NEP 2.0

Ahmednagar Jilha Maratha Vidya Prasarak Samaj's

New Arts, Commerce, and Science College Ahmednagar (Autonomous)

(Affiliated to Savitribai Phule Pune University, Pune)

National Education Policy (NEP)
Choice Based Credit System (CBCS)

Programme Framework

B. A. - I (Logic)

Implemented from

Academic Year 2024-25

Ahmednagar Jilha Maratha Vidya Prasarak Samaj's

New Arts, Commerce and Science College, Ahmednagar (Autonomous)

Board of Studies in Philosophy

Sr. No.	Name	Designation
1.	Prof. Dr. Aman Waman Bagade	Chairman
2.	Prof. Ganesh Nimasae	Member
3.	Dr. Satish Kulkarni	Member
4.	Dr. Jayshree Aher	Member
5.	Dr. Prajkta Thube	Member
6.	Dr. Kiran Ahirrao	Member
7.	Dr. Gnyandev Upade	Academic Council Nominee
8.	Dr. Vijayshreenath Kanchi	Academic Council Nominee
9.	Dr. Sangeeta Pande	Vice-Chancellor Nominee
10.	Dr. Sachin Rajput	Alumni
11.	Mr. Devdatta Joshi	Industry Expert

1. Prologue/ Introduction of the programme: At least one page

This course aims to introduce students to the basic concepts and achievements of Logic with modern logic. Logic is the application of formal, mathematical methods in the study of reasoning. The type of reasoning under consideration is specially deductive reasoning. Philosophy enquires into the meaning and significance of life and the world. It is called a second order discipline in so far as it enquires into the foundations and presuppositions of various disciplines. Logic is a science which deals with forms of arguments. In an extended sense, it studies the methodology of deductive as well as inductive science. Modern logic is fastly developing science and it is closely related to mathematics. It does not cancel the Aristotelian logic but points out its limitations. So in the syllabus, we itend to acquint the students with the elements of traditional logic, modern logic and scientific method. The syllabus will also acquint students with few seesntial problems of Western and Indian Philosophy.

Logic is a study of language, inference and reasoning. This paper itends to give the students some basic ideas about kinds of reasoning which enables students to get some basic ideas about reasoning, meant for different competitive examinations.To Gain an appreciation for the complexity of language.

2. Programme Outcomes (POs)

1. To learn effective methods of resolution for a variety of disagreements.

2. To obtain the ability to define terms.

3. To understand the structure of different kinds of arguments.

4. To recognize and evaluate the different kinds of arguments.

5. To sketch the principles of symbolic logic.

B. A. Programme Framework: Credit Distribution

Level / Difficulty	Sem	Subject-1				Subject-2	Subject-3	GE/OE	SEC	IKS	AEC	VEC	CC	Total
Certificate 4.5 / 100	I	04				04	04	2	-	2	2	2	2	22
	II	04				04	04	2	2	--	2	2	2	22
		Credits Related to Subject Selected as Major				Selected as Minor		GE/OE	SEC	IKS	AEC	VEC	CC	Total
		Major Core	Major Elective	VSC	FP / OJT/ CEP/RP									
Diploma 5.0 / 200	III	06	--	2	2 (FP)	04	--	02	2		2	--	2	22
	IV	06	--	2	2 (CEP)	04	--	02	2	--	2	--	2	22
Degree 5.5 /300	V	10	04	2	2 (FP)	02	--	--	--	2	--	--	--	22
	VI	10	04	2	4 (OJT)	02	--	--	--		--	--	--	22
Total		40	08	08	10	18	08	08	06	04	08	04	08	132
6.0/400 Honours	VII	14	04	-	RM-04	-								22
	VIII	14	04	-	OJT-04	-								22
6.0/400 Honours with Research	VII	10	04	-	RM-04 RP-04	-								22

	VIII	10	04	-	RP-08									22
Total		68/60	16	08	18/26	18	08	08	06	04	08	04	08	176

B. A. Programme Framework: Course Distribution

Level / Difficulty	Sem	Subject-1				Subject -2	GE/ OE	SEC	IKS	AEC	VEC	CC	Total
Certificate 4.5 / 100	I	01				01	01	-	01	01	01	01	07
	II	01				01	01	01	--	01	01	01	07
		Credits Related to Subject Selected as Major				Minor	GE/ OE	SEC	IKS	AEC	VEC	CC	Total
		Core	Elective	VSC	FP / OJT/ CEP								
Diploma 5.0 / 200	III	02		01	01	01	01			01	--	01	08
	IV	02		01	01	01	01			01	--	01	08
Degree 5.5 /300	V	03	01	01	01	01	--	--	01	--	--	--	08
	VI	03	01	01	01	01	--	--		--	--	--	07
Total		12	02	04	04	06	04	02	02	04	02	04	44
6.0/400 Honours	VII	04	01	-	RM-01								06
	VIII	04	01	-	OJT-01	-							06
6.0/400 Honours with Research	VIII	03	01	-	RM-01 RP-01	-							06
	VIII	03	01	-	RP-01								05
Total		18/16	04	04	06/07	06	04	02	02	04	02	04	56/55

B. A. -I (Logic): Credits and Courses in Bracket

Level / Difficulty	Sem	Subject (Marathi)				IKS	Total
4.5 Certificate	I	04 (01)					04 (01)
	II	04 (01)				--	04 (01)
		Core	Elective	VSC	FP / OJT/ CEP		
5.0 Diploma	III	06 (02)		02 (01)	02 (01)		10 (04)
	IV	06 (02)		02 (01)	02 (01)		10 (04)
5.5 Degree	V	10 (03)	04 (01)	02 (01)	02 (01)	02 (01)	
	VI	10 (03)	04 (01)	02 (01)	04 (01)		
Total		**40 (12)**	**08 (02)**	**08 (04)**	**10 (04)**	**02 (01)**	
6.0 Honours	VII	14 (04)	04 (01)	-	RM-04	-	22 (06)
	VIII	14 (04)	04 (01)	-	OJT-04	-	22 (06)
6.0 Honours with Research	VII	10 (03)	04 (01)	-	RM-04 (01) RP-04 (01)	-	22 (06)
	VIII	10 (03)	04 (01)	-	RP-08 (01)		22 (05)

Programme Framework (Courses and Credits): B. A. Logic

Sr. No.	Year	Semester	Level	Course Type	Course Code	Title	Credits
1.	I	I	4.5	DSC-01	BA-LO 111T	Traditional Logic	04
2.	I	II	4.5	DSC-02	BA-LO 121T	Propositional Logic	04
3.	II	III	5.0	DSC-03	BA-LO 231T	Logic – I (Indian)	04
4.	II	IV	5.0	DSC-05	BA-LO 241T	Formal Logic	04
5.	III	V	5.5	DSC-07	BA-LO 351T	Symbolic Logic	04
6.	III	VI	5.5	DSC-10	BA-LO 361T	Reasoning and Logic	04

B. A. Logic (Honours)

7.	IV	VII	6.0	DSC-16	BA-MR 471T	KLM	04
8.	IV	VII	6.0	DSC-17	BA-MR 472T	NOP	04
9.	IV	VII	6.0	DSC-18	BA-MR 473T	QRS	04
10.	IV	VII	6.0	DSC-19	BA-MR 474T	TUV	02
11.	IV	VII	6.0	DSE-03	BA-MR 475T	WXY	04
12.	IV	VII	6.0	RM-01	BA-MR 476T	ZAB	04

13.	IV	VIII	6.0	DSC-20	BA-MR 481T	CDE	04
14.	IV	VIII	6.0	DSC-21	BA-MR 482T	FGH	04
15.	IV	VIII	6.0	DSC-22	BA-MR 483T	IJK	04
16.	IV	VIII	6.0	DSC-23	BA-MR 484T	LMN	02
17.	IV	VIII	6.0	DSE-04	BA-MR 485T	OPQ	04
18.	IV	VIII	6.0	OJT-02	BA-MR 486P	RST	04

B. A. Logic (Honours with Research)

24.	IV	VII	6.0	DSC-16	BA-MR 471T	KLM	04
25.	IV	VII	6.0	DSC-17	BA-MR 472T	NOP	04
26.	IV	VII	6.0	DSC-18	BA-MR 473T	TUV	02
27.	IV	VII	6.0	DSE-03	BA-MR 475T	WXY	04
28.	IV	VII	6.0	RM-01	BA-MR 476T	ZAB	04
29.	IV	VII	6.0	RP-01	BA-MR 477P	ABC	04
30.	IV	VIII	6.0	DSC-19	BA-MR 481T	CDE	04
31.	IV	VIII	6.0	DSC-20	BA-MR 482T	FGH	04
32.	IV	VIII	6.0	DSC-21	BA-MR 483T	IJK	02
33.	IV	VIII	6.0	DSE-04	BA-MR 485T	OPQ	04
34.	IV	VIII	6.0	PR-02	BA-MR 486P	RST	08

Ahmednagar Jilha Maratha Vidya Prasarak Samaj's

New Arts, Commerce and Science College, Ahmednagar (Autonomous)

Syllabus

B. A.-I (Logic)

Title of the Course: Traditional Logic								
Year: I				Semester: I				
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
DSC-01	BA-LO111T	04	00	04	60	30	70	100

Learning Objectives:

1. To explain the basic principles of correct reasoning.
2. To provide students ample scope to exercise their reasoning based on the above principles. (Traditional logic)
3. Introduction to logic as branch of philosophy.
4. To explain the Concept of logic, Utility of logic and Brief history of logic

Course Outcomes (Cos):

1. The students will become adept in indentifyineg vailid arguments as against invailid arguments.

2. Precision in expressing proposition and arguments.

3. Ability to abstract the logical form of propositions and arguments.

4. To enhance articulate communication skills.

5. Logic and reasoning are fundamental to the way students communicate with knowledge based.

Detailed Syllabus:

Unit 1:Introduction to Logic: (Allowted 20 lectures)

1. The nature of logic as the study of inference.

2. Deductive and inductive branches of logic.

3. Proposition and Proposition form; Argument and argument form; difference between proposition and sentence.

4. Basic issues / concepts from Indian traditions of logic: theory of intference.

Unit 2: Traditional Western understanding of propositions and its classification: (Allowted 20 lectures)

1. Formal character of deductive logic.

2. Basic structure of proposition and its components: subject term, predicate term, copula, quantifiers.

3. Classification of propositions: Categorical, Hypothetical, Disjunctive.

4. Application of propositions.

Unit 3: Square of Oppositin: (Allowted 10 lectures)

1. Difference between proposition, sentence and judgement.
2. Four-fold-scheme of categorical proposition.
3. Distribution of terms in A, E, I, O propositions.

Unit 4: Traditional Western understanding of Inference and its classification:

(Allowted 10 lectures)

1. Immediate inference: Opposition, conversion, obversion.

2. Mediate inference: Categorical syllogism, mixed disjunctive syllogism, mixed hypothetical syllogism, dilemma,

Suggested Readings/Material:

1. I.M. Copi, Introduction to logic (truth edition), Macmillan company, New York.
2. Athale and Bodas, Tarkasangraha, (Relevant chapters)
3. Copi I.M. Symbolic Logic (6^{th} edition), Macmillan company, New York.
4. Vidyabhushan S.C., History of Indian Logic, Motilal Banarsidas, 1978
5. Stephen Barker, Elements of Logic.

Ahmednagar Jilha Maratha Vidya Prasarak Samaj's

New Arts, Commerce and Science College, Ahmednagar (Autonomous)

Syllabus

B. A.-I (Logic)

Title of the Course: Propositional Logic								
Year: I				Semester: II				
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
DSC-02	BA-LO121T	04	00	04	60	30	70	100

Learning Objectives:

1. To explain the basic principles of correct reasoning.
2. To provide students ample scope to exercise their reasoning based on the above principles. (Traditional logic)
3. Introduction to logic as branch of philosophy.
4. To explain the Concept of logic, Utility of logic and Brief history of logic

Course Outcomes (Cos):

1. The students will become adept in identifying valid arguments as against invalid arguments.

2. Precision in expressing propositions and arguments.

3. Ability to abstract the logical form of propositions and arguments.

4. To enhance articulate communication skills.

Detailed Syllabus:

Unit 1. Symbolic logic: (Allowted 20 lectures)

1. Nature, scope and its applications.
2. Modern classification of Propositions:
   a) Simple b) Truth Functionally compound
3. Nature and use of:
   a) Propositional variables b) Logical constants
4. Symbolize propositions using the above.

Unit 2. Basic truth functions: (Allowted 20 lectures)

1. Nature of Logical Connectives

2. Types truth functions:

a) Material implication b) Disjunction c) Conjunction

d) Material Equivalence e) Negation

3. Use of basic Truth-Table Method

4. Propositional forms: Tautology, Contradiction, Contingency

Unit 3. Decision Procedure: (Allowted 10 lectures)

1. Nature and types of Decision procedure: Truth-Table, Shorter-Truth-Table, Truth Tree .

2. Merits and demerits of decision procedures.

3. Exercises of decision procedures.

Unit 4. **Use of decision procedure to identify proposition forms: (Allowted 10 lectures)**

1. Statement and Statement Form.

2. Argument and Argument form.

Suggested Readings/Material:

1. I.M. Copi, Introduction to logic (truth edition), Macmillan company, New York.

2. Athale and Bodas, Tarkasangraha, (Relevant chapters)

3. Copi I.M. Symbolic Logic (6^{th} edition), Macmillan company, New York.

4. Vidyabhushan S.C., History of Indian Logic, Motilal Banarsidas, 1978.

5. Stephen Barker, Elements of Logic.