowledge
SDG 10	Reduced Inequalities	Understanding and inclusion of tribal communities
SDG 11	Sustainable Cities and Communities	Preservation of cultural heritage
SDG 12	Responsible Consumption and Production	Sustainable resource management practices

SDG 15	Life on Land	Conservation of natural resources and biodiversity

Semester III

Code	Course Title	Credit	L-T-P
RM50001	**Research Methodology**	4	3-1-0

Course Objectives:

The objectives of this course is to:

Provide exposure to various research techniques and methods (both quantitative and qualitative). Build upon the basic assumptions in adopting different methodologies for different kinds of research themes. Adopt appropriate methodologies for building upon hypotheses and analyzing research gaps. Teach certain quantitative methods, statistical techniques and qualitative methods to collect and analyze the data would help them organize and analyze the information gathered by them.

Course Outcomes:

On the completion of this course students should be able to:

CO1- Know the formulation of research problems and plan for their structural study.

CO2- Understand the scope of collection of relevant data and their interpretations

CO3- Learn the use of various statistical analysis for decision making.

CO4- Learn different quantitative methods, statistical techniques and qualitative methods to collect and analyze the data.

CO5- Adopt methodologies to build hypotheses and test them with appropriate methods.

CO-PO- PSO Mapping

Course Outcomes \ Program Outcomes	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**	**PSO 1**	**PSO 2**	**PSO 3**	**PSO 4**
CO1	3	2	1	1	1	2	1	2	1	–	2	1	2	1	–	2
CO2	2	3	2	2	2	2	2	2	1	1	2	1	2	2	1	2
CO3	2	3	2	3	3	2	2	3	2	1	3	1	3	3	1	3
CO4	2	2	3	3	2	2	2	2	1	2	3	2	3	2	2	2
CO5	2	3	2	3	3	2	2	2	2	2	3	2	3	3	2	2
Average	**2.2**	**2.6**	**2.0**	**2.4**	**2.2**	**2.0**	**1.8**	**2.2**	**1.4**	**1.2**	**2.6**	**1.4**	**2.6**	**2.2**	**1.2**	**2.2**

1 – Weakly Mapped (Low)

2 – Moderately Mapped (Medium)

3 – Strongly Mapped (High)

– – No Correlation

Course Inputs:

UNIT-I INTRODUCTION TO RESEARCH (12 Lectures)

Meaning of Research, Philosophy of Research, Motivation of Research, Importance and Scope of Research, Scientific Research Methods and its Application to Social Phenomenon Introduction to various aspects of research methods, Types of Research.

UNIT-II RESEARCH DESIGN AND DATA COLLECTION(12 Lectures)

Research Design: Meaning, Need and features of a good design.Types of Research Design. Literature Review and its Importance, Steps in the Process of Research, Write a Research Proposal, Write qualitative research for publication/communication Sources and Methods of Data Collection

UNIT-III RESEARCH PROBLEM AND TYPES (12 Lectures)

Research Problem, Research objectives and its Formulation, Fundamental research questions, Research Variables, Measurement and Scaling: Measurement in Research, Measurement Scales, Source of Error in Measurement, Test of sound Measurement: Reliability and Validity. Qualitative Research, Ethnographic Study, Observation, Case Study Method, Interviewing, Schedule, Mail Survey Method, Action Research: PRA and RRA, Focused Group discussion (FGD)

UNIT-IV STATISTICS (12 Lectures)

Descriptive Statistics: Frequency Distribution, Relative, Percentage and Cumulative Frequency Distribution, Graph and Diagrams: Two Variables Graphs, Bar Diagrams, Pie Diagram, Pictorial Diagrams. Measures of Central Tendency: Mean, Mode, Median, Measures of Variability: Range, Standard Deviation, Coefficient of Variation, Normal Distribution: Basic Concept only, Standard Scores Correlation: Correlation Coefficient and its properties, Linear Regression: Regression coefficients, Line of Regressions, Relation between Regression Coefficients and Correlation Coefficient., Rank Correlation Coefficient, Biserial Correlation Coefficient, Coefficient of Determination

UNIT-V SAMPLING (12 Lectures)

Sampling: Need for Sampling, Methods of Probability Sampling and Non probability Sampling. Sampling and Non sampling Error

Hypotheses: Concept of Population, Sample, Parameter and Statistic, Concept of Hypothesis, Types of Hypotheses, Formulation of Hypothesis, Procedure of Testing of Hypothesis, Test of Significance, One-tailed and Two-tailed Test, Testing of Single Mean and Difference of Means, Parametric and Non parametric Test, Variable Ananlyis.

Report Writing: Objective, Purpose of Report, Type of Reports, Report Writing Process, Guidelines for Effective Report Writing.

Recommended Learning Resources

Suggested Readings:

1. Creswell, John W (2009) Research design: qualitative, quantitative, and mixed methods approaches

2. Creswell, John W (2013) Qualitative inquiry and research design: choosing among five approaches

3. Garett, Henry, E Statistics in Psychology and Education - David Heley and Co.

4. Huberman, A. Michael (2002) Qualitative researcher's companion

5. Maxwell, Joseph (2005) Qualitative research design: an interactive approach

6. W.J. Goode and P. K. Hatt (1952) Methods in Social Research. Mc Graw Hill Co.

Reference Materials & Digital Resources:

1. Kothari, C.R. Research Methodology, Methods and Techniques -Wiley Eastern Limited - New Delhi

2. Ahuja, R (2010), Research Methods, Rawat Publication, Jaipur.

3. Sondhi N, Chawla D.(2nd Edition), Research Methodology, Vikas Publication.

Swayam Link- https://onlinecourses.swayam2.ac.in/nou24_cm17/preview

SDG Mapping with this course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Development of research and analytical skills
SDG 9	Industry, Innovation and Infrastructure	Research for innovation and problem-solving
SDG 12	Responsible Consumption and Production	Research for sustainable practices
SDG 16	Peace, Justice and Strong Institutions	Ethical research and evidence-based policy-making

Code	Course Title	Credit	L-T-P
RE50003	**Research and Publication Ethics**	4	3-1-0

Course Objectives:

The objectives of this course is to:

This course is focusing on basics of philosophy of science and ethics, research integrity, publication ethics, Hands on sessions are designed to identify research misconduct and predatory publications. Indexing and citation databases, open access publications, research metrics (citation, hi-index, impact factor etc.) and plagiarism tools will be taught in this course.

Course Outcomes:

On the completion of this course students should be able to:

CO1- Learn about basics of philosophy of science and ethics, research integrity.

CO2- Have awareness about the publication ethics and publication misconducts.

CO3- Learn about the publication related databases and various research related tools.

CO4- Develop knowledge about indexation and citation of publications.

CO5- Learn in and out of research publications.

CO-PO- PSO Mapping

Course Outcomes \ Program Outcomes	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**	**PSO 1**	**PSO 2**	**PSO 3**	**PSO 4**
CO1	3	2	2	1	2	3	1	2	1	–	2	2	2	2	1	2
CO2	2	3	2	2	2	3	1	2	1	1	2	2	2	2	1	2
CO3	2	3	2	3	3	3	2	2	1	1	3	2	3	3	1	2
CO4	2	2	3	2	2	2	2	3	1	1	3	2	3	2	2	3
CO5	2	2	3	3	3	3	2	2	2	2	3	2	3	3	2	2
Average	**2.2**	**2.4**	**2.4**	**2.2**	**2.4**	**2.8**	**1.6**	**2.2**	**1.2**	**1.0**	**2.6**	**2.0**	**2.6**	**2.4**	**1.4**	**2.2**

1 – Weakly Mapped (Low)

2 – Moderately Mapped (Medium)

3 – Strongly Mapped (High)

– – No Correlation

Course Inputs:

UNIT-I: PHILOSOPHY AND ETHICS (5 Lectures)

Introduction of philosophy: Definition, nature and scope, concept, branches Ethics: Definition, moral philosophy, nature of moral judgments and reactions.

UNIT-II: SCIENTIFIC CONDUCT (5 Lectures)

Ethics with respect to science and research, Intellectual honesty and research Integrity Scientific Misconducts: Falsification, Fabrication and Plagiarism (FFP) Redundant Publications: duplicate and overlapping publications, salami slicing Selective Reporting and misrepresentation of data

UNIT-III: PUBLICATION ETHICS (7 Lectures)

Publication Ethics: Definition, introduction and importance Best practices/standards setting initiatives and guidelines: COPE, WAME etc. Conflicts of interest, Publication misconduct: definition, concepts, problems that lead to unethical behaviour and vice versa, types, Violation of publication ethics, authorship and contributor-ship, Identification of publication, misconduct, complaints and appeals, Predatory publishers and journals, Practice

UNIT-IV: OPEN ACCESS PUBLISHING (4 Practical)

Open access Publications and Initiatives

SHERPA/ROMEO online resource to check publisher copyright and self-archiving policies Software tool to identify predatory publications developed by SPPU

Journal finder/journal suggestion tools viz. JANE, Elsevier Journal finder, Springer journal suggester, etc.

UNIT-V: PUBLICATION MISCONDUCT (4 Practical)

A. Group Discussions

Subject specific ethical issues, FFP, authorship Conflicts of interest, Complaints and appeals: examples and fraud from India and Abroad

B. Software tools:

•Use of plagiarism software like Turnitin, Urkund and other open source software tools

• Use of Referencing software like Mendeley, Zotero etc

UNIT-VI : DATA BASES AND RESEARCH METRICS (7 Practical)

A. Databases

•Indexing Databases

•Citation Databases: Web of Science, Scopus etc.

B. Research Metrics

Impact factor of journal as per Journal Citation Report, SNIP, SJR, IPP,Cite Score Metrics: h-index, g index, I 10 index, alt metrics

Recommended Learning Resources

Suggested Readings:

1. The students' guide to Research Ethics by Paul Oliver Open University Press, 2003

2. Responsible conduct of Research by Adil E. Shamoo; David B. Resnik Oxford University Press, 2003

3. Anderson B.H., Dursaton, and Poole M.: Thesis and Assignment writing, Wiley Eastern 1997.

Reference Materials & Digital Resources:

1. S. B. Kishor, A.S. Kushwaha, Research and Publication Ethics, Das Ganu Prakashan, Nagpur,
2. Y. Sharma., A. Sharma, Textbook of Research and Publication Ethics, KalyaNIPublishers.

Swayam Link- https://onlinecourses.swayam2.ac.in/nou24_ge73/preview

SDG Mapping with this course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Promoting ethical research and academic integrity
SDG 9	Industry, Innovation and Infrastructure	Supporting research quality and innovation
SDG 12	Responsible Consumption and Production	Responsible dissemination and use of research findings
SDG 16	Peace, Justice and Strong Institutions	Promoting transparency, accountability, and ethical standards

Course Title: Computer Application and Data Analysis

Code	Course Title	Credit	L-T-P
CA50005 (For Other discipline)	Computer Application and Data Analysis	4	3-0-1

Course Objectives:

1. Increase knowledge and requisite skills of participants on the use of SPSS
2. enable the students make the most of this powerful software package while allowing them to work independently with SPSS on their own data
3. Provide a solid foundation for advanced data analysis work.
4. Increase proficiency of scholars on the use of Basic computer Applications and SPSS.

Course Outcomes:

Upon successful completion of this course, students will be able to:

- **CO1 (Knowledge/Remember):** Recall and describe the fundamental concepts of computer hardware, software, operating systems, and basic computer applications.
- **CO2 (Understanding):** Explain and interpret the features and applications of MS Office packages and various analytical and research software tools used for data organization, documentation, and presentation.
- **CO3 (Application):** Apply appropriate computer applications and statistical methods to formulate research hypotheses, organize data, and perform basic computational tasks.
- **CO4 (Analysis):** Analyze research data using statistical software such as SPSS and interpret the results to support evidence-based decision-making and problem-solving.
- **CO5 (Synthesis/Evaluation):** Design, implement, and evaluate data analysis workflows by integrating computer applications, MS Office tools, and SPSS to prepare professional reports and support research and organizational decision-making.

CO-PO-PSO Mapping

*(Rate correlations: **1** - Weakly Mapped, **2** - Moderately Mapped, **3** - Strongly Mapped, "_" - No Correlation).*

Course Duration: 45 hours

Course Syllabus

Unit I: Computer Basic and Computer Fundamental [8 Classroom Contact Hours]

Hardware and Software, Functional units comprising a typical computer configuration: input/output, fixed and removable data storage, internal storage, control and arithmetic/logic unit, The concepts relating to execution speed, data access times, storage capacities and similar comparative aspects of hardware performance. Operating Systems: Windows, Linux etc. Application software, role and functions of commonly available applications, Computer Network Concept- Data communication and network terminology, IP address and its significance, Internet, Multimedia, WWW, FTP, E-mail, and Web pages. Concept of VPNs. Concept of Network security and management.

Unit II: Microsoft word [9 Classroom Contact Hours]

Creating and editing documents, formatting text and paragraph, formatting documents, creating and formatting tables, illustration documents with graphics. Creating a web page, mail merge and document merging, working with styles and templates, developing multi-page documents, integrating word with other applications, exploring advance graphics, building forms, working with charts and diagrams

Unit III: Microsoft Excel [9 Classroom Contact Hours]

Building and editing worksheets, formatting a worksheet, working with charts, Working with formulas and functions, managing workbooks and preparing them for the web, automating worksheet tasks with macros, using lists, analyzing list data, enhancing charts and worksheets Using analysis tools, Analyzing data with pivot tables, exchanging data with other programs.

Unit IV: Microsoft PowerPoint [9 Classroom Contact Hours]

Creating a presentation with Microsoft PowerPoint, modifying a presentation, inserting objects into presentation, finishing a presentation, Working with advanced tools and masters, enhancing charts, inserting illustration, objects and media clips, using advanced features.

Unit V: Statistical Analysis [10 Classroom Contact Hours]

The analysis will be done with the help of SPSS, and other statistical packages. M Descriptive Analysis: Mean, Median, Mode, Standard Deviation, Correlation. Regression Analysis, t- test, chi-square test, R-Square test, Factor Analysis, ANOVA, NVIVO, SPSS, JAMOVI, AMOS.

Total Practical / Lab Experiments: [30 Lab Contact Hours]

1. Create and format a table in Word with at least 5 rows × 5 columns; apply borders, shading, and sorting.
2. Perform a Mail Merge: prepare a personalized invitation letter using an Excel data source (name, address).
3. Build a student mark sheet with fields (Name, Roll, Subject Marks). Apply formulas for Total, Average, Percentage, and Grade.
4. Format the worksheet (merge cells, adjust column width, borders, number formatting). Apply conditional formatting (highlight marks <40 in red).
5. Create different charts (bar, pie, line) for student performance or sales data. Enhance charts with titles, legends, and labels.
6. Demonstrate formulas and functions:
   SUM, AVERAGE, MAX, MIN, COUNT, IF
7. Create a PowerPoint presentation (minimum 8 slides) on “Emerging Technologies in Computing.” Include title slide, content slides, conclusion, and references.
8. Create a PowerPoint presentation (minimum 10 slides) on “Emerging Trends in Computer Science.” Include:
    1. Slide designs, transitions, and animations
    2. Insert images, charts, and SmartArt
    3. Add audio or video clips

9. Input a dataset of student scores into SPSS. Perform Descriptive Statistics: Mean, Median, Mode, Standard Deviation, and Correlation. Generate graphs (histogram, scatter plot).
10. Using SPSS, perform Hypothesis Testing:

Course Code	Course Title	Credit Hours (Weekly)			Total Credit
		L	T	P	
TR50051	**Management of Tribal Resource**	**3**	**1**	**0**	**4**

Prerequisites

candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a foundational understanding of tribal communities, basic institutional structures, and resource ecosystems. Familiarity with general management principles and rural livelihood concepts will be advantageous for grasping modern and traditional resource management strategies.

Course Objectives

each course offered under the programme shall be designed to achieve the following objectives:

1. To update students about contemporary management tools, frameworks, and strategic techniques to assess tribal resource trends systematically.
2. To strengthen knowledge regarding depleting natural resources and formulate community-driven strategies to arrest distress among vulnerable tribal populations.
3. To enhance competencies in evaluating core functional areas of management—including human resources, marketing, finance, and operations—within the unique socio-cultural framework of tribal ecosystems.
4. To promote analytical thinking regarding microfinance systems, self-help groups (SHGs), and cooperative networks to foster sustainable economic empowerment.
5. To foster appreciation for indigenous knowledge, traditional leadership patterns, and ethical governance practices necessary for balanced regional development.

Course Outcomes (COs)

Each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	Bloom's Taxonomy Level	NHEQF Cognitive Level	Expected Learning Outcome

CO1	Remember	Knowledge	Recall and describe traditional wisdom, indigenous structures, and the native management frameworks used by tribal communities to administer local natural resources.
CO2	Understand	Understanding	Explain modern management concepts across human resources, marketing, finance, and operations, aligning them contextually with the socio-economic realities of tribal regions.
CO3	Apply	Application	Apply institutional mechanisms like Self-Help Groups (SHGs), thrift societies, and microfinance models to chart practical pathways for tribal economic empowerment.
CO4	Analyse	Higher-order Analysis	Analyse emerging trends in general management, depleting natural resource capacities, and market linkages to protect minor forest products (NTFPs) from systemic vulnerabilities.
CO5	Evaluate / Create	Evaluation & Innovation	Evaluate operational interventions, assess tribal development policies, and design comprehensive asset management strategies that integrate traditional systems with modern enterprise applications.

CO–PO–PSO Mapping

(Rate correlations: 1 – Weakly Mapped, 2 – Moderately Mapped, 3 – Strongly Mapped, "_" – No Correlation)

COs/ POs	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	3	3	2	2	2	1	1	1	2	1	1	3	3	2	2	1	1
CO2	3	3	2	3	3	2	1	1	2	1	2	3	3	3	2	1	2
CO3	3	3	2	2	3	2	1	1	2	2	2	3	3	3	3	2	2

CO4	3	2	3	3	3	2	2	1	2	2	3	3	2	3	3	3	3
CO5	3	3	3	3	3	3	2	2	2	2	3	3	3	3	3	3	3
Average	**3.0**	**2.8**	**2.4**	**2.6**	**2.8**	**2.0**	**1.4**	**1.2**	**2.0**	**1.6**	**2.2**	**3.0**	**2.8**	**2.8**	**2.6**	**2.0**	**2.2**

Course Inputs

- **UNIT- I: Emerging Trends in General Management**

Business Process Re-engineering – Benchmarking – Management by Objectives and Exception – Management of natural resources in Tribal Region, Management By Walking Around – Corporate Governance – Corporate Social Responsibility – Sustainable resource use in Tribal Areas. Business Adoption – Work-life balance. Tribal Communication Skill, Traditional Leadership Pattern.

- **UNIT- II: Emerging Trends in Human Resource Management**

Socialization – 360 degrees appraisal – Flexi timing – Emotional Labour – Knowledge, Tribal concept of labour, Tribal Skill development and Human Capital formation, management – Employee engagement – Retention strategies – Outplacement. Traditional ways of solving HRM problems, Cultural taboos in HRM.

- **UNIT- III: Emerging Trends in Marketing Management**

Marketing Mix – Customer Relationship Management – Online and Web marketing – Marketing ethics. Marketing of NTFPs minor forest products, Linking NTFP goods with NTFPs with formal Market. Role of Tribal Development co-operative society in marketing the Tribal Products.

- **UNIT- IV: Best Practices in Financial Management**

Economic Value Addition – Activity Based Costing – Depository Services – Derivatives Market. Traditional valuation practices. Economic Empowerment of tribals through SHG, Micro Finance, Thrift society.

- **UNIT- V: Emerging Trends in Operations Management**

Business Process Outsourcing – Enterprise Resources Planning – Kaizen – Automated Storage and Retrieval System – Just-in-time inventory, Flexible manufacturing systems, Lean manufacturing, Supply chain management. Capacity building for Entrepreneurship among Tribals, Entrepreneurship Development. Traditional Management of local resources for economic development.

Skill Development Activities / Practical Exercise

- Preparation of analytical case reviews on traditional leadership patterns and native communication skills within diverse tribal contexts.
- Field exercises and model design for group-led economic initiatives using Microfinance mechanisms and Self-Help Group (SHG) strategies.
- Formulation of structural market linkage mapping plans for Non-Timber Forest Products (NTFPs) to connect local goods with organized commercial sectors.

- PowerPoint presentations and semantic group debates evaluating Corporate Social Responsibility (CSR) profiles and environmental interventions in tribal belts.
- Mini assignment portfolios detailing strategic action paths for capacity building and entrepreneurship generation among native youth.

Textbooks Recommended

- Jha, A. K. (Latest Edition). *Management Principles and Application*. Vrinda Publications (P) Ltd.
- Singh, B. P., & Singh, A. K. (Latest Edition). *Essentials of Management*. Excel Books.
- Gupta, C. B. (Latest Edition). *Management Concept and Practices*. Sultan Chand & Sons.
- Bera, G. K. (Latest Edition). *Tribal India's Traditional Wisdom and Indigenous Resource Management*. Aryan Books International.

Suggested Readings

- Chhabra, T.N., & Grover, S. K. (Latest Edition). *Marketing Management*. Dhanpat Rai & Company.
- Grewal, D., & Levy, M. (Latest Edition). *Marketing*. McGraw Hill Education.
- Ramachandran, K. (Latest Edition). *Entrepreneurship Development*. McGraw-Hill Education.
- Khanka, S. S. (Latest Edition). *Human Resource Management*. S Chand.
- Ahuja, K. K. (Latest Edition). *Industrial Relations*. Kalyani Publishers.
- Rao, P. S. (Latest Edition). *HRM and IR*. Himalaya Publishing House.
- Gupta, P. V. (Latest Edition). *Tribal Development and Management*. Raj Publications.

Digital Resources

students are encouraged to utilize digital learning platforms and online resources including SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, Tribal Digital Document Repository, Ministry of Tribal Affairs (MoTA) Portal, TRIFED Archives, Harvard Business Review Online, Microsoft Learn, and Google Workspace to access e-learning modules, regional case studies, financial inclusion reports, policy papers, and software tools for project planning and supply chain analytics.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	**Relevance in the Course**
Professional Ethics	Promotes ethical handling, transparent corporate governance, protection of indigenous community rights, and corporate social responsibility (CSR) when dealing with native resource configurations.
Gender Sensitivity	Encourages structural analysis of the contribution of women in tribal resource administration, fostering inclusive leadership dynamics, and equalizing opportunities across micro-enterprises.

Environmental Sustainability	Promotes strategic preservation practices, checking depletion vectors of forest resources, and embedding sustainable operational parameters within regional operations management.
Human Values	Emphasizes absolute respect for traditional wisdom, community autonomy, integration of tribal cultural traits, and systemic equity during human capital building activities.

SDG Mapping of the Course

SDG Goal	Relevance to the Course
SDG 1: No Poverty	Facilitates generation of sustainable micro-livelihoods, economic capital access via institutional credit networks, and protective safety boundaries against local financial distress.
SDG 8: Decent Work and Economic Growth	Enhances employment dynamics through structural capacity building, native entrepreneurship incubation, and integration of informal forest markets with wider value chains.
SDG 13: Climate Action	Integrates age-old indigenous management knowledge to combat depletion challenges, forming localized adaptive capacities against climate irregularities.
SDG 15: Life on Land	Strengthens direct community conservation programs, ensuring balanced ecosystem maintenance, protective utilization of minor forest assets, and protection of natural biodiversity blocks.

Course Code	Course Title	L	T	P	Total Credit
TR50053	Economics of Tribal Resource	3	1	0	4

Prerequisites

candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a basic knowledge of rural economics, agrarian systems, and elementary resource structures. Familiarity with baseline economic activities and introductory concept frameworks of rural livelihoods will be advantageous for contextualizing resource interventions.

Course Objectives

Each course offered under the programme shall be designed to achieve the following objectives:

1. To help students understand the concepts, meanings, typologies, and structural forms of tribal livelihoods, facilitating effective intervention processes.
2. To understand the institutional and market frameworks required to expand choices and enhance resource accessibility for improving tribal economic activities.
3. To strengthen knowledge concerning the equitable distribution of natural endowments and explore balanced frameworks for rural asset allocation.
4. To promote analytical thinking regarding the socio-economic impacts of migration, institutional displacement, and dispossession patterns within tribal habitats.
5. To foster actionable competencies in utilizing participatory evaluation methods, rural resource mapping, and sustainable livelihood planning systems.

Course Outcomes (COs)

each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	**Bloom's Taxonomy Level**	**NHEQF Cognitive Level**	**Expected Learning Outcome**
CO1	Remember	Knowledge	Recall and explain the primary distribution patterns of tribal natural resources, entitlement structures, and baseline accessibility limitations.
CO2	Understand	Understanding	Identify, interpret, and explain the comprehensive spectrum of tribal economic activities across land, water, forest, and livestock-based sub-sectors.
CO3	Apply	Application	Apply Participatory Rural Appraisal (PRA), Participatory Resource Mapping (PRM), and participatory planning models to assess local community assets.
CO4	Analyse	Higher-order Analysis	Analyse structural interventions, state development policies, and institutional factors influencing tribal entrepreneurship, migration, and livelihood security.

CO5	Evaluate / Create	Evaluation & Innovation	Evaluate resource sustainability trade-offs, address user-entitlement conflicts, and formulate strategic intervention frameworks to mitigate tribal displacement and poverty vectors.

CO–PO–PSO Mapping

(Rate correlations: 1 – Weakly Mapped, 2 – Moderately Mapped, 3 – Strongly Mapped, "_" – No Correlation)

COs/ POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	3	3	2	2	2	1	1	1	2	1	1	3	3	2	2	1	1
CO2	3	3	2	3	3	2	1	1	2	1	2	3	3	3	2	1	2
CO3	3	3	2	2	3	2	1	1	2	2	2	3	3	3	3	2	2
CO4	3	2	3	3	3	2	2	1	2	2	3	3	2	3	3	3	3
CO5	3	3	3	3	3	3	2	2	2	2	3	3	3	3	3	3	3
Average	**3.0**	**2.8**	**2.4**	**2.6**	**2.8**	**2.0**	**1.4**	**1.2**	**2.0**	**1.6**	**2.2**	**3.0**	**2.8**	**2.8**	**2.6**	**2.0**	**2.2**

Course Inputs

- **UNIT- I: Livelihood**

Concept, meaning and nature of livelihood. Factors that affect livelihood, Agrarian structure, Land and Water based-traditional land cultivation, shifting cultivation. Forest based – food gathering, gum, timber, honey, seasonal food collection. Livestock based-consumption and production.

- **UNIT- II: Land and Water Based Intervention**

Agriculture and improved agricultural practices, improved crop productivity, increasing cropping intensity, fisheries, watershed management, soil and water conservation activities and horticultural plantation.

- **UNIT- III: Issues in Livelihood**

Traditional issues of tribal livelihood. Changing nature of tribal livelihood issues, Migration, displacement and dispossession, State policies of tribal livelihood.

- **UNIT- IV: Understanding Natural Resources**

Concept, Meaning of Natural Resource and sustainability: Forests- Types, functions, ownership, control and regulatory systems, current critical issues of forests and its sustainability (Degradation conflicts, competing user rights and entitlements).

- **UNIT- V: Natural Resource Management Processes**

Participatory methods for resource assessment, planning and impact assessment. Participatory rural Appraisal (PRA), Participatory Resource mapping (PRM), Participatory planning.

Skill Development Activities / Practical Exercise

- Conducting targeted baseline laboratory simulations or fieldwork frameworks using visual Participatory Rural Appraisal (PRA) field charts.
- Drafting comprehensive structural models for local watershed interventions and resource-conserving horticultural operations.
- Designing field exercise maps for Participatory Resource Mapping (PRM) applied to rural agricultural holdings and common property assets.
- Group debates and slide presentations evaluating state-level displacement policies, migration profiles, and indigenous rehabilitation packages.
- Preparation of analytical reports detailing commercial intervention pipelines for tribal entrepreneurship and minor forest product collection.

Textbooks Recommended

- Bhat, S. (Latest Edition). *Natural Resources Conservation Delhi: Law*. Sage Publications.
- Gole, P. (Latest Edition). *Nature Conservation and Sustainable Development in India*. Rawat Publications.
- Panda, P. C. (Latest Edition). *Towards Tribal Development: Myth and Reality*. Cyber Tech Publications.
- Paul, S. K. (Latest Edition). *Tribal Agriculture and Modernization: The Change and Continuity*. Daya Publishing House.

Suggested Readings

- Akinnifesi, F. K., Sileshi, G., Ajayi, O. C., Chirwa, P. W., Mngomba, S., Chakeredza, S., & Nyoka, B. I. (Latest Edition). *Domestication and Conservation of Indigenous Miombo Fruit Trees for Improving Rural Livelihoods*. Tropical Conservancy.
- Andersen, K. E., Sophorn, S., & Thornberry, F. (Latest Edition). *Development of a Sub-decree on Shifting Cultivation*. International Labour Organisation.
- Belsky, J. M., & Siebert, S. F. (Latest Edition). *Cultivating Cacao: Implications of Sun-grown Cacao on Local Food Security and Environmental Sustainability*. Agriculture and Human Values, 20, 277-285.
- Chhauchhuak, L. (Latest Edition). *Jhum Works, Shillong Declares on Jhum: Benefits Jhum Cultivation*. Down to Earth.
- Government of India. (Latest Edition). *National Water Policy*. Ministry of Water Resources.
- Mibang, T. (Latest Edition). *Indigenous Institutions, Social Capital and Sustainability in Tribal India*. Serials Publications.
- Gowda, H. R. K. (Latest Edition). *Tribal Co-operatives in India*. Serials Publications.
- Padhy, D. N. (Latest Edition). *Role of Co-operatives for Tribal Development*. Mohit Publications.

Digital Resources

students are encouraged to utilize digital learning platforms and online resources including SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, Bhuvan Indian Geo-Platform (ISRO), Ministry of Rural Development Portal, National Institute of Rural Development and Panchayati Raj (NIRDPR) Library, FAO Corporate Document Repository, and UNDP Resilience Archives to access spatial databases, microeconomic data sheets, livelihood survey blueprints, and international models for community-based asset allocation.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	**Relevance in the Course**
Professional Ethics	Promotes fair and ethical economic models, transparency in distributing resource allocations, and checking predatory structural violations of traditional communal holdings.
Gender Sensitivity	Emphasizes the deep role of women in collecting forest produce, managing rural livestock portfolios, and ensuring equal asset shares within community intervention steps.
Environmental Sustainability	Directly embeds methods to reverse soil degradation, prevent water loss, maintain forestry assets, and configure sustainable long-term cultivation dynamics.
Human Values	Highlights inclusive welfare frameworks, safeguarding dispossessed populations, and incorporating age-old native institutional values into modern project evaluations.

SDG Mapping of the Course

SDG Goal	**Relevance to the Course**
SDG 1: No Poverty	Promotes targeted baseline livelihood options, structural adjustments to check vulnerabilities, and asset improvement initiatives to raise economic standing.
SDG 8: Decent Work and Economic Growth	Advances regional micro-enterprises, structural optimization of traditional agriculture, and structured value management for seasonal agricultural collections.
SDG 10: Reduced Inequalities	Creates institutional mechanisms that secure equal resource accessibility, protect land entitlements, and lower regional socio-economic vulnerabilities.

SDG 15: Life on Land	Enforces proper common property management, controlled forestry usage rules, and systematic preservation steps across delicate localized topographies.

Course Code	Course Title	L	T	P	Total Credit
TR-50055	Resource Management and Tribal Development	4	0	0	4

Prerequisites

candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a comprehensive grounding in the socio-economic profiles of indigenous populations, public administration frameworks, and natural resource configurations. Familiarity with local community institutional systems and state-level welfare delivery networks will be highly advantageous for analyzing developmental planning models.

Course Objectives

each course offered under the programme shall be designed to achieve the following objectives:

1. To help students understand the concepts, meanings, scope, and typologies of natural resources within tribal regions, alongside their conservation, utilization, and sustainable management.
2. To understand indigenous methods of resource exploitation, livelihood generation patterns, and the management of natural resource-based small, cottage, and handicraft micro-enterprises.
3. To analyze tribal welfare programs, constitutional provisions, administrative sub-plans, and socio-economic challenges within isolated or rural habitats.
4. To train research scholars for working constructively with tribal communities, equipping them with the skills to prepare and implement integrated regional development projects.
5. To cultivate specialized field investigation techniques, participatory execution models, and programmatic valuation structures required for balancing local ecological and economic needs.

Course Outcomes (COs)

each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	Bloom's Taxonomy Level	NHEQF Cognitive Level	Expected Learning Outcome

CO1	Remember	Knowledge	Recall and outline the foundational concepts, types, ownership laws, and classifications of natural resource structures characteristic of tribal regions.
CO2	Understand	Understanding	Explain good governance parameters, statutory tribal protection mechanisms, and institutional arrangements to serve as informed change agents in community development.
CO3	Apply	Application	Apply programmatic frameworks, administrative sub-plans, and welfare models to systematically address health, education, and livelihood challenges in tribal communities.
CO4	Analyse	Higher-order Analysis	Analyse indigenous resource extraction methods, native crafts, and sustainable processing options to support rural small-scale and cottage entrepreneurs.
CO5	Evaluate / Create	Evaluation & Innovation	Evaluate grass-roots execution constraints, utilize participatory rural appraisal frameworks, and synthesize integrated regional development plans for tribal areas.

CO–PO–PSO Mapping

(Rate correlations: 1 – Weakly Mapped, 2 – Moderately Mapped, 3 – Strongly Mapped, "_" – No Correlation)

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	3	3	2	2	2	1	1	1	2	1	1	3	3	2	2	1	1
CO2	3	3	2	3	3	2	1	1	2	1	2	3	3	3	2	1	2
CO3	3	3	2	2	3	2	1	1	2	2	2	3	3	3	3	2	2
CO4	3	2	3	3	3	2	2	1	2	2	3	3	2	3	3	3	3
CO5	3	3	3	3	3	3	2	2	2	2	3	3	3	3	3	3	3

Average	**3.0**	**2.8**	**2.4**	**2.6**	**2.8**	**2.0**	**1.4**	**1.2**	**2.0**	**1.6**	**2.2**	**3.0**	**2.8**	**2.8**	**2.6**	**2.0**	**2.2**

Course Inputs

- **UNIT- I: Tribal Development Policies, Programmes and Governance**

Historical Perspectives of Tribal Development Policy: Constitutional identity, The fifth and sixth schedule of the Indian Constitution, Commission and committees on tribal Development, National Tribal Development Policy 2005, Tribal Sub-Plans, TDA and ITDA approaches. Protection of Tribal Rights and Governance: United Nations Declaration on Rights of Indigenous People, ILO Convention on rights of Indigenous people, Forest Dwellers protection Act, Institutions in Tribal Governance: Tribal Development administrative structure at central and state level. National Commission on Scheduled Tribes. National Council for Tribal Welfare. TRIFED, Tribal Advisory Councils.

- **UNIT- II: Natural Resources and Tribal Livelihood**

Tribal Livelihood: Concept, meaning and nature of livelihood. Factors affecting livelihood, Migration, displacement and dispossession. Forms of Tribal Livelihood: Land and Water based - traditional land cultivation, shifting cultivation, Forest based – food gathering, gum, timber, honey, seasonal food collection. Livestock based-consumption based livestock production, milk, cattle rearing. Tribal Entrepreneurship: i) Timber based processing ii) Food processing, forest and agro food processing. iii) Plate and rope making iv) Pottery, Terracotta, stone and horn based Crafts, handloom, bamboo based weaving etc, Odisha livelihood Mission and Tribal Welfare. Livelihood Intervention: Land and water based Intervention: improved agricultural practices, improved crop productivity, increasing cropping intensity, fisheries, watershed management, soil and water conservation activities and horticultural plantation. Forest based intervention: Forest conservation, gum, honey and timber collection and marketing through self-help groups and cooperative societies, social forestry, medicinal plants, collection of Kendu leaves. Livestock based Intervention: Cattle rearing-cows and buffaloes, goat rearing, sheep rearing, poultry. Challenges in Livelihood: Traditional issues of tribal livelihood. Changing nature of tribal livelihood issues. State policies of tribal livelihood, Tribal Livelihood: Case studies.

- **UNIT- III: Resource Management and Sustainable Tribal Development**

Understanding Natural Resources: Concept of Natural Resource Management and sustainability. A) Forests - Types, functions, ownership, control and regulatory systems, current issues of forests and its sustainability (Degradation, conflicts, competing user rights and entitlements). B) Water – Water for life, livelihood, health and sanitation. Ownership, access and regulatory systems. Current issues of water and its sustainability. Implications of declining water resources and deteriorating quality – water pollution, unequal access etc. C) Land - Changing land use and cropping pattern, Land ownership of Tribals. Corporatization, displacement, and problem of sustainability. D) Energy - Utilisation of Renewable and Non-renewable energy, Current issues and alternatives of energy and its sustainability. Natural Resource Management: Participatory methods, Participatory Rural Appraisal (PRA), Participatory Resource Mapping (PRM), Role of NGOs and Civil Society Organizations in Resource Management and Sustainable Tribal Development.

- **UNIT- IV: Tribal Society, Culture and Heritages: Issues in Development**

Social Organizations: Tribal family, marriage, kinship, Yuva gruh, Religion and Customary Practices. Economic organization's: Concept, forms, functions and changing nature. Political Organizations': Tribal

council, customary laws and practices. Tribal Culture: Dance, Drama, Folklore, Dialect, Instruments, Religion, Customs, Rituals and Festivals, Literature, Tribal Art and Crafts, Life philosophy in cultural practices. Tribal Problems and Transformation: Detribalisation, 'Sanskritization' and Religion and Cultural Conflicts, Customary laws, Infrastructural Issues of Habitat and Settlements, Basic Civic Amenities of Transportation and Communication, Economic Issues of Land alienation and Agriculture, Poverty and indebtedness, Unemployment, Educational issues – accessibility and drop-out, migration, Health issues – accessibility and Utilization, mortality and morbidity, reproductive health Status, Malnutrition and anemia, Disease Burdon, sickle cell anemia. Superstitions, addiction and isolation.

- **UNIT- V: Tribal Subplans and Welfare Programmes**

Particularly Vulnerable Tribal Groups (PVTGs) in India, Tribal Development in Odisha: An Overview, Strategies for Tribal Development in Odisha – Tribal Sub-plans, Welfare Schemes and Programmes of state and central sector, NGOs working in Tribal Areas of Odisha and their Field of Activities, Mission Shakti and Self-Help Groups. Specific Tribe Oriented Development Programs.

Skill Development Activities / Practical Exercise

- Conducting institutional policy field mappings and evaluating structural administrative setups within nearby Integrated Tribal Development Agencies (ITDAs).
- Formulating structural intervention pipelines for small-scale tribal entrepreneurship based on local forest and agro-food processing resources.
- Designing detailed Participatory Rural Appraisal (PRA) field frameworks to evaluate declining water resources and changing local land-use patterns.
- Organizing group debates and presentation sequences examining detribalization, drop-out vectors, and specific genetic health conditions like sickle cell anemia.
- Developing sample project proposals and comprehensive integrated regional development frameworks for local Particularly Vulnerable Tribal Groups (PVTGs).

Textbooks Recommended

- Padhy, D. N. (Latest Edition). *Role of Co-operatives for Tribal Development*. Mohit Publications.
- Joshi, V., & Upadhyaya, C. (Latest Edition). *Tribal Situation in India*. Rawat Publications.
- Panda, P. C. (Latest Edition). *Towards Tribal Development: Myth and Reality*. Cyber Tech Publications.
- Mibang, T. (Latest Edition). *Indigenous Institutions, Social Capital and Sustainability in Tribal India*. Serials Publications.

Suggested Readings

- Government of India. (2014). *Report of the High-Level Committee on Socio-Economic, Health and Educational Status of Tribal Communities of India*. Ministry of Tribal Affairs.
- Menon, A., Singh, P., Shah, E., Lele, S., Paranjape, S., & Joy, K. J. (Latest Edition). *Community Based Natural Resource Management: Issues and Cases from South Asia*. Sage Publications.
- Rashid, S. M., et al. (Latest Edition). *Environment Resources and Sustainable Development*. Rawat Publications.
- Official Policy Documents. (Latest Edition). *National Tribal Development Policy Schemes*. Ministry of Tribal Affairs, Government of India.

Digital Resources

students are encouraged to utilize digital learning platforms and online resources including SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, Ministry of Tribal Affairs Knowledge Repository, National Commission for Scheduled Tribes (NCST) Portal, Odisha Livelihoods Mission (OLM) Platform, TRIFED E-Marketplace, and the World Bank Indigenous Knowledge Database to access policy manuals, ethnographic surveys, public health statistical datasets, and collaborative regional documentation frameworks.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	**Relevance in the Course**
Professional Ethics	Promotes transparent tribal governance, alignment with international indigenous covenants, protection of intellectual heritage, and ethical research frameworks during active community fieldwork.
Gender Sensitivity	Evaluates the operational pathways of tribal women via institutional networks like Mission Shakti, strengthening gender-inclusive development schemes, and balancing household asset control.
Environmental Sustainability	Directly targets common property management, balancing regulatory forest protection protocols with traditional shifting cultivation systems, and preserving regional biodiversity blocks.
Human Values	Emphasizes historical rights integration, reducing systemic marginalization, protecting traditional social institutions, and applying social justice models to health and educational access.

SDG Mapping of the Course

SDG Goal	**Relevance to the Course**
SDG 1: No Poverty	Directs institutional safety schemes, targets poverty mitigation strategies for PVTGs, and structures interventions to check rural land alienation.
SDG 8: Decent Work and Economic Growth	Expands cottage industry entrepreneurship, builds market systems for minor forest produce via TRIFED, and establishes fair alternative livelihood avenues.
SDG 13: Climate Action	Leverages native environmental philosophy and custom practices to establish adaptive climate mitigation and localized resource ecosystem durability.
SDG 15: Life on Land	Strengthens direct community conservation programs, ensuring balanced ecosystem maintenance, protective utilization of minor forest assets, and protection of natural biodiversity blocks.

Course Code	Course Title	L	T	P	Total Credit
EM-50031	Econometric Methods	4	0	0	4

Prerequisites

candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a working knowledge of introductory statistics, basic matrix algebra, and elementary economic theory. Familiarity with probability distributions, hypothesis testing frameworks, and foundational calculus will be advantageous for executing quantitative calculations.

Course Objectives

each course offered under the programme shall be designed to achieve the following objectives:

1. To introduce students to the fundamental theoretical techniques, empirical principles, and practical applications of econometric modeling.
2. To equip students with the essential skills needed to formulate, estimate, and interpret single and multiple linear regression configurations.
3. To strengthen capability in identifying structural specification errors and applying diagnostic tests for classical assumption violations.
4. To develop proficiency in utilizing modern statistical packages and analytical software to process cross-sectional, time series, and panel data.
5. To promote analytical thinking for conducting rigorous empirical research and formulating evidence-based economic policy recommendations.

Course Outcomes (COs)

each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	Bloom's Taxonomy Level	NHEQF Cognitive Level	Expected Learning Outcome
CO1	Remember	Knowledge	Recall and define the structural properties of econometric data types, classical linear regression assumptions, and basic properties of estimators.
CO2	Understand	Understanding	Explain the theoretical mechanics of Ordinary Least Squares (OLS) estimation, diagnostic test parameters, and the implications of specification errors.

CO3	Apply	Application	Apply single and multiple linear regression models to real-world economic datasets using standard programming packages and software suites.
CO4	Analyse	Higher-order Analysis	Analyse diagnostic outputs to detect heteroscedasticity, autocorrelation, and multicollinearity, implementing appropriate mathematical remedies.
CO5	Evaluate / Create	Evaluation & Innovation	Evaluate time series stationarity, formulate error correction models, interpret panel regressions, and design complete empirical economic research frameworks.

CO–PO–PSO Mapping

(Rate correlations: 1 – Weakly Mapped, 2 – Moderately Mapped, 3 – Strongly Mapped, "_" – No Correlation)

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	1	3	2	2	3	2	1	2	2	1	1	1	3	2	1	1	1
CO2	1	3	2	3	3	3	1	3	2	1	2	1	3	3	2	1	2
CO3	1	3	2	3	3	3	1	2	2	1	2	1	2	3	3	2	2
CO4	2	2	3	3	3	3	2	3	2	2	3	1	2	3	3	3	3
CO5	3	3	3	3	3	3	2	3	2	2	3	2	3	3	3	3	3
Average	**1.6**	**2.8**	**2.4**	**2.8**	**3.0**	**2.8**	**1.4**	**2.6**	**2.0**	**1.4**	**2.2**	**1.2**	**2.6**	**2.8**	**2.4**	**2.0**	**2.2**

Course Inputs

- **UNIT- I: Introduction to Econometrics**

Definition and scope of econometrics, Types of econometric data: cross-sectional, time series, and panel data, Basics of statistical inference, Introduction to statistical software for econometric analysis.

- **UNIT- II: Simple Linear Regression**

The classical linear regression model (CLRM), Ordinary Least Squares (OLS) estimation. Assumptions of the CLRM, Goodness of fit: R-squared and adjusted R-squared, Hypothesis testing: t-tests and F-tests.

- **UNIT- III: Multiple Regression Analysis**

Extension of the simple linear regression model, Interpretation of coefficients, Multicollinearity: detection and remedies, Dummy variables and interaction terms, Model specification and selection criteria.

- **UNIT- IV: Diagnostic Testing and Model Refinement**

Residual analysis and diagnostic tests, detecting heteroscedasticity and autocorrelation, Remedies for heteroscedasticity and autocorrelation, Model selection using Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC), Specification errors and model diagnostics.

- **UNIT- V: Time Series Analysis**

Introduction to time series econometrics, Stationarity and unit root tests, Cointegration and error correction models, Basics of panel data analysis, Instrumental variables and endogeneity.

Skill Development Activities / Practical Exercise

- Conducting targeted software simulations to differentiate structural variance between cross-sectional, time series, and panel datasets.
- Running ordinary least squares estimation exercises and validating classical parameter boundaries using financial data files.
- Executing advanced computational diagnostic iterations to isolate heteroscedasticity, autocorrelation, and multi-collinear associations.
- Group debates and slide reviews evaluating model information metrics like Akaike and Bayesian criteria across variable groups.
- Preparation of analytical research reports utilizing unit root configurations, cointegration tools, and instrumental variable frameworks.

Textbooks Recommended

- Wooldridge, J. M. (Latest Edition). *Introductory Econometrics: A Modern Approach*. Cengage Learning.
- Gujarati, D. N., & Porter, D. C. (Latest Edition). *Basic Econometrics*. McGraw-Hill.

Suggested Readings

- Stock, J. H., & Watson, M. W. (Latest Edition). *Introduction to Econometrics*. Pearson.
- Greene, W. H. (Latest Edition). *Econometric Analysis*. Pearson.
- Johnston, J., & DiNardo, J. (Latest Edition). *Econometric Methods*. McGraw-Hill.
- Kennedy, P. (Latest Edition). *A Guide to Econometrics*. Wiley-Blackwell.

Digital Resources

students are encouraged to utilize digital learning platforms and online resources including SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, CRAN R Project, Python Data Science Archives, OpenStax Quant, Kaggle Economics Repositories, and the World Bank Microdata Catalog to access econometric documentation libraries, open-source script scripts, macroeconomic databases, regression templates, and live software processing modules.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	Relevance in the Course

Professional Ethics	Promotes absolute integrity in data reporting, preventing data fabrication, checking statistical manipulation (p-hacking), and managing transparent documentation profiles.
Gender Sensitivity	Emphasizes the creation of unbiased indicator metrics and dummy configurations to track systemic gender-based variations in wages and resource access.
Environmental Sustainability	Integrates specialized green accounting estimations and carbon footprint modeling vectors within standard empirical assignment tracks.
Human Values	Highlights the value of transparent statistical declarations, objective tracking of policy interventions, and avoidance of confirmation biases in research.

SDG Mapping of the Course

SDG Goal	**Relevance to the Course**
SDG 4: Quality Education	Builds high-level analytical competencies, structural logic workflows, and advanced software coding capacities among student groups.
SDG 8: Decent Work and Economic Growth	Offers data-driven policy tools to evaluate market productivity, track unemployment changes, and plan economic expansion packages.
SDG 9: Industry, Innovation and Infrastructure	Leverages technological modeling solutions to evaluate infrastructure investments, predict output trends, and support industrial development.
SDG 13: Climate Action	Employs advanced time series models and regression framework setups to track environmental degradation paths and check policy mitigation performance.

Course Title: Computer Application and Data Analysis

Code	Course Title	Credit	L-T-P
CA50005 (For Other discipline)	Computer Application and Data Analysis	4	3-0-1

Course Objectives:

Upon successful completion of this course, students will be able to:

- **CO1 (Knowledge/Remember):** Recall and describe the fundamental concepts of computer hardware, software, operating systems, and basic computer applications.
- **CO2 (Understanding):** Explain and interpret the features and applications of MS Office packages and various analytical and research software tools used for data organization, documentation, and presentation.
- **CO3 (Application):** Apply appropriate computer applications and statistical methods to formulate research hypotheses, organize data, and perform basic computational tasks.
- **CO4 (Analysis):** Analyze research data using statistical software such as SPSS and interpret the results to support evidence-based decision-making and problem-solving.
- **CO5 (Synthesis/Evaluation):** Design, implement, and evaluate data analysis workflows by integrating computer applications, MS Office tools, and SPSS to prepare professional reports and support research and organizational decision-making.

CO-PO-PSO Mapping

*(Rate correlations: **1** - Weakly Mapped, **2** - Moderately Mapped, **3** - Strongly Mapped, **"_"** - No Correlation).*

CO	PO 1	PO2	PO 3	PO 4	PO 5	PO6	PO7	PO8	PO 9	PO1 0	PO1 1	PO1 2	PSO1	PSO2	PSO3	PSO4
CO 1																
CO 2																
CO 3																
CO 4																
CO 5																

Course Duration: 45 hours

Course Syllabus

Unit I: Computer Basic and Computer Fundamental [8 Classroom Contact Hours]

Hardware and Software, Functional units comprising a typical computer configuration: input/output, fixed and removable data storage, internal storage, control and arithmetic/logic unit. The concepts relating to execution speed, data access times, storage capacities and similar comparative aspects of hardware performance.

Operating Systems: Windows, Linux etc. Application software, role and functions of commonly available applications

Computer Network Concept- Data communication and network terminology, IP address and its significance, Internet, Multimedia, WWW, FTP, E-mail, and Web pages. Concept of VPNs. Concept of Network security and management.

Unit II: Microsoft word [9 Classroom Contact Hours]

Creating and editing documents, formatting text and paragraph, formatting documents, creating and formatting tables, illustration documents with graphics. Creating a web page, mail merge and document merging, working with styles and templates, developing multi-page documents, integrating word with other applications, exploring advance graphics, building forms. working with charts and diagrams

Unit III: Microsoft Excel [9 Classroom Contact Hours]

Building and editing worksheets, formatting a worksheet, working with charts, working with formulas and functions, managing workbooks and preparing them for the web, automating worksheet tasks with macros, using lists, analyzing list data, enhancing charts and worksheets Using analysis tools, analyzing data with pivot tables, exchanging data with other programs.

Unit IV: Microsoft PowerPoint [9 Classroom Contact Hours]

Creating a presentation with Microsoft PowerPoint, modifying a presentation, inserting objects into presentation, finishing a presentation, working with advanced tools and masters, enhancing charts, inserting illustration, objects and media clips, using advanced features.

Unit V: SPSS [10 Classroom Contact Hours]

The analysis will be done with the help of SPSS, and other statistical packages.

The syllabus includes the following topics: Descriptive Analysis: Mean, Median, Mode, Standard Deviation, Correlation. Regression Analysis, t- test, chi-square test, R-Square test, Factor Analysis, ANOVA, NVIVO, SPSS., JAMOVI, AMOS.

Total Practical / Lab Experiments: [30 Lab Contact Hours]

vii. Create and format a table in Word with at least 5 rows × 5 columns; apply borders, shading, and sorting.

viii. Perform a Mail Merge: prepare a personalized invitation letter using an Excel data source (name, address).

ix. Build a student mark sheet with fields (Name, Roll, Subject Marks). Apply formulas for Total, Average, Percentage, and Grade.

x. Format the worksheet (merge cells, adjust column width, borders, number formatting). Apply conditional formatting (highlight marks <40 in red).

xi. Create different charts (bar, pie, line) for student performance or sales data. Enhance charts with titles, legends, and labels.

xii. Demonstrate formulas and functions:

SUM, AVERAGE, MAX, MIN, COUNT, IF

xiii. Create a PowerPoint presentation (minimum 8 slides) on "Emerging Technologies in Computing." Include title slide, content slides, conclusion, and references.

xiv. Create a PowerPoint presentation (minimum 10 slides) on "Emerging Trends in Computer Science." Include:

b) Slide designs, transitions, and animations

c) Insert images, charts, and SmartArt

d) Add audio or video clips

xv. Input a dataset of student scores into SPSS. Perform Descriptive Statistics: Mean, Median, Mode, Standard Deviation, and Correlation. Generate graphs (histogram, scatter plot).

xvi. Using SPSS, perform Hypothesis Testing:

16 t-test for comparing two groups

17 Chi-square test for categorical data

18 ANOVA for comparing more than two groups

19 Report R-square and regression results with interpretations

1. **Text Books:**

1. Hari Shankar Asthana, Braj Bhushan, Statistics for Social Sciences (With SPSS Applications, PHI Publication.
2. Jesus Salcedo, Keith Mccormick, SPSS Statistics for Dummies, 3rd Edition (Paperback), Wiley Publication.
3. Sabine Landau and Brian S. Everitt, A Handbook of Statistical Analysis Using SPSS

Reference Materials & Digital Resources:

1. Goel, Computer Fundamentals, Pearson Education, 2010.

2. K. Kalyanaraman, Hareesh N. Ramanathan, P.N. Harikumar, Statistical Methods for Research: A Step by Step Approach Using IBM SPSS, Atlantic Publication

3. R. Panneerselvam, Research Methodology, 2nd Edition, PHI Publication.

Swayam Link-

- https://onlinecourses.swayam2.ac.in/nou24_cm16/preview
- https://onlinecourses.nptel.ac.in/noc24_mg70/preview

SDG Mapping for this Course

SDG	Rationale
SDG 4	Digital literacy
SDG 9	Data-driven innovation
SDG 10	Equity through unbiased data
SDG 17	Data for partnerships and policy

Course Code	Course Title	L	T	P	Total Credit
DE-50031	Population and Development	4	0	0	4

Prerequisites

candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a baseline understanding of foundational microeconomics, basic societal structures, and structural data patterns. Familiarity with rudimentary public health indicators, historical demographic shifts, and national human development reports will be advantageous for interpreting policy setups.

Course Objectives

each course offered under the programme shall be designed to achieve the following objectives:

1. To introduce students to the intricate, bi-directional relationship between global demographic changes and regional socio-economic development.
2. To explore theoretical frameworks of population growth, historical transitions, and contemporary population policies across developing economies.
3. To examine the drivers, typologies, and economic consequences of internal and international migration flows on sending and receiving regions.
4. To evaluate critical population challenges including demographic aging, youth bulges, environmental constraints, and human capital investments.
5. To develop empirical capacity in applying demographic datasets to evaluate public health, nutrition, education, and sustainable development goals.

Course Outcomes (COs)

each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	**Bloom's Taxonomy Level**	**NHEQF Cognitive Level**	**Expected Learning Outcome**
CO1	Remember	Knowledge	Recall and outline foundational demographic concepts, fertility indexes, mortality matrices, and core historical population development trends.
CO2	Understand	Understanding	Explain key theoretical configurations of population growth, demographic transition phases, and the driving dynamics of internal or forced migration.
CO3	Apply	Application	Apply quantitative demographic indicators and census data frameworks to assess health, nutrition, and labor productivity balances across target populations.
CO4	Analyse	Higher-order Analysis	Analyse the economic impacts of migration remittances, spatial urbanization pressures, and demographic dividends versus dependencies within local economies.

CO5	Evaluate / Create	Evaluation & Innovation	Evaluate pro-natalist and anti-natalist family planning interventions and formulate integrated population-development policy strategies linked to global sustainability goals.

CO–PO–PSO Mapping

(Rate correlations: 1 – Weakly Mapped, 2 – Moderately Mapped, 3 – Strongly Mapped, "_" – No Correlation)

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	2	3	2	2	2	1	1	1	2	1	1	2	3	2	1	1	1
CO2	2	3	2	3	3	2	1	1	2	1	2	2	3	3	2	1	2
CO3	3	3	2	2	3	2	1	1	2	2	2	3	3	3	2	2	2
CO4	3	2	3	3	3	2	2	1	2	2	3	3	2	3	3	3	3
CO5	3	3	3	3	3	3	2	2	2	2	3	3	3	3	3	3	3
Average	**2.6**	**2.8**	**2.4**	**2.6**	**2.8**	**2.0**	**1.4**	**1.2**	**2.0**	**1.6**	**2.2**	**2.6**	**2.8**	**2.8**	**2.2**	**2.0**	**2.2**

Course Inputs

- **UNIT- I: Introduction to Population and Development**

Definition and scope of demography; Key demographic concepts: fertility, mortality, and migration. Overview of development: economic, social, and sustainable development; Historical perspective on population and development.

- **UNIT- II: Population Growth and Economic Development**

Theories of population growth: Malthusian, Neo-Malthusian, and Demographic Transition Theory. Economic consequences of population growth; Case studies: Population policies in China and India. Urbanization and its impact on development.

- **UNIT- III: Migration and Development**

Types and causes of migration: internal and international; Impact of migration on sending and receiving regions; Remittances and their role in development; Refugees and forced migration.

- **UNIT- IV: Challenges of Population**

Population Trends in the Twentieth Century, Population Explosion, Global perspective of Population changes in the size, composition and distribution, Demographic burden Vs Dividends, Individual Ageing and Population Ageing and its impact, Interrelationship between Nutrition, Health, education and productivity.

- **UNIT- V: Population Policies and Sustainable Development**

Overview of population policies: pro-natalist and anti-natalist; Family planning programs and their impact; Sustainable development goals (SDGs) related to population; Future challenges: aging populations, youth bulge, and environmental constraints.

Skill Development Activities / Practical Exercise

- Executing census mapping exercises to visually differentiate historical fertility and mortality shifts across multiple decades.
- Formulating structured comparative case models evaluating the economic impacts of historical population control rules between India and China.
- Designing localized demographic surveys to trace how migration remittances influence asset creation and school enrollment at the village level.
- Organizing panel debates and digital slideshows evaluating the fiscal impact of regional demographic aging against emerging youth bulges.
- Preparing multi-sector policy proposals analyzing how child nutrition levels influence long-term education and workplace output patterns.

Textbooks Recommended

- Todaro, M. P., & Smith, S. C. (Latest Edition). *Economic Development*. Pearson.
- Weeks, J. R. (Latest Edition). *Population: An Introduction to Concepts and Issues*. Cengage Learning.
- Castles, S., De Haas, H., & Miller, M. J. (Latest Edition). *The Age of Migration*. Palgrave Macmillan.

Suggested Readings

- Kelley, A. C., & Schmidt, R. M. (2005). *Saving, Dependency and Development*. Oxford University Press.
- Bloom, D. E., & Canning, D. (2001). "Cumulative Causality, Economic Growth, and the Demographic Transition" in *Population Matters*. Oxford University Press.
- De Haas, H. (2010). "Migration and Development: A Theoretical Perspective". *International Migration Review*, 44(1), 227-264.
- United Nations. (2019). *World Population Policies*. Department of Economic and Social Affairs.
- Sen, A. (1999). *Development as Freedom*. Oxford University Press.

Digital Resources

students are encouraged to utilize digital learning platforms and online resources including SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, United Nations Population Fund (UNFPA) Dashboard, World Bank Development Indicators, Census of India Portal, ORGI Databases, National Family Health Survey (NFHS) Repository, and the PRB Population Data Sheets to analyze population estimates, live fertility indexes, health survey datasets, and cross-national migration logs.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	**Relevance in the Course**
Professional Ethics	Insists on absolute confidentiality in survey reporting, ethical management of vital statistics, and respect for rights during census tracking.

Gender Sensitivity	Focuses heavily on maternal health profiles, tracking uneven sex ratios, advancing female education, and evaluating reproductive health rights.
Environmental Sustainability	Directly evaluates spatial environmental pressures, urban congestion costs, carrying capacity limits, and population pressure on rural forest blocks.
Human Values	Emphasizes universal health access, reducing infant mortality rates, protecting displaced refugees, and securing dignity for graying populations.

SDG Mapping of the Course

SDG Goal	Relevance to the Course
SDG 3: Good Health and Well-being	Directly addresses structural targets to lower maternal mortality, improve child nutrition indices, and manage epidemical diseases.
SDG 5: Gender Equality	Supports female empowerment models, targets the elimination of skewing sex ratios, and promotes reproductive healthcare autonomy.
SDG 8: Decent Work and Economic Growth	Maximizes labor force entry channels, converts youth bulges into functional demographic dividends, and builds productive workforce skills.
SDG 10: Reduced Inequalities	Targets inclusive distribution models for rural-urban migrants, handles refugee safety, and reduces disparities in health access.

Course Code	Course Title	L	T	P	Total Credit
DE-50033	**Economics of Environment**	**4**	**0**	**0**	**4**

Prerequisites

candidates seeking admission to the M.A. Economics programme should possess a Bachelor's degree in Economics or an allied discipline from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are expected to have a baseline understanding of intermediate microeconomic foundations, core welfare optimization principles, and basic public policy frameworks. Familiarity with fundamental macroeconomic indices, historical industrial development phases, and basic natural resource classifications will be advantageous for executing policy reviews.

Course Objectives

each course offered under the programme shall be designed to achieve the following objectives:

1. To introduce students to the core analytical frameworks, market failures, and structural trade-offs governing economic development and environmental systems.
2. To explore international environmental externalities, climate change paradigms, and the interaction between trade policies and global environmental treaties.
3. To build a robust theoretical grounding in weak and strong sustainability parameters, integrated green accounting models, and environmentally corrected macro-aggregates.
4. To evaluate institutional policy instruments, legal statutes, and regulatory frameworks deployed in India to mitigate air, water, and forestry degradation.
5. To cultivate specialized field insight into community-based co-management strategies, joint forest systems, and collective action models for common property assets.

Course Outcomes (COs)

each course shall define five Course Outcomes (COs) aligned with Bloom's Revised Taxonomy and the National Higher Education Qualification Framework (NHEQF). Upon successful completion of the course, students will be able to:

Course Outcome	**Bloom's Taxonomy Level**	**NHEQF Cognitive Level**	**Expected Learning Outcome**
CO1	Remember	Knowledge	Recall and define basic concepts of economic externalities, optimal resource depletion rates, property rights, and the structural phases of the Environmental Kuznets Curve.
CO2	Understand	Understanding	Explain global climate change mechanisms, trade-related pollution flows within the WTO framework, and the evolution of domestic macroeconomic policy transformations.
CO3	Apply	Application	Apply indicators of weak and strong sustainability alongside integrated green accounting frameworks to estimate environmentally adjusted gross domestic product configurations.
CO4	Analyse	Higher-order Analysis	Analyse the institutional efficacy of market-based and regulatory command instruments used to monitor air, water, and industrial pollutant levels under Indian conditions.

CO5	Evaluate / Create	Evaluation & Innovation	Evaluate joint forest management frameworks, assess grass-roots participatory operational bottlenecks, and design community-centric collective action plans for forest landscapes.

CO–PO–PSO Mapping

(Rate correlations: 1 – Weakly Mapped, 2 – Moderately Mapped, 3 – Strongly Mapped, "_" – No Correlation)

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	2	3	2	2	2	1	1	1	2	1	1	3	3	2	2	1	1
CO2	2	3	2	3	3	2	1	1	2	1	2	3	3	3	3	2	1
CO3	3	3	2	3	3	2	1	1	2	2	2	3	3	3	3	3	2
CO4	3	2	3	3	3	2	2	1	2	2	3	3	3	2	3	3	3
CO5	3	3	3	3	3	3	2	2	2	2	3	3	3	3	3	3	3
Average	**2.6**	**2.8**	**2.4**	**2.8**	**2.8**	**2.0**	**1.4**	**1.2**	**2.0**	**1.6**	**2.2**	**3.0**	**3.0**	**2.6**	**2.8**	**2.4**	**2.0**

Course Inputs

- **UNIT- I: Environment and Development**

Present economic environment in India and its influences on non-economic environment; Environment and development trade-off; Theories of optimal use of exhaustible and renewable resources; The Environmental Kuznets Curve hypothesis and its limitations.

- **UNIT- II: Global environmental externalities and climatic change**

Trade and environment in WTO regime, Informal regulation and the new model of pollution control; Balance of payment from 1950-51 to 1985-90; major economic reforms of 1991.

- **UNIT- III: The concept of sustainable development**

Sustainable development: Weak and strong sustainability; Rules and indicators of sustainable development; Integrated environmental and economic accounting; Measurement of environmentally-corrected GDP.

- **UNIT- IV: Environmental Policy in India**

Policy instruments for controlling water and air pollution and forestry policy; People’s participation in the management of common and forest lands.

- **UNIT- V: The Institutions of Joint Forest Management**

Forest Management-Afforestation, Urban Forestry, Social forestry-rationale and benefits, Collective Participatory Forest Management; Air and water pollution and controlling measures.

Skill Development Activities / Practical Exercise

- Executing graphical and statistical modeling exercises to map the validity boundaries and empirical limitations of the Environmental Kuznets Curve.
- Constructing structural policy case matrixes analyzing the historical trajectory of India's balance of payments leading up to the 1991 structural reforms.
- Designing sample mathematical frameworks to adjust standard regional domestic product figures into green, environmentally corrected GDP values.
- Organizing simulation debates and slide portfolios evaluating the regulatory performance of command instruments vs. informal pollution tracking.
- Preparing field appraisal schedules to monitor participatory equity and collective action problems within rural Joint Forest Management (JFM) units.

Textbooks Recommended

- Kolstad, C. D. (Latest Edition). *Environmental Economics*. Oxford University Press.
- Karpagam, M. (Latest Edition). *Environmental Economics: A Textbook*. Sterling Publishers.
- Bhattacharya, R. N. (Latest Edition). *Environmental Economics: An Indian Perspective*. Oxford University Press.

Suggested Readings

- Jhingan, M. L., & Sharma, C. K. (Latest Edition). *Environmental Economics*. Vrinda Publications.
- Baumol, W. J., & Oates, W. E. (Latest Edition). *The Theory of Environmental Policy*. Cambridge University Press.
- Dasgupta, P., & Mäler, K. G. (Latest Edition). *The Environment and Emerging Development Issues*. Clarendon Press.

Digital Resources

students are encouraged to utilize digital learning platforms and online resources including SWAYAM, SWAYAM Plus, NPTEL, INFLIBNET, Shodhganga, e-PG Pathshala, World Resources Institute (WRI) Portals, Ministry of Environment, Forest and Climate Change (MoEFCC) Repository, Central Pollution Control Board (CPCB) Databases, ENVIS India Network, United Nations Environment Programme (UNEP) Archives, and the World Bank Green Accounting Systems to access legal statutes, pollutant emission registries, sustainability tracking files, and forestry management blueprints.

Cross-Cutting Issues of the Course

Cross-Cutting Issue	**Relevance in the Course**
Professional Ethics	Demands transparency in environmental impact reporting, compliance with international green mandates, and fair asset mapping during fieldwork.
Gender Sensitivity	Evaluates gendered resource vulnerabilities, the central role of rural women in gathering fuel resources, and inclusive forest committee governance.

Environmental Sustainability	Serves as the central theme by detailing optimal resource utilization rules, pollution checks, carbon control, and protective forestry paradigms.
Human Values	Highlights ancestral ecological stewardship, collective social equity, universal rights to clean air and water, and inter-generational wealth justice.

SDG Mapping of the Course

SDG Goal	**Relevance to the Course**
SDG 7: Affordable and Clean Energy	Targets optimal energy allocations, checking exhaustible fuel depletion paths, and building support structures for renewable utility systems.
SDG 12: Responsible Consumption and Production	Incorporates indicators of strong sustainability, green national accounting frameworks, and cleaner processing solutions.
SDG 13: Climate Action	Directly evaluates carbon emissions mitigation, global warming trajectories, and the implementation of international climate treaties.
SDG 15: Life on Land	Directs afforestation programming, checks forest degradation trends, and optimizes joint participatory community asset management systems.

SEMESTER-IV

Course Code	Course Title	L	T	P	Total Credit
FD50082	**Fieldwork Dissertation**	**0**	**0**	**20**	**20**

Prerequisites

candidates seeking admission to the M.A. programme should possess a Bachelor's degree from a recognized university as per the eligibility criteria prescribed by KISS Deemed to be University. Students are required to have successfully completed foundational coursework in research methodology, social science inquiry, and basic qualitative and quantitative data collection techniques. Prior knowledge of rural and tribal socio-economic structures, participatory rural appraisal (PRA) tools, basic descriptive statistical computations, and ethical protocols involving human subjects is essential for field deployment.

Full Marks: 500 marks

Course objectives: The aim of this course is to provide a comprehensive understanding the nature of research like quantitative and qualitative. Make students acquainted with various types of data collection like primary and secondary sources. This course also aims to able the students to make data analysis using various statistical tools like ANOVA, SPSS, R square, EViews, Python, multivariate Techniques and R type and Q type Factor analysis and also analyzing various data and give suggestions for betterment of the Economy as well as for the people.

Field Work and Report Writing [600 Lab Contact Hours]

Field Work: Each student shall have to undergo training for learning and use of different techniques of scientific data collection during 30 days of fieldwork under the supervision of a teacher, as nominated by the head of the Programme, in a urban/rural area. The Programme shall announce the exact date of commencement of fieldwork. Student failing to complete the fieldwork in a particular year can only clear the paper by completing fieldwork next year. Dissertation is to be prepared by the student under the supervision of the concerned teacher. The student is required to submit the dissertation through the supervising teacher to the Head of the Programme for its evaluation at least fifteen days in advance of the date notified for examination. The dissertation shall be evaluated by an external examiner in consultation with the internal examiner (the supervising teacher). The candidate shall be awarded grade both by the internal and external examiners on the basis of his/her dissertation, seminar presentation and viva voice.

SL No	Mode of Evaluation	Credits
1	Selection of Research Topic and Synopsis Presentation	4

2	Literature Review and Preparation of Research Tools (Questionnaires and schedule)	4
3	Fieldwork and Data Collection	4
4	Data Analysis and Report Writing	4
5	Seminar Presentation and Viva voce test on dissertation	4
	TOTAL	20

The Dissertation has to be submitted by the student positively before the end semester examination.

Course Learning Outcomes:

CO 1: The students who successfully complete this course will understand the nature of anthropological research and develop their skills in various types of data collection, interpretation and presentation.

CO 2: After this course the students also able to explore different problems areas of human society, acquire skills in fieldwork, data analysis and report writing.

CO 3: This course will help the students to interpret both biological and social issues faced by the human societies.

CO 4: The students through this paper assess the data presentation and documentation in an effective way.

CO 5: Develop the capability of academic writing and publication of research findings.

Course Outcomes - Programme Outcomes Mapping of Paper FD 50082

Course Outcomes ↓ / Program Outcomes →	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PSO1**	**PSO2**	**PSO3**
CO1	2	3	2	3	2	3	1	3	3	3
CO2	2	3	2	3	3	3	2	3	3	3
CO3	2	3	2	3	2	2	1	3	2	2
CO4	2	3	3	2	2	3	1	3	3	3

CO5	2	3	3	3	2	3	1	3	3	3
Average	2.0	3.0	2.4	2.8	2.2	2.8	1.2	3.0	2.8	2.8

1 = Weakly Mapped (Low), 2 = Moderately Mapped (Medium),

3 = Strongly Mapped (High), "–" = There is No correlation

SDGs Mapping of this course

SDG No.	**SDG Title**	**Nature of Contribution**
SDG 4	Quality Education	Develops research skills, fieldwork competence, and academic writing, promoting quality higher education
SDG 5	Gender Equality	Encourages gender-sensitive research design and inclusive data collection practices
SDG 8	Decent Work and Economic Growth	Enhances employability through research, analytical, and reporting skills
SDG 9	Industry, Innovation and Infrastructure	Promotes innovation through data analysis, research tools, and methodological applications
SDG 10	Reduced Inequalities	Supports research on marginalized communities and social disparities
SDG 12	Responsible Consumption and Production	Emphasizes ethical use of data, responsible research practices, and sustainability
SDG 16	Peace, Justice and Strong Institutions	Highlights research ethics, transparency, accountability, and evidence-based policy support
SDG 17	Partnerships for the Goals	Encourages collaborative and interdisciplinary research across institutions and communities

Suggested Readings:

Ahuja, Ram (2010), *Research Methods*. Jaipur: Rawat Publication.

Bauer M.W. & G. Gaskell (eds.). (2000). *Qualitative Research with Text, Image and Sound: A Practical Handbook*. London, Sage Publications.

Bryman A. (1988). *Quantity and Quality in Social Research*. London, Unwin Hyman Ltd.

Bryman, A. (2001). *Surveying the Social World*, Buckingham. Philadelphia, Open University Press.

Denzin, N.K. & Y.S. Lincoln. (eds.). (2000). *Handbook of Qualitative Research*. New York, Sage.

Flick, U. (2009). *An Introduction to Qualitative Research* (4th Edition). London, Sage Publications.

Giddens, A. (1993). *New Rules of sociological Method* (2nd Edition).Stanford, California, Stanford University Press.

Grbich, C. (2004). *New Approaches in Social Research*. London, Sage Publications.

Gupta, C.B and Gupta, V. *An Introduction to Statistical Methods*, New Delhi: Vikas Publishing House PVT Ltd.

Huberman, A.M. & M.B. Miles.(2002). *The Qualitative Researcher's Companion*. New York, Sage Publications.

Kothari, C. R. *Research Methodology*, Methods and Techniques –Wiley Eastern Limited – New Delhi

Silverman, D. (ed.). (2011) *Qualitative Research* (3rd Edition).London, Sage Publications.

University of Chicago (2010). *The Chicago Manual of Style* (sixteenth ed.). Chicago: Univ. of Chicago Press.

W.J. Goode and P. K. Hatt (1952) *Methods in Social Research*. McGraw Hill Co.

Young, P.V. 1956. *Scientific Social Surveys and Research*. London: Prentice-Hall

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