[OBE DESIGN- ECONOMICS DEPARTMENT]

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PREFACE

Outcome Based Education (OBE) is the educational approach which focuses on student centric education in the context of development of personal, social, professional and knowledge (KSA) requirements in one's career and life. It is the decade ago curriculum development methodology. The educational triangle of *LEARNING-ASSESSMENT-TEACHING* is the unique nature of the OBE approach. The curriculum practices such as Competency Based Curriculum, Taylor's Model of Curriculum Development, Spadys' Curriculum principles, Blooms taxonomy and further use of assessment methodologies like, Norm-reference testing and Criterion reference testing, etc is being practiced since decades. It is also interesting to know that, globally, different countries and universities adopts the curriculum development models/approaches such as, CDIO (Conceive-Design-Implement-Operate), Evidenced Based Education, Systems' Approach, etc as the scientific and systematic approaches in curriculum design.

The authorities of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (M.S.) in-lieu of accreditation standards of National Assessment and Accreditation Council, decided to opt for Outcomes Based Education (OBE). As the part of the decision, different meetings, workshops and presentations were held at the campus of university.

This document is the outcome of different meetings and workshops held at university level and department level. The detailed document is designed and the existing curriculum of the department is transformed in to the framework of OBE. This is the first step towards the implementation of OBE in the department. The document will serve all stakeholders in the effective implementation of the curriculum. The OBE is continuous process for quality enhancement and it will go a long way in order to enhance the competencies and employability of the graduates/Post-graduates of the university department.

Head of Department

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OUTCOME BASED EDUCATION

Faculty of Humanities

Department of Economics

1. Mission:

Mission Statement

- To offer Post-graduate and Research program in Economics.
- To develop the economist for development of social, political and business economy of the population.
- To apply theories and principles to rise the economic levels of the community at large.
- To analyse the economic parameters and conduct research in the domain of economics.
- To offer practice based and field based learning platform to develop value based and ethical economic professionals.

2. Vision:

Vision Statement

- To be the center of economic research and development centre to address the domain need in the development of rural, farmer and economically & socially disadvantaged population of the world.
- To evolve innovative and adaptive economic formula/ model for economic development of community at large.

3. Title of the Program (s):

a. Master of Economics

4. Program Educational Objectives:

The program educational objectives (PEO) are the statement that describes the career and professional achievement after the program of studies (graduation/ post-

graduation). The PEO s are driven form question no. (ii) of the Mission statement (What is the purpose of organization). The PEOs can be minimum three and maximum five.

PE01: In-depth knowledge of economics and related domains to design/solve economical solutions/problems.

PEO2: To provide the professional services to private and public organization through competitive examination.

PEO3: To provide expertise and consultancy services in the private and public sector and be an entrepreneur/professional consultant.

PEO4: To opt for higher education, research and to be a life-long learner.

PEO5: To provide value based and ethical leadership to the profession and social life.

5. Program Outcomes:

The program outcomes (PO) are the statement of competencies/ abilities. POs are the statement that describes the knowledge and the abilities the graduate/ post-graduate will have by the end of program studies.

- a. Application at an advanced level about the complex economics mechanism that characterize modern society.
- b. in depth knowledge about economic theory regarding the utilisation and allocation of resources, including labour, natural resources and capital and use relevant models and methods, independently but under supervision,
- c. To design/implement way the economy is influenced by economic policy, technological advances and demographic conditions.
- d. To analyse markets for goods and services function and how income is generated and distributed.
- e. To formulate mathematical economic models by using econometric- and mathematical methods.
- f. Insight into special fields like energy economics, competition policy, industrial economics, financial markets, environmental and resource economics, development economics and international trade and globalization.
- g. Conduct research and analyse existing economic models and evaluate their relevance for theoretical and practical problem solving and undertake applied work and research projects in economics.
- h. Demonstrate team work, values and social and professional ethics.
- i. Communication efficacy.

6. Course- Program outcome Matrix:

The Program Outcomes are developed through the curriculum (curricular/co-curricular-extra-curricular activities). The program outcomes are attained through the course implementation. As an educator, one must know, "to which POs his/her course in contributing?". So that one can design the learning experiences, select teaching method and design the tool for assessment. Hence, establishing the Corse-PO matrix is essential step in the OBE. The course-program outcomes matrix indicates the co-relation between the courses and program outcomes. The CO-PO matrix is the map of list of courses contributing to the development of respective POs.

The **CO-PO MATRIX** is provided in the below table.

Course Title	а	b	С	d	е	f	g	h	i
Micro Economics-I	*	*	*	*	*				
Macro Economics-I	*	*	*	*	*				
Statistical Methods	*	*	*	*	*		*		
International Economics	*	*	*	*	*				
Demography	*	*	*	*	*				
Agriculture Economics	*	*	*	*	*	*			
Energy Economics	*	*	*	*	*	*			
Micro Economics-II	*	*	*	*	*				
Macro Economics-II	*	*	*	*	*				
Mathematical Methods	*	*	*	*	*				
Economics of Firms	*	*	*	*	*				
Insurance Economics	*	*	*	*	*				
History of Economic thoughts	*	*	*	*	*				
Indian Economic policy-I	*	*	*	*	*				
Public Economics	*	*	*	*	*				
Econometrics-I	*	*	*	*	*				
Banking	*	*	*	*	*				
Mathematical Economics-I	*	*	*	*	*				
Growth Economics		*	*	*	*	*			
Indian Economic policy-II		*	*	*	*	*			
Indian Public Finance		*	*	*	*	*			
Econometrics-II		*	*	*	*	*	*	*	*
Financial markets		*	*	*	*	*	*	*	*
Development Economics		*	*	*	*	*			
Mathematical Economics-II		*	*			*	*	*	*
Service Course		*	*	*	*	*			
Research Methodology					*	*	*	*	*
Advance Economic theory		*	*	*	*	*	*	*	
Banking and financial institutions		*	*	*	*	*	*	*	
International trade and finance		*	*	*	*	*	*	*	
Agriculture economics		*	*	*	*	*	*	*	
Economics of industry and labour		*	*	*	*	*	*	*	

7. Course Outcomes (for all courses):

The course outcomes are the statement that describes the knowledge & abilities developed in the student by the end of course (subject) teaching. The focus is on development of abilities rather than mere content. There can be 5 to 7 course outcomes of any course. These are to be written in the specific terms and not in general. The list of Course Outcomes is the part of *Annexure-C* attached herewith.

8. Set Target levels for Attainment of Course Outcomes:

The course outcome attainment is assessed in order to track the graduates' performance w.r.t target level of performance. The CO-PO attainment is the tool used for continuous improvement in the graduates' abilities through appropriate learning & teaching strategies. In order to assess students' performance with respect to abilities (at the end of course teaching/by the end of program) the course outcome attainment are measured/calculated. In order to calculate the program outcome attainment, the course outcome attainment is calculated. Prior to that, the course-program outcome mapping is done.

9. Set Target level for Attainment of Program Outcomes:

The program outcome attainment is assessed in order to track the graduates' performance w.r.t target level of performance. The CO-PO attainment is the tool used for continuous improvement in the graduates' abilities through appropriate learning & teaching strategies. In order to assess students' performance with respect to abilities (at the end of course teaching/by the end of program) the course outcome attainment and program outcome attainment is measured/calculated. The program outcome attainment is governed by curricular, co-curricular and extra-curricular activities including the stakeholders' participation. The direct method and indirect method is adopted to calculate the PO attainment. The direct method implies the attainment by course outcomes contributing to respective program outcomes. And indirect method is the satisfaction/feed-back survey of stakeholders. In order to calculate the program outcome attainment, the course outcome attainment is calculated. Prior to that, the course-program outcome mapping is done.

The set target level is the set benchmark to ensure the continuous improvements in the learners/ graduates' performance.

10. Course Attainment Levels:

- a. CO attainment is defined/set at three levels;
- b. The CO attainment is based on end term examination assessment and internal assessment;
- c. The Co attainment is defined at three levels in ascending order
 - i. e.g. For end term and internal examination;
 - ii. Level-1: 20% students scored more than class average
 - iii. Level-2: 30% students score more than class average;
 - iv. Level-3: 40% students score more than class average.

- d. The target level is set (e.g. Level-2). It indicates that, the current target is level-2; 30% students score more than class average. The CO attainment is measured and the results are obtained. Based on the results of attainment, the corrective measures/remedial action are taken.
- e. CO Attainment= 80% (Attainment level in end term examination) + 20% (Attainment level in internal examination).

11. Program attainment Level:

- a. PO attainment is defined at five levels in ascending order;
- b. The PO attainment is based on the average attainment level of corresponding courses (Direct Method) and feed-back survey (Indirect method);
- c. The PO attainment levels are defined / set as stated below;
 - i. Level-1: Greater than 0.5 and less than 1.0 (0.5>1)- Poor
 - ii. Level-2: 1.0>1.5-Average
 - iii. Level-3: 1.5>2.0-Good
 - iv. Level-4: 2.0>2.5-Very Good
 - v. Level-5: 2.5>3.0 -Excellent
- d. The PO attainment target level is set/defined (say, Level-4). It implies that, the department is aiming at minimum level-4 (very good) in the performance of abilities by the graduates. Based upon the results of attainment, the remedial measures are taken;
- e. PO Attainment= 80% (Average attainment level by direct method) + 20% (Average attainment level by indirect method).

12. The Results of CO Attainment:

The Results of CO attainment are provided in Annexure-B.

FOR EXAMPLE:

COURSE CODE/TITLE: Demography

e.g. For end term and internal examination;

- i. Level-1: 20% students scored more than class average
- ii. Level-2: 30% students score more than class average;
- iii. Level-3: 40% students score more than class average

In this department/case, the indicator for calculating the Attainment level is taken as "Average Marks" obtained in End term and internal examination.

- 1. The Attainment target is Level-2; the average marks in the end term and internal examination is 30%.
- 2. The Average Marks in the end term examination are 56.25 i.e. the level-3 is attained.

3. The Average Marks in internal examination are 14.75 i.e. 70% i.e. level-3 is attained.

Hence, the attainment level is Level-2 and the set target level is Level-2 and therefore the CO is fully attained.

Table No. 1.0: CO Attainment Level

Course Title	CO Attainment Value	Target Attainment level	Fully attained/ Not attained	Remedial Measures
Micro Economics-I	1.6	2	Not attained	Assignments, exercises, tutorial, coaching.
Macro Economics-I	1.6	2	Not attained	
Statistical Methods	2.4	2	Fully attained	
International Economics	1.6	2	Fully attained	
Demography	2.4	2	Fully attained	
Agriculture Economics	2.4	2	Fully attained	
Energy Economics	0.8	2	Not attained	Assignments, exercises, tutorial, coaching.
Micro Economics-II	1.6	2	Not attained	
Macro Economics-II	2.4	2	Fully attained	
Mathematical Methods	2.4	2	Fully attained	
Economics of Firms	0.8	2	Not attained	Assignments, exercises, tutorial, coaching.
Insurance Economics	1.6	2	Not attained	

History of Economic thoughts	2.4	2	Fully attained	
Indian Economic policy-I	2.4	2	Fully attained	
Public Economics	2.4	2	Fully attained	
Econometrics-I	2.4	2	Fully attained	
Banking	1.6	2	Not attained	Assignments, exercises, tutorial, coaching.
Mathematical Economics-I	2.4	2	Fully attained	
Growth Economics	1.6	2	Fully attained	
Indian Economic policy-II	2.4	2	Fully attained	
Indian Public Finance	2.4	2	Fully attained	
Econometrics-II	2.4	2	Fully attained	
Financial markets	2.4	2	Fully attained	
Development Economics	2.4	2	Fully attained	
Mathematical Economics-II	2.4	2	Fully attained	
Research Methodology	3	2	Fully attained	

Advance Economic theory	3	2	Fully attained
Banking and financial institutions	3	2	Fully attained
International trade and finance	3	2	Fully attained
Agriculture economics	3	2	Fully attained
Economics of industry and labour	3	2	Fully attained

13. The Results of PO Attainment:

The Results of PO attainment are provided in Annexure-B FOR EXAMPLE:

PO NO.: f

(Note: Refer point No. 11 above which describes the attainment level and set target attainment level)

PO Attainment= 80% (Average attainment level by direct method) + 20% (Average attainment level by indirect method).

= 1.94+ 0.486

= 2.42

Table No. 2.0 PO Attainment Level

PO/PSO number	PO Attainment Value	Target level	Fully attained/ Not Attained	Remedial Measures
а	1.96	4	Not attained	Assignment, exercise, tutorial and coaching will be conducted for corresponding courses w.r.t. PO
b	2.26	4	Fully attained	
С	2.21	4	Fully attained	
d	2.20	4	Fully attained	
е	2.25	4	Fully attained	
f	2.43	4	Fully attained	
g	2.76	4	Fully attained	
h	2.80	4	Fully attained	
i	2.55	4	Fully attained	

14. Planned Actions for Course Attainment:

The courses having CO attainment level less than Level-2 shall be addressed by designing the remedial measures through assignments, tutorials and coaching.

15. Planned Actions for Program Outcome Attainment:

The PO having attainment level less than 4 shall be addressed for remedial measures in the courses corresponding to resspective courses of that PO.

ANNEXURE-B RESULTS OF CO-PO ATTAINMENT

Master of Art- Economics										
Course Title	а	b	С	d	е	f	g	h	i	
Micro Economics-I	1.6	1.6	1.6	1.6	1.61.6					
Macro Economics-I	1.6	1.6	1.6	1.6	1.6					
Statistical Methods	2.4	2.4	2.4	2.4	2.4		2.4			
International Economics	1.6	1.6	1.6	1.6	1.6	1.6				
Demography	2.4	2.4	2.4	2.4	2.4					
Agriculture Economics	2.4	2.4	2.4	2.4	2.4	2.4				
Energy Economics	0.8	0.8	0.8	0.8	0.8	0.8				
Micro Economics-II	1.6	1.6	1.6	1.6	1.6					
Macro Economics-II	2.4	2.4	2.4	2.4	2.4					
Mathematical Methods	2.4	2.4	2.4	2.4	2.4					
Economics of Firms	0.8		0.8	0.8	0.8					
Insurance Economics	1.6	1.6	1.6	1.6	1.6					

History of Economic thoughts	2.4	2.4	2.4	2.4	2.4				
Indian Economic policy-I	2.4	2.4	2.4	2.4	2.4				
Public Economics	2.4	2.4	2.4	2.4	2.4				
Econometrics-	2.4	2.4	2.4	2.4	2.4				
Banking	1.6	1.6	1.6	1.6	1.6				
Mathematical Economics-I	2.4	2.4	2.4	2.4	2.4				
Growth Economics		1.6	1.6	1.6	1.6	1.6			
Indian Economic policy-II		2.4	2.4	2.4	2.4	2.4			
Indian Public Finance		2.4	2.4	2.4	2.4	2.4			
Econometrics-		2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Financial markets		2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Development Economics		2.4	2.4	2.4	2.4	2.4			
Mathematical Economics-II		2.4	2.4			2.4	2.4	2.4	2.4
Research Methodology					3	3	3	3	3

Advance Economic theory		3	3	3	3	3	3	3	
Banking and financial institutions		3	3	3	3	3	3	3	
International trade and finance		3	3	3	3	3	3	3	
Agriculture economics		3	3	3	3	3	3	3	
Economics of industry and labour		3	3	3	3	3	3	3	
	1.96	2.26	2.21	2.20	2.25	2.43	2.76	2.8	2.55

ANNEXURE-C COURSE OUTCOMES

MICRO-ECONOMICS

- Explain the allocation of scarce resources and the distribution of goods and services in competitive market.
- Assess the efficiency of markets and describe the various factors that might impact on efficiency
- Distinguish between the various forms of market failure and explain how governments might need to intervene
- Describe the various types of markets and compare their efficiency
- Use economic models to analyse a situation in terms of economics
- Interpret charts, graphs, and tables and use the information to make informed judgments
- Evaluate outcomes based on the costs and benefits involved

Foundation course in economics

- Explain the concept and principles of economics.
- Explain the theories of economics.
- Describe the application/relevance of economics in development.
- Explain the salient features of economics Indian economic system.
- Describe the tax system/structure at national level.
- Explain the banking system.
- Explain the concept of balance of payment, deficit.

Statistical Methods

- Explain the economics relationships and relevant statistical methods
- Explain the statistical terminology used in economics.
- Explain different statistical methods used for economic analysis.
- Solve problems by using different statistical tools.
- Analyse the results of statistical analysis.

Industrial Economics

- Explain the basic theory of industrial organization.
- Describe the reasons/factors for uneven regional development. Describe the recent issues of mergers and role of FDI.
- Analyze the industrial policy issues in the context of new economic reforms.
- Criticality describe the response of Indian industry to the challenge of WTO.

Demography

- Describe the theory of demography.
- Explain the basic demographic techniques.
- Describe the main feature s of the demography of India such as population and development, structure of population, etc.
- Critically analyze the relationship between demography and economics.

Agriculture economics

- Analyze and describe the issues in agricultural economics.
- Explain the policy issues that are relevant to Indian agricultural sector
- Analyze the issues using basic micro economic concepts.
- Explain the market structure for agricultural products.
- Describe the rural credit system and structure.

International Trade

- Explain the theory of trade along with a background of the Mercantilist
- Doctrine.
- Describe the neo classical trade theory as well as alternative explanation of trade and recent explanations in terms of technological lead.
- Describe the government intervention in the form of tariffs, quotas and non-tariff barriers.
- Explain the theory of customs union.
- Analyze and describe different trade models.

Energy economics

- Analyse and describe the theory of consumer behaviour, the determinants of consumer choices those involving risks, the theory of production and the theory of costs.
- Describe the energy resources and its relationship with economics.
- Explain the energy policies in India.
- Describe the energy and environment in the context of national economy.

Mathematical methods

Explain the mathematical methods in economic phenomena.

- Use mathematical techniques used in economics and business
- Apply the economic analysis skill with mathematical tools along students.

Rural Development

- Describe the dynamic of changes in the rural economy.
- Analyze and explain the problems faced by rural population.
- Critically review of various schemes and projects that benefit the rural population.
- Describe the rural development as an integral part of overall socioeconomic development.
- Identify the factors/interventions in the development of rural economy.

History of economic Thoughts

- Analyze and describe the economic thoughts in India from pre-independence to modern era w.r.t. the syllabus context.
- Compare the economic thoughts in different period/thinkers.
- Analyze the philosophical thought in economic development under each era.

Insurance economics

- Describe the vital role of the task of risk bearing and risk elimination in the economic affairs m
- Explain the concept of insurance.
- Describe the framework of insurance system.
- Explain the historical development in the insurance system.

International Monetary Economics

- Analyze and explain the basics of international economics.
- Describe the monetary aspects related to international economic transactions between countries.
- Explain the basics of balance of payments and various approaches to correcting disequilibrium in balance of payments.
- Describe foreign exchange market.
- Describe the issues related to international movements of capital and international banking.
- Explain the evolution of the international monetary order.

Labour Economics

- Explain the basic concepts related to labour economics; labour, employment, labour forces.
- Describe the process of wage determination.
- Describe the nature and type of the labour market.
- Explain the method of forecasting labour requirement.
- Explain the trade union role in labour economics.

Indian Economic policy-I

- Describe the measurement of national income in India.
- Explain the national income and human development.
- Describe the demographic features across various parameters such as population, gender, ect.
- Analyze the issues and prblems in indian economy.
- Describe the Economic policy 1991.
- Describe the special feature of Indian economy w.r.t SC/ST.

Econometrics

- Operate empirically economic theory and test economic theory.
- Predict future movements in the economic variable of interest on the basis of econometric model.
- Use different tools and techniques for prediction of economy.

Financial market

- Describe the structural organisation of financial market, institutions and the role they play in economy
- Explain the basic concepts in modern finance and monetary policy.
- Analyzes basics of financial policies and operations of commercial banks and other financial institutions
- Analyze and describe the globalization of financial markets and institutions

Development Economics

- Describe the concepts of measuring the economic growth
- Describe the nature an status of sectorial growth and economics
- Analyze and describe the micro and micro economics aspect of economy.
- Analyze and describe the issues in economic developments.