DEPARTMENT OF ECONOMICS
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN
ECONOMICS (HONS) PART III

Programme Outcomes:

PO1· Assess the existing knowledge, concepts, techniques, and methodology appropriate to the graduate's chosen discipline.

PO2· Conceive and plan a high-quality research and/or creative capstone project in the appropriate disciplinary or multi-disciplinary context.

PO3· Apply discipline-based and/or cross-discipline-based knowledge to design a problem-solving strategy

PO4· Identify major issues, debates, or approaches appropriate to the discipline

PO5· Synthesize complex information appropriate to the discipline

PO6· Select and organize credible evidence to support converging arguments

PO7· Develop an argument in accordance with the methods of the discipline

PO8· Solve discipline-based and/or cross-discipline-based problems using strategies appropriate to the subject

PO9· Employ writing conventions appropriate to the discipline

PO10· Exhibit disciplined work habits as an individual

Programme Specific Outcome

PSO 1· Students will analyze and evaluate positions on economic issues, showing that they can break an economic issue down into the various economic principles and concepts that form the basis of the position and identify the competing sides on the issue.

PSO 2· Students will critique an economic position in terms of the accuracy of its representations of economic principles and concepts and the soundness of its use of those concepts and principles to make a claim about economics.

PSO 3· Students will solve real-world economic problems effectively in the context of an industry or field of study, showing that they can identify and collect the appropriate economic data, analyze data in terms of costs and benefits, present economic data and solutions to problems in a way that is clear and accurate, and come to a reasoned judgment concerning benefits within the constraints of costs and can express that judgment convincingly for an audience who must act on it.

PSO 4· Students will explain economics to lay audiences, showing that they can translate economic concepts and principles into terms that can be understood by both general and specific audiences.

Part-III BA/BSc Honours in Economics

Course: 1. International Economics, Money and Capital Market

Course outcomes:

CO 01. Theory of Trade

CO 02. Balance of Payments and Problems of Adjustment

CO 03. Trade Intervention: Theory of Tariff and quotas

CO4. IMF, World Bank

CO 05. Money Market

CO 06. Commercial and the Central Bank

CO 07. Non-Banking Financial Intermediaries (NBFIs)

CO 08. Capital Market

CO 09. Indian Stock Market

CO 10. Capital Market Regulatory Authority (SEBI)

Course: 2. Development Economics, Classical Political Economy

CO 01. Meaning of Development, different concepts of development

CO 02. **Development and Underdevelopment as a Historical Process**

CO 03. Persistence of Underdevelopment and Way to Develop

CO 04. Development Strategy

CO 05. Trade and Development

CO 06. Historical Evolution from GATT to WTO

CO 07. Classical Background: Chief features of classical system

CO 08. **Stages of Development**

CO 09. Marx's Theory of Value

CO 10. The Reproduction Schemes & Accumulation of Capital

CO 11. Surplus Value and Profits

Course: 3. Econometrics & Quantitative Technique, Public Economics and Environmental Economics

CO 01. Concept - Types – theoretical and applied econometrics

CO 02. **The Classical Linear Regression Model (Two variable case)**

CO 03. The Classical Linear Regression Model (Three variable case)

CO 04. Technique of Dynamic Analysis: Some Applications

CO 05. Introduction to instruments and objective of Public Finance

CO 06. Principles of Taxation

CO 07. Fiscal Policy

CO 08. Environment Economy Interaction

CO 09. Pollutions and other environmental Degradations

Course: 4. Indian Economic Planning, Computer Application (Practical)

CO 01. Economic Planning

CO 02. Fiscal Policy of GOI

CO 03. Monetary Policy of GOI

Practical

CO 04. The Nature and Sources of Data for Economic Analysis

CO 02. Graphical Representation of Data Sets

CO 03. Using Spreadsheet / Excel for Statistical Analysis Estimation of Descriptive Statistics

DEPARTMENT OF ECONOMICS
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN
ECONOMICS (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PSO Matrix for **ECONOMICS Honours**

	PSO1	PSO2	PSO3	PSO4
CO 1.-01	3	3	3	2
CO 1-02	3	3	3	3
CO 1-03	3	2	3	2
CO 1-04	3	3	3	2
CO 1-05	3	2	3	3
CO 1-06	3	3	3	3
CO 1-07	3	2	3	3
CO 1-08	3	2	3	3
CO 1-09	3	3	3	2
CO 1-10	3	3	3	3
Total	30	26	30	26
Average	**3.0**	**2.6**	**3.0**	**2.6**

Table 2. CO – PSO Matrix for **ECONOMICS Honours**

	PSO1	PSO2	PSO3	PSO4
CO 2.-01	3	3	3	3
CO 2.-02	2	3	2	2
CO 2.-03	3	3	3	2
CO 2.-04	2	2	3	2
CO 2.-05	3	2	3	3
CO 2.-06	3	3	3	3
CO 2.-07	2	2	2	2
CO 2.-08	2	2	2	2
CO 2.-09	2	2	3	2
CO 2.-10	3	2	3	2
CO 2.-11	2	3	2	3
Total	27	27	29	26
Average	**2.5**	**2.5**	**2.6**	**2.4**

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THREE-YEAR DEGREE COURSE IN
ECONOMICS (HONS) PART III
COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 3. CO – PSO Matrix for **Economics Honours**

	PSO1	PSO2	PSO3	PSO4
CO 3.-01	3	2	3	2
CO 3.-02	2	1	3	2
CO 3.-03	2	2	3	2
CO 3.-04	2	2	3	1
CO 3.-05	2	3	3	3
CO 3.-06	3	3	3	3
CO 3.-07	3	2	3	2
CO 3.-08	3	3	3	3
CO 3.-09	3	2	3	3
Total	23	20	27	21
Average	2.5	2.2	3.0	2.3

Table 4. CO – PSO Matrix for **Economics Honours**

	PSO1	PSO2	PSO3	PSO4
CO 4.-01	3	3	2	3
CO 4.-02	3	3	3	3
CO 4.-03	3	3	3	3
CO 4.-04	3	2	3	3
CO 4.-05	3	2	3	3
CO 4.-06	3	2	3	3
Total	18	15	17	18
Average	3.0	2,.5	2.8	3.0

SIGNATURE

DEPARTMENT OF ECONOMICS MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN

ECONOMICS (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 1.-01	3	3	3	3	3	3	2	3	3	2
CO 1-02	3	3	3	3	2	2	3	2	2	2
CO 1-03	3	2	2	2	2	3	2	1	3	2
CO 1-04	2	2	3	2	3	1	2	1	3	1
CO 1-05	2	2	2	3	2	2	1	2	3	2
CO 1-06	2	2	3	3	2	1	2	2	3	2
CO 1-07	3	2	3	2	2	2	1	1	3	2
CO 1-08	3	3	3	2	3	1	2	2	3	3
CO 1-09	2	2	2	3	2	3	2	1	3	1
CO 1-10	3	3	2	2	3	2	3	2	2	2
Total	26	24	25	25	25	20	20	17	28	19
Average	**2.6**	**2.4**	**2.5**	**2.5**	**2.5**	**2.0**	**2.0**	**1.7**	**2.8**	**1.9**

Table 2. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 2.-01	3	2	3	3	3	2	2	3	3	3
CO 2.-02	2	2	3	3	3	1	3	2	2	3
CO 2.-03	2	3	3	3	3	1	2	2	3	2
CO 2.-04	2	2	3	3	3	1	3	3	1	2
CO 2.-05	2	2	3	3	3	2	2	1	2	2
CO 2.-06	2	2	3	3	2	1	2	2	2	2
CO 2.-07	2	2	3	2	2	1	2	1	1	2
CO 2.-08	2	2	3	2	2	1	2	2	2	2
CO 2.-09	2	2	3	2	2	1	2	2	2	2
CO 2.-10	1	1	3	2	3	1	2	1	3	3
CO 2.-11	2	2	3	2	2	2	1	1	2	2
Total	22	22	33	28	28	14	23	20	23	25
Average	**2.0**	**2.0**	**3.00**	**2.5**	**2.5**	**1.3**	**2.09**	**2.0**	**1.09**	**2.3**

DEPARTMENT OF ECONOMICS
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THREE-YEAR DEGREE COURSE IN
ECONOMICS (HONS) PART III
COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 3. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 3.-01	3	3	3	3	3	3	2	2	2	3
CO 3.-02	3	3	3	2	3	2	2	3	2	2
CO 3.-03	2	2	3	2	2	3	2	3	2	2
CO 3.-04	3	2	2	2	2	2	2	3	1	2
CO 3.-05	3	3	3	2	2	1	1	3	1	2
CO 3.-06	2	2	3	2	2	2	2	2	2	2
CO 3.-07	2	2	3	3	1	2	2	3	1	2
CO 3.-08	3	2	3	2	2	3	2	3	2	1
CO 3.-09	2	3	3	2	3	2	2	2	2	2
Total	23	22	26	20	20	20	17	24	15	18
Average	**2.5**	**2.0**	**2.9**	**2.2**	**2.2**	**2.2**	**1.9**	**2.7**	**1.7**	**2.0**

Table 4. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 4.-01	3	3	3	2	3	3	3	3	3	3
CO 4.-02	2	3	3	2	2	2	3	3	2	3
CO 4.-03	3	3	3	3	2	3	2	2	2	2
CO 4.-04	2	2	2	3	2	2	2	2	3	2
CO 4.-05	2	2	2	2	2	2	3	3	2	2
CO 4.-06	2	2	2	1	2	2	2	3	3	2
Total	14	15	15	13	13	14	15	16	15	14
Average	**2.3**	**2.5**	**2.5**	**2.2**	**2.2**	**2.33**	**2.5**	**2.7**	**2.5**	**2.33**

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DEPARTMENT OF PHILOSOPHY
MUC WOMEN'S COLLEGE, BURDWAN
THREE-YEAR DEGREE COURSE IN
PHILOSOPHY (HONS) PART III

PROGRAMME OUTCOME OF PHILOSOPHY HONOURS

Upon graduation, students should be able to:

PO1· Assess the existing knowledge, concepts, techniques, and methodology appropriate to the graduate's chosen discipline.

PO2· Conceive and plan a high-quality research and/or creative capstone project in the appropriate disciplinary or multi-disciplinary context.

PO3· Apply discipline-based and/or cross-discipline-based knowledge to design a problem-solving strategy

PO4· Identify major issues, debates, or approaches appropriate to the discipline

PO5· Synthesize complex information appropriate to the discipline

PO6· Select and organize credible evidence to support converging arguments

PO7· Develop an argument in accordance with the methods of the discipline

PO8· Solve discipline-based and/or cross-discipline-based problems using strategies appropriate to the subject

PO9· Employ writing conventions appropriate to the discipline

PO10· Exhibit disciplined work habits as an individual

PROGRAMME SPECIFIC OUTCOME OF PHILOSOPHY HONOURS

PART III   (1+1+1 PATTERN)

PSO 1. Develop an understanding of Indian Logical concepts through analysis of primary text and commentary upon it.

PSO 2. Develop the ability to assess in a critical manner primary sources of Indian Philosophy, as well as to analyse and discuss complex subject matters contained in these sources with great precision.

PSO 3. Develop an awareness of different mental states and processes that ultimately generates self-estimation and the capacity of checking of undeserved and crude emotional overflow.

PSO 4. Analyze the fundamental questions necessary to understand life as it is lived, with other humans, in a public realm.

PSO 5. Analyze and judge existing institutions and relationships. Acquire visions of the good social life: of what ought to be the ruling set of values and institutions that hold all sects of people together.

PSO 6. Understand the key issues in the current science-religion priority debate and engage into this debate rationally.

PSO 7. Develop a liberal outlook on religious issues and awaken a consciousness of religious pluralism..

PSO 8. Develop the capability of applying knowledge and skills within philosophy to areas that require an ability to analyze complex problems, as well as to develop possible solutions from a philosophical perspective.

PSO 9. Present traditional philosophical ideals and values in the mould of modernity. Reconcile the forces of tradition with those of modernity.

PSO 10. Relate traditional philosophical notions to actual life and experience, reducing the abstractness of the notions.

PSO 11. Apply analytical techniques, in order to attain conceptual clarity. The habit of careful veracity acquired in the practice of this philosophical method can be extended to the whole sphere of human activity, producing, wherever it exists, a lessening of fanaticism with an increasing capacity of sympathy and mutual understanding.

PSO 12. Students will learn much about themselves and where they stand. - their current values, principles, and beliefs, and perhaps also about the values, principles, and beliefs that it is worthwhile having.

PSO 13. Students will get the impetus to rise above the essentially absurd condition of humanity by exercising their personal freedom and choice. They will learn that nothing is predetermined in individual existence, and that one has to "create oneself" and then live in accordance with this self.

. **COURSE OUTCOME OF PHILOSOPHY HONOURS**

PART- III (1+1+1 PATTERN)

Course-V: Indian Logic

Text:Annambhatta: Tarkasamgraha   with   Tarkasamgrahadipika(From "sarvavyavaharaheturgunobuddhirjnanam"to "smrtirapidvividhayatharthayatharthasceti")

This paper will offer the students a textual reading of the Sanskrit text *Tarkasaṁgraha* of Annaṁbhatta. With the help of *dīpikā*, students will penetrate into the arena of Indian logic and gather the concepts of pramana, prama, jnana, buddhi, smrirti, etc.

CO5 01. Statemangalacaranam, and explain anubandha catustaya, sapta padartha, dravya laksana and guna laksana.

CO5 02. Presentthe defining charactersofbuddhi ,prama and aprama and describes the nature of karana, anyathasiddha, Asatkaryavada, samavayi karana, asamavayi karana and karana –vyapara.

CO5 03. State the definition of pratyaksa and analyses the two classes of perception, viz, nirvikalpak and savikalpaka.   Brings   out   the   epistemological   concepts   of   sannikarsa, anupalabdhi,samanyalaksana,jnanalaksana,jogaja pratyaksa.

CO5 04. Present anumana laksana , and brings out the arguments against the carvaka theory. Describes the different concepts related to anumana, like the concepts of paramarsa, vyapti laksana, , linga paramarsa, vyaptigraha. Presents the different classification of anumana- the anvayvytireki, kevalanvayi and kevalvytireki types, and the purvavat, sesavat and samanyatodrista types.

CO5 05. Describe the nature of sathetu and asathetu, and describes the different hetvabhasas

CO5 06. State the definition of upamana and describes the different upamanas.

CO5 07.   State the definition of sabda and pada, laksana, and describes the nature of sakti, saktigraha and laksana. Analyses the padacaturvidha- akanska, yogyata, sannidhi o tatparya.

CO5 08. Bring out the concept of pramanya and describes the different types of pramanya: svatahpramanya and parathpramanya, presents the theories of prabhakar, bhatta and murarymisra, describes the different theories of error,-akhyati, anyathakhyati, presents the concepts of samsaya,viparyay, tarka and smriti.

Course VI : Psychology and Socio-Political Philosophy

CO6 01. Generate an awareness of the nature and scope of Psychology.

CO6 02. Evaluate the various methods used to judge the condition of mind.

CO6 03. Analyse the different factors constituting mental life: sensation, perception. memory, attention, learning.

CO6 04. Discern the different states of consciousness .

CO6 05. Describe the different schools of Psychology.

CO6 06. Generate an awareness of the nature and scope of Social Philosophy and Political Philosophy.

CO6 07. Introduce some basic socio-political concepts including society, community, association, custom etc.

CO6 08. Elucidate the concepts of social class and caste.

CO6 09. Critically analyse the political ideals of democracy, socialism, secularism and nationalism.

Course-VII : Philosophy of Religion and Philosophical Analysis

CO7 01. Briefly present the nature and scope of philosophy of religion.

CO7 02. Discuss the origin and development of religion.

CO7 03. Definereligion- discern its relation to dharma and dhamma.

CO7 04. Explain the basic tenets of some religions.

CO7 05. Elucidate the proofs for and against the existence of God and discusses the problem of evil

CO7 06. Introduce the concepts of monotheism, polytheism, henotheism, immanence and transcendence.

CO7 07. Introduce the different issues in the areas of meaning and reference, definition and vagueness from the standpoint of analysis of concepts.

CO7 08. Give the students an insight into the concepts of knowledge, truth, analyticity, a priority, and the principles of logic.

CO7 09. Describe the philosophical problems relating to cause, determination and freedom.

CO7 10. Critically analyse the different approaches to our knowledge-claim about of the external world.

Course-VIII : Philosophy in the Twentieth Century : Indian and Western

CO8 01. Provide a thinker -wise analysis of the various philosophical issues in the Indian context.

CO8 02 Present Rabindranath Tagore's concept of the finite-infinite aspect of man, nature of religion and problem of evil

CO8 03 Discuss Swami Vivekananda's concept of Practical Vedānta, Universal Religion, and Yoga.
CO8 04 Describe Sri Aurobindo's concept of reality, human evolution and Integral Yoga.

CO8 05 Provide analysis of S. Radhakrishnan's concept of man, religious experience and intuitive apprehension.

CO8 06 Briefly introduce Md. Iqbal's view of Self, World, and God

CO8 07 Discusse Mahatma Gandhi's doctrineof God Truth, ahiṁsā, and trusteeship.

CO8 08 Introduce Moore's critique of idealism and his defence of common sense view, Russell's conceptions of acquaintance and description, and Ayer's presentation of verifiability theory of meaning.

CO8 09 Present the debates on human existence raised by M. Heidegger and J.P. Sater. Explain the key concepts of existential philosophy, like Heidegger's conception of   Being, existence, world, facticity, authenticity and Satre's conception of nothingness and freedom.

THREE-YEAR DEGREE COURSE IN PHILOSOPHY (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PSO Matrix for **Philosophy Honours**

	PSO1	PSO2	PO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12	PSO13
CO5-01	3	3	0	1	1	2	1	3	1	2	3	2	1
CO5-02	3	3	2	1	1	2	1	3	1	2	3	2	1
CO5-.03	3	3	2	1	1	2	1	3	1	2	3	2	1
CO5- 04	3	3	1	1	1	2	1	3	1	2	3	2	1
CO5- 05	3	2	1	1	1	2	1	3	1	2	3	2	1
CO5- 06	3	3	1	1	1	2	1	3	1	2	3	2	1
CO5- 07	3	3	0	1	0	2	1	3	1	2	3	2	1
CO5- 08	3	3	0	1	0	2	1	3	1	2	3	2	1
Total	24	23	7	8	5	16	8	24	8	16	24	16	8
*Average	3	2.875	0.875	1	0.71428	2	1	3	1	2	3	2	1

Table 2. CO – PSO Matrix for **Philosophy Honours**

	PSO1	PSO2	PO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12	PSO13
CO6-01	0	0	3	3	0	0	0	2	0	0	2	2	2
CO6-02	0	0	3	2	0	0	0	1	0	0	1	1	1
CO6-.03	0	0	3	3	0	0	0	1	0	0	2	2	2
CO6- 04	0	0	3	3	0	0	0	2	0	0	2	2	2
CO6- 05	0	0	3	1	0 -	0	0	1	0	0	1	1	1
CO6- 06	0	0	1	3	3	1	1	3	1	1	3	3	2
CO6- 07	0	0	1	3	3	2	1	3	1	1	3	3	3
CO6- 08	0	0	1	3	3	1	1	3	1	1	3	3	3
CO6- 09	0	0	1	3	3	1	1	3	0	1	3	3	3
Total	0	0	19	24	12	5	4	19	3	4	20	20	19
*Average	0	0	2.11111	2.66666	3	0.55555	0.444444	2.111111	0.33333	0.444444	2.222222	2.22222	2.11111

Table 3. CO – PSO Matrix for **Philosophy Honours**

	PSO1	PSO2	PO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12	PSO13
CO7-01	0	1	0	1	1	3	3	3	0	1	1	2	1
CO7-02	0	1	0	1	1	3	3	3	1	3	1	2	1
CO7-.03	0	1	0	1	1	3	3	3	3	3	2	2	1
CO7- 04	0	1	0	1	1	3	3	2	3	3	2	2	2
CO7- 05	0	1	0	1	1	3	3	2	1	1	2	1	1
CO7- 06	0	1	0	1	1	3	3	2	1	1	2	1	1
CO7- 07	0	1	0	1	0	0	0	3	0	0	3	1	1
CO7- 08	1	1	0	1	1	0	1	3	0	0	3	2	1
CO7- 09	1	1	0	3	1	1	2	3	1	1	3	3	3
CO7- 10	0	1	0	3	1	1	1	3	0	1	3	3	3
Total	2	10	0	14	5	20	22	27	10	14	22	19	15
*Average	0.2	1	0	1.4	0.83333	2	2.2	2.7	1	1.4	2.2	1.9	1.5

Table 4. CO – PSO Matrix for **Philosophy Honours**

	PSO1	PSO2	PO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12	PSO13
CO8-01	1	3	0	1	0	1	1	3	3	3	2	2	0
CO8-02	0	1	0	3	2	1	2	3	1	3	1	2	1
CO8-.03	1	1	1	3	2	1	3	3	3	3	2	2	1
CO8- 04	1	1	1	3	2	1	3	3	3	3	2	2	1
CO8- 05	1	1	1	3	2 -	1	3	3	3	3	2	2	1
CO8- 06	0	0	1	3	1	1	3	3	2	3	2	2	1
CO8- 07	0	0	1	3	1	1	3	3	2	3	2	2	1
CO8- 08	0	0	0	1	1	0	0	3	2	3	3	3	1
CO8- 09	0	0	1	3	2	0	1	3	1	2	3	3	3
Total	4	7	6	23	3	7	19	27	20	26	19	20	10
*Average	0.44444	0.77777	0.66666	2.55555	1.5	0.77777	2.111111	3	2.22222	2.888889	2.111111	2.22222	1.11111

Table 1. CO – PO Matrix for **Philosophy Honours**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO5-01	2	1	1	2	1	1	1	1	2	1
CO5-02	3	1	1	3	2	1	1	2	2	1
CO5-.03	3	1	1	3	2	1	2	2	2	1
CO5- 04	3	1	1	3	2	1	2	2	2	1
CO5- 05	3	1	1	3	2	2	2	2	3	1
CO5- 06	3	1	1	3	2	1	2	2	3	1
CO5- 07	3	1	1	3	2	1	2	2	3	1
CO5- 08	3	1	1	3	2	2	2	2	3	1
Total	23	8	8	23	15	10	14	15	20	8
*Average	2.875	1	1	2.875	1.875	1.25	1.75	1.875	2.5	1

Table 2. CO – PO Matrix for **Philosophy Honours**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO6-01	2	2	2	3	2	1	2	1	2	1
CO6-02	2	2	2	3	2	1	3	1	2	1
CO6-.03	3	2	3	3	3	2	3	1	2	1
CO6- 04	3	2	3	3	3	1	2	1	2	1
CO6- 05	3	2	2	3	3	2	2	2	2	1
CO6- 06	3	2	2	3	2	1	2	1	2	1
CO6- 07	3	2	3	3	3	2	3	1	2	1
CO6- 08	3	2	3	3	3	2	3	1	2	1
CO6- 09	3	2	3	3	3	2	3	1	2	1
Total	25	18	23	27	24	14	23	10	18	9
*Average	2.77777	2	2.55555	3	2.66666	1.55555	2.555556	1.111111	2	1

Table 3. CO – PO Matrix for **Philosophy Honours**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO7-01	2	2	2	3	2	1	2	1	2	1
CO7-02	3	1	1	3	3	2	2	2	2	1
CO7-.03	3	1	2	3	3	1	1	2	2	1
CO7- 04	2	1	2	3	3	1	2	2	2	1
CO7- 05	2	1	2	3	3	3	3	2	2	1
CO7- 06	3	2	1	3	3	2	3	1	2	1
CO7- 07	3	2	1	3	3	2	2	1	2	1
CO7- 08	3	2	3	3	3	2	1	1	2	1
CO7- 09	3	2	2	3	3	3	2	1	2	1
CO7- 10	3	2	2	3	3	2	2	1	2	1
Total	27	16	18	30	29	19	20	14	20	10
*Average	2.7	1.6	1.8	3	2.9	1.9	2	1.4	2	1

Table 4. CO – PO Matrix for **Philosophy Honours**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO8-01	3	3	1	3	3	2	3	1	2	1
CO8-02	3	2	2	3	3	2	2	2	3	1
CO8-.03	3	2	3	3	3	3	3	3	3	1
CO8- 04	3	2	2	3	3	3	3	3	2	1
CO8- 05	3	2	3	3	3	2	3	1	2	1
CO8- 06	3	2	2	3	3	2	2	1	2	1
CO8- 07	3	2	2	3	3	2	2	2	2	1
CO8- 08	3	3	2	3	3	2	3	3	3	1
CO8- 09	3	3	3	3	3	2	3	3	3	1
Total	27	21	20	27	27	20	24	19	22	9
*Average	3	2.33333	2.22222	3	3	2.22222	2.666667	2.111111	2.44444	1

বাংলা বিভাগ

এম.ইউ.সি. উইমেন্স কলেজ, বর্ধমান
তৃতীয় বর্ষ বাংলা সাম্মানিক

কোর্স আউটকাম

পঞ্চম পত্র : উপন্যাস (চন্দ্রশেখর, চোখের বালি, গৃহদাহ ও গণদেবতা)

১. উপন্যাস পাঠের মাধ্যমে সৃজনশীল রচনা পাঠের অভ্যাস তৈরি করা এবং সৃজনশীল রচনার অভ্যাস তৈরি করা।

২. মনস্তত্ত্বমূলক উপন্যাস সম্পর্কে ধারণা তৈরি করা এবং মানব মনের জটিলতা বিশ্লেষণের ক্ষমতা তৈরি করা।

৩. বাংলার সমাজ ও সংস্কৃতিতে পুরুষতন্ত্রের কাঠামো ও নারীর অবস্থান বুঝে নেওয়া।

৪. নৈতিকবোধ সম্পর্কে সচেতন হওয়া।

৫. উপন্যাস পাঠের মাধ্যমে ছাত্রীদের সামাজিকতা , বুদ্ধিবৃত্তি , মননশীল , চিন্তাশক্তি ও যুক্তিশীলতার উন্মেষ ঘটানো।

Table I – co-po Martin for Bengali Hons. Course paper - V

	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010
CO-01	3	3	2	2	2	2	3	1	3	3
CO-02	3	3	3	2	1	2	2	2	2	3
CO-03	1	2	1	1	3	2	2	2	1	3
CO-04	0	0	1	1	0	1	0	0	0	3
CO-05	2	2	3	2	2	2	2	1	2	1
Total	9	10	10	8	8	8	9	6	8	13
Average	1.8	2	2	1.6	1.6	1.6	1.8	1.2	1.6	2.6

ষষ্ঠপত্র :- নাটক (নীলদর্পন,প্রফুল্ল, শারদোৎসব ও দেবীগর্জন)

১. উনিশ ও বিশশতকের নাট্যকারদের জীবন দৃষ্টি, সামাজিক ও সাংস্কৃতিক প্রেক্ষাপট ও সমস্যা সম্পর্কে বিস্তারিত জ্ঞান লাভ করা।

২. গণনাট্যের উদ্ভব ও এই আন্দোলনের প্রেক্ষিতে বিজন ভট্টাচার্যের নাটকের মূল্যায়ন করা।

৩. Performing Art বা প্রায়গিক শিল্প সম্পর্কে ধারণা লাভ।

৪. সমাজ সচেতনতা এবং বিশ্লেষনী শক্তির বিকাশ সাধন করা।

৫. ঔপনিবেশিক শাসন - শোষনের প্রেক্ষিত এবং তার বিরুদ্ধে প্রতিবাদী আন্দোলনের স্বরূপ বিশ্লেষণ।

Table II – co-po Martin for Bengali Hons. Course paper -VI

	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010
CO-01	2	3	3	2	2	2	1	2	2	2
CO-02	2	2	2	0	2	2	2	1	1	2
CO-03	1	2	1	0	1	2	1	1	1	2
CO-04	1	2	2	3	2	1	1	1	1	2
CO-05	2	2	2	2	1	1	2	2	1	1
Total	8	11	10	7	8	8	7	7	6	9
Average	1.6	2.2	2	1.4	1.6	1.6	1.4	1.4	1.2	1.8

সপ্তম পত্র :- (গল্প গুচ্ছ, একালের গল্প, বাংলা প্রবন্ধ ও কাব্য জিজ্ঞাসা)

১. ছাত্রীদের নান্দনিক চাহিদার চরিতার্থতা এবং সৃজনশীলতা ও কল্পনা শক্তির বিকাশ সাধন করা।

২. বর্তমান সময়ের সংকটকে বিশ্লেষণের মাধ্যমে বাঁচার সঠিক পথের সন্ধান করা।

৩. ভারতীয় সাহিত্যতত্ত্ব ও সাহিত্য বিশ্লেষণের ধারা সম্পর্কে জ্ঞান লাভ ।

৪. বিষয়ের গভীরতা উপলব্ধির দক্ষতাবৃদ্ধি এবং সৃষ্টিধর্মী রচনার সমালোচনায় পারদর্শী হওয়া। সাহিত্য সমালোচক হওয়ার প্রাথমিক পাঠগ্রহণ।

৫. লোকশিক্ষা , ভাষা, জাতি ও সংস্কৃতি সম্পর্কে জ্ঞানলাভ এবং তত্ত্ব ও তথ্য দিয়ে ঘটনার বিচার-বিশ্লেষণের দক্ষতা অর্জন।

Table III – co-po Martin for Bengali Hons. Course paper - VII

	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010
CO-01	1	2	2	2	1	2	1	2	1	2
CO-02	3	2	2	2	1	2	2	2	1	2
CO-03	2	2	1	2	1	3	3	2	1	3
CO-04	3	3	2	3	2	3	2	2	0	2
CO-05	2	2	3	3	2	3	3	2	1	2
Total	11	11	10	12	8	13	11	10	4	11
Average	2.2	2.2	2	2.4	1.6	2.6	2.2	2	0.8	2.2

অষ্টম পত্র :- (সংস্কৃত ও ইংরেজি সাহিত্যের ইতিহাস ও সাহিত্যের রূপরীতি)

১. অতীতের মানবজীবন-রাজনীতি-ধর্ম-অর্থনীতি সম্পর্কে ধারণালাভ।

২. প্রাচ্য ও পাশ্চাত্যের সাহিত্যের ইতিহাস সম্পর্কে জ্ঞানলাভ করে মাতৃভাষায় আরো দক্ষতা অর্জন করা।

৩. ইউরোপ ও এশিয়ার মানবজীবন, সংস্কৃতি, ঐতিহ্য ধর্ম প্রভৃতি সম্পর্কে ধারণা তৈরি করা।

৪. তত্ত্বকাঠামোয় বিশ্লেষণের দক্ষতা অর্জন এবং প্রাচ্য ও পাশ্চাত্যের সাহিত্যের তুলনামূলক আলোচনা।

৫. জীবন ও জগৎ সম্পর্কে বিস্তারিত ও সুবৃহৎ পরিসরে ভাবনার অভ্যাস তৈরি।

Table IV – co-po Martin for Bengali Hons. Course paper - VIII

	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010
CO-01	3	2	2	3	2	2	2	2	2	2
CO-02	3	2	2	1	1	2	1	1	1	2
CO-03	2	2	1	2	1	3	3	2	1	3
CO-04	3	2	2	3	3	2	2	2	2	3
CO-05	2	2	2	3	2	3	2	2	0	0
Total	13	10	9	12	10	12	10	9	6	10
Average	2.6	2	1.8	2.4	2	2.4	2	1.8	1.2	2

পি.এস.ও

১. শিক্ষকতা

২. গবেষণা

৩. সাংবাদিকতা

৪. প্রশাসনিক কাজ

৫. বেতার দূরদর্শনে ঘোষক/ঘোষিকার কাজ বা প্রায়গিক শিল্পে
   (Performing Art) দক্ষতা অর্জন।

Table V – co-pso (Bengali Hons)

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO-01 (paper-V)	3	2	1	1	1
CO-02 (paper-VI)	3	2	1	1	3
CO-03 (paper-VII)	3	1	1	1	1
CO-04 (paper-VIII)	3	3	2	1	1
TOTAL	12	8	5	4	6
AVERAGE	3	2	1.25	1	1.50

PART III SANSKRIT HONOURS

Course Outcomes:

Course: 1

CO 01. The students would know about the Vedic Mantras and Vedic Grammar also. The students would know general grammar.

CO 02. The students would know about the Vedic BrahamanaTexts and its importance.

CO 03. The students would know vedic grammar and also know the differences between classical and vedic grammar.

CO 04. The students can take the knowledge about Classification of Veda, Date of Rigveda, Socio-economic life in the age of Rigveda, the different hymns of Rigveda and its Philosophical importance.

Course: 2
CO 01. The students should know general introduction of Indian Petrology and definitions and examples of various arthalankara.

CO 02. They learn many notable works of criticism combine discussions of texts with broad arguments about the nature of literature and the principles of assessing it.

Course: 3.

CO 01. The students would know about Sanskrit ProseKavya.

CO 02. The students would know about the Texts of Dharmasastra & Arthsastra.

CO 03. Students also learn taxes maintain and protect brahmanas, brahmanas activities increase kings life.

CO 04 One must also know how Indian education system Gurukul System was overtaken by convert school culture under a well drafted plan to produce Indians who thinks and behave like Englishman.

CO 05. The students would know about the historical importance of inscription.

CO 06. Students will be able to know political career of samudragupta and the kingdoms conquered by him.

Course: 4.

CO 01. The students would know about the history of Indian Philosophy.

CO 02. Evaluate the major theory of Naya-Baisesika & Vedanta. The students could relate the philosophical theory in practical life.

CO 03. The students could learn to write essay in Sanskrit language and also learn how to summarize a passage.

Program Outcomes:

Upon graduation, students earning any of these degrees should be able to:

PO1· Assess the existing knowledge, concepts, techniques, and methodology appropriate to the graduate's chosen discipline.

PO2· Conceive and plan a high-quality research and/or creative capstone project in the appropriate disciplinary or multi-disciplinary context.

PO3· Apply discipline-based and/or cross-discipline-based knowledge to design a problem-solving strategy

PO4· Identify major issues, debates, or approaches appropriate to the discipline

PO5· Synthesize complex information appropriate to the discipline

PO6· Select and organize credible evidence to support converging arguments

PO7· Develop an argument in accordance with the methods of the discipline

PO8· Solve discipline-based and/or cross-discipline-based problems using strategies appropriate to the subject

PO9· Employ writing conventions appropriate to the discipline

PO10· Exhibit disciplined work habits as an individual

Programme Specific Outcomes:

PSO 01. Students gain knowledge about Language and Communication. They develop

competence in speaking in Sanskrit.

PSO 02. To provide knowledge of ancient Indian religion, literature and history through the study of Sanskrit texts.

PSO 03. Students will understand the difference between vedic Sanskrit and classical Sanskrit.

PSO 04. Students will earn the high spiritual thinking by reading Indian Philosophy in Sanskrit.

Table I shows "CO-PO" mapping matrix and Table II.2 shows "CO-PSO" mapping matrix

Table II.1 CO – PO Matrix for EC- 504 Microprocessors and Microcontrollers

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1-01	2	2	2	2	1	1	1	1	2	2
CO1-02	3	1	2	2	3	2	2	2	3	1
CO1-.03	1	2	2	-	3	2	1	2	2	2
CO1- 04	3	3	2	2	-	1	1	1	1	1
Total	9	8	8	6	7	6	5	6	8	6
*Average	2.25	2	2	1.5	1.75	1.5	1.25	1.5	2.0	1.5

Table II.1 CO – PO Matrix for EC- 504 Microprocessors and Microcontrollers

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO2-01	2	2	2	2	1	1	1	1	2	2
CO2-02	1	2	2	3	3	2	2	2	3	1
Total	3	4	4	5	4	3	3	3	5	3
*Average	1.5	2	2	2.5	2	1.5	1.5	1.5	2.5	1.5

Table II.1 CO – PO Matrix for EC- 504 Microprocessors and Microcontrollers

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO3-01	3	3	3	2	-	2	1	2	2	3
CO3-02	3	3	2	-	3	2	1	2	-	1
CO3-.03	3	3	2	3	3	2	1	2	2	3
CO3- 04	3	3	2	2	-	2	1	2	3	-
CO3- 05	3	2	2	-	3	2	1	2	-	-
CO3- 06	2	3	2	2	3	2	1	2	3	3
Total	17	17	13	9	12	12	6	12	10	10
*Average	2.8	2.8	2.2	2.2	3.0	2.0	1.0	2.0	2.3	3

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO4-01	2	2	2	2	1	1	1	1	2	2
CO4-02	2	1	2	2	-	2	2	1	1	1
CO4-.03	2	1	1	1	3	2	1	2	2	2
Total	6	4	5	5	4	5	4	4	5	5
*Average	2.0	1.33	1.66	1.66	1.33	1.66	1.33	1.33	1.66	1.66

Table II.2 CO – PSO Matrix for EC- 504 Microprocessors and Microcontrollers

	PSO1	PSO2	PSO3	PSO4
CO1-01	3	2	2	1
CO1-02	1	1	-	1
CO1-.03	3	3	2	2
CO1- 04	2	2	-	3
Total	9	8	4	7
Average	2.25	2	1	1.75

Table II.2 CO – PSO Matrix for EC- 504 Microprocessors and Microcontrollers

	PSO1	PSO2	PSO3	PSO4
CO2-01	3	2	2	1
CO2-02	1	1	1	2
Total	**4**	**3**	**3**	**3**
Average	**2**	**1.5**	**1.5**	**1.5**

Table II.2 CO – PSO Matrix for EC- 504 Microprocessors and Microcontrollers

	PSO1	PSO2	PSO3	PSO4
CO3-01	2	2	1	2
CO3-02	1	3	-	1
CO3-.03	2	2	2	2
CO3- 04	1	2	-	2
CO3- 05	3	1	1	1
CO3- 06	2	2	2	2
Total	**11**	**12**	**6**	**10**
Average	**1.83**	**2**	**1**	**1.66**

Table II.2 CO – PSO Matrix for EC- 504 Microprocessors and Microcontrollers

	PSO1	PSO2	PSO3	PSO4
CO1-01	3	2	2	1
CO1-02	1	1	-	1
CO1-.03	2	2	2	2
Total	**6**	**5**	**4**	**4**
Average	**2**	**1.66**	**1.33**	**1.33**

Department of History

M.U.C. Women's College,
Burdwan

B.A.(General)

Program Outcome:

PO O1.Assess the existing knowledge concepts, techniques methodology of the program.

PO O2.Learn a basic narrative of historical events in a specific region of the world

PO 03. Understand and evaluate different historical ideas, and argument.

PO 04. Articulate factual and contextual knowledge of specific spaces and time.

PO 05. Understand the basic skill to analyse the facts.

PO 06.Write the history of events in a scientific and secular temper.

Program Specific Outcome:

B. A.History (H)

While perusing the above programthe student should be able to:

PSO O1. Assess the existing knowledge concepts, techniques methodology of the program.

PSO O2.Apply the scientific method to question anything in history

PSO O3. Understand and evaluate different historical ideas, and argument.

PSO O4. Learn a basic narrative of historical events in a specific region of the world

PSO O5.To have an access to the primary sources of history.

PSO O6.To have an access to the secondary sources of history.

PSO O7 .TO understand basic skill in writing the events in historical manner

PSO 08.Write the history of events in a scientific and secular temper.

Course Outcome:

B. A. Part III History (H)

History of India (1757-1964)

Course –I

CO 01. Understanding the history of the East India Company and its coming to India; Territorial expansion including Bengal

CO 02. Basic narratives of East India Company in relation to administration, legislation, police, army, etc.

CO 03. Understanding the historical ideas and various arguments on permanent settlement, Raiyatwari and Mahalwari settlement

CO 04. Formulation of various policies of company–economy, society, culture etc

CO 05. Peasant and tribal response to the policies-Chuar, Kol, Santal, Farazi, Wahabi, revolt of 1857, Pabna rebellion, Deccan riots etc.

CO 06. Formulation of Middle Class mind set to the colonial rule, leading to social and political movements.

CO 07. Emergence of Indian Nationalism

CO 08. Emergence of Gandhi-new era of nationalism

CO 09. Movement from outside contextualizing national and independence

CO 10.Nehruvian Era-Movement of social justice, neutrality in foreign policy, parliamentary democracy

History of Europe (1789-1945)

Course –II

CO 01. Road to revolution in France and the establishment of Republic leading to the end ancient regime

CO 02. Napoleonic age and its impact on Europe

CO 03. Restoration and Reaction in Europe-Vienna Congress, Concert of Europe etc.

CO 04. Age of Nationalism- Unification of Germany and Italy, Paris Commune, Edict of Emancipation, Balkan Nationalism etc.

CO 05. Transformation of Europe in terms of production- Industrial revolution, social and economic changes in Europe

CO 06. Imperialism in a new shape, Kiser William –II, rivalry with Britten, scramble for power Africa

CO 07. Emergence of two earth camp, Balkan Wars, WW-I

CO 08. New European order, emergence of Soviet Russia, rise of Fascism in Italy, Nazism in Germany

CO 09. World economic crisis, WW-II

CO 10. Quest for Peace- emergence of UNO

History of China and Japan (1839-1949)

Course –III

CO 01. Pre-colonial China: Nature& structure of traditional Chinese society & economy.

CO 02.Understanding the Anglo-Chinese relation till Opium War: Tribute system, Canton Trade etc.

CO 03. Resistance leading to Rebellion : Taiping, Nien etc.

CO 04. Reform & Restoration: Tung Chih, 100 Days'Reform Movement, Boxer, 1911 Revolution,   Yuan Shih Kai – Rule of Warlordism, May Fourth Movement, KMT, Chiang Kai Shek

CO 05.Rivalry between CCP & KMT for capture of power- Victory of the Communists over KMT.

CO 06. The Shogunate in Japan- economy ,society & Govt. Perry Mission, Opening to the West.

CO 07. Fall of the Shogunate, Meiji Restoration, modernization, Constitution

CO 08. Rise of political Parties, Satsuma Rebellion & Popular Rights Movement

CO 09. Emergence of Japan as an imperial power, Sino- Japanese War, Anglo-Japanese Alliance, Russo-Japanese War.

CO 010. Japan in W.W. I, 21 Demands, Washington Conference, Manchurian Crisis , Militarism –W. W. 2.

Making of theContemporary World(1945-2000)

Course –IV

CO.0I: Understanding the New World & the Origin of the Cold War- Ideological clash or power rivalry.

CO 02: Americanizing the Western Europe & Sovietizing the Eastern Europe.

CO 03: Cold War escalates around the World.

CO 04: Decolonization in Asia & Africa leading to the emergence of the Third world- Its movement.

CO 05: Detente – NPT, SALT- I, SALT-II

CO 06: Rise of China & World politics.

CO 07: India & her Neighbours- SAARC, BIMSTEC etc.

CO 08: Collapse of Soviet Bloc, reunification of Germany.

CO 09: Unipolar World - America as Global Police.

CO 09: Globalization: Its impact on the Third World- IT Revolution- Liberalization- Its impact.

Course Outcome Assessment Methodology

COs and PSOs areon the scale of 0 to 3, 0 being no correlation. 1.being the low correlation, 2.being medium and 3. being high correlation.

Table for Course-I of part B. A. Part III History (Hons.):

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO 01	02	02	02	02	03	02	02	01
CO 02	02	03	02	02	01	03	01	02
CO 03	02	03	02	01	02	02	02	01
CO 04	03	01	02	03	01	01	02	02
CO 05	01	02	02	03	02	02	01	02
CO 06	02	02	03	02	02	02	02	02
CO 07	02	01	01	02	03	01	02	03
CO 08	03	03	02	02	02	03	02	01
CO 09	02	02	01	01	01	02	03	02
CO 010	03	02	02	03	02	02	02	02
Total	21	20	19	21	18	20	19	18

Table for Course-II of part B. A. Part III History (Hons.):

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO 01	02	02	02	02	03	02	02	01
CO 02	03	02	02	02	02	02	01	02
CO 03	02	03	02	01	02	02	03	03
CO 04	03	01	02	02	01	01	02	02
CO 05	01	02	02	03	02	02	01	02
CO 06	02	02	03	02	02	02	02	02
CO 07	02	01	01	02	03	01	02	03
CO 08	01	02	03	02	02	02	02	02
CO 09	02	02	01	01	02	02	03	02
CO 010	03	01	02	03	02	03	02	03
Total	21	18	20	20	21	19	20	22

Table for Course-III of Part B. A. Part III History (Hons.):

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO 01	03	02	02	02	02	02	02	01
CO 02	02	02	03	02	01	02	02	02
CO 03	02	03	01	01	02	02	02	02
CO 04	03	01	02	03	02	01	02	02
CO 05	01	02	02	02	02	02	03	01
CO 06	02	02	03	02	01	02	02	02
CO 07	02	01	01	01	03	02	02	03
CO 08	02	01	02	02	02	03	02	02
CO 09	01	02	01	02	01	02	03	02
CO 010	02	01	02	03	02	01	02	02
Total	20	19	19	20	18	19	22	19

Table for Course-IV of part B. A. Part III History (Hons.):

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO 01	02	02	02	02	03	02	02	01
CO 02	02	02	02	02	01	03	01	02
CO 03	02	03	01	01	02	02	02	01
CO 04	03	01	02	03	02	01	02	02
CO 05	01	02	02	03	02	02	01	02
CO 06	02	02	03	02	02	02	02	02
CO 07	02	01	01	02	03	01	02	03
CO 08	03	03	02	02	02	03	02	01
CO 09	02	02	01	01	01	02	03	02
CO 010	02	02	02	03	02	02	02	01
Total	20	19	18	21	19	20	19	17

The above Course Outcome is prepared on the basis of using actions being suggested by Bloom Taxonomy.

HEAD
Department of History
M. U. C. Women's College
Burdwan

COURSE OUTCOME of Physics Honours

Paper- IX

Special Theory of Relativity, Solid State of Physics, Statistical Mechanics

CO-9-1: Derive Lorentz transformation equations by using special Theory of Relativity.

CO-9-2: Define Four Dimensional Space and deduce the transformation formulae between **E** and **B**,**J** and ρ.

CO-9-3: Explain Gibb's paradox and derive Sackur Tetrode formula.

CO-9-4: Define Black Body and establish spectral distribution of energy of Black Body radiation.

CO-9-5: Describe different types of Crystal Structure and different type interatomic Binding in solids.

CO-9-6: Obtain an expression of Electrical and thermal conductivity in free electron model.

CO-9-7: Define different types of magnetic materials by using the concept of Classical and
        Quantum theory.

CO-9-8: Compare the concept of MB, BE, and FD statistics and use it to explain the specific heat and entropy of solids, liquids and gasses.

CO-9-9: Describe Brownian Motion by Langevin and Einstein theories.

Paper- X

Atomic Physics, Quantum Mechanics, Nuclear Physics

CO-10-1: Explain the characteristics of Photoelectric and Compton effects.

CO-10-2: Give the origin of Hydrogen spectra from Bohr's theory.

CO-10-3:Obtain the energy values of systems executing Linear Harmonic Oscillator

CO-10-4: Explain the characteristics of X ray Spectra and derive Mosley's law.

CO-10-5: State de Broglie postulates and explain wave like properties of particles.

CO-10-6: Explain the origin radioactivity and magic number from Liquid drop model and Shell Model

CO-10-7: Explain the phenomenon of Radioactive Decay (α,β and γ)

CO-10-8: StatePauli exclusion principle and describe LS and JJ coupling scheme.

CO-10-9: ExplainNuclear Fission and Fusion process in Nuclear reaction.

CO-10-10: Explain Zeeman effect, Paschen Back effect and Raman effect in atomic spectra.

Paper –XI

Electronics

CO-11-1: Explain Thermionic emission and characteristics of vacuum tubes.

CO-11-2: Explain the I-V characteristics of Zener diode, Tunnel diode and PN diode.

CO-11-3: Construct Rectifiers and Filters using diodes.

CO-11-4: Find gain of BJT Amplifiers &frequency of operation of Oscillators.

CO-11-5: Explain communication techniques using Modulation & de modulation.

CO-11-6: Calculate gain of Operational Amplifiers and describe its use.

CO-11-7: Introduce basic gates and construct Flip- Flops.

PROGRAM SPECIFIC OUTCOME

PSO-1: Derivation of frequency spectrum of FM wave from the concept of Bessel function and solution of different differential equation of electronic circuits from the knowledge of the solution of linear differential equations.

PSO -2: Students will show that they have learned laboratory skills, enabling them to take measurements in a physics laboratory and analyse the measurements to draw valid conclusions.

PSO-3: Students will be capable of oral and written scientific communication, and will prove that they can think critically and work independently.

PSO-4: Students will be able to demonstrate proficiency in the experimental techniques in different area of Physics.

PSO-5: Analysis of broad range of physical phenomena with the knowledge of selected topics from classical mechanics, quantum mechanics and Statistical Mechanics.

PROGRAM OUTCOME

PO1· Assess the existing knowledge, concepts, techniques, and methodology appropriate to the graduate's chosen discipline.

PO2· Conceive and plan a high-quality research and/or creative capstone project in the appropriate disciplinary or multi-disciplinary context.

PO3· Apply discipline-based and/or cross-discipline-based knowledge to design a problem-solving strategy

PO4· Identify major issues, debates, or approaches appropriate to the discipline

PO5· Synthesize complex information appropriate to the discipline

PO6· Select and organize credible evidence to support converging arguments

PO7· Develop an argument in accordance with the methods of the discipline

PO8· Solve discipline-based and/or cross-discipline-based problems using strategies appropriate to the subject

PO9· Employ writing conventions appropriate to the discipline

PO10· Exhibit disciplined work habits as an individual

Table-I

CO-PO matrix for Paper – IX

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO-9-1	3	1	3	3	1	0	1	3	2	2
CO-9-2	2	3	2	1	2	3	1	0	3	3
CO-9-3	2	1	3	2	2	1	2	3	1	2
CO-9-4	2	2	2	3	3	3	2	1	2	1
CO-9-5	3	1	3	2	2	2	1	2	3	0
CO-9-6	1	3	2	1	1	1	3	2	3	2
CO-9-7	3	1	3	3	2	2	3	2	2	2
CO-9-8	2	2	3	2	3	3	1	3	1	3
CO-9-9	1	1	2	2	3	2	2	2	2	3
TOTAL	19	15	23	19	19	17	16	18	19	18
AVERAGE	2.11	1.67	2.56	2.11	2.11	1.89	1.78	2.0	2.11	2.0

Table-II

CO-PO matrix for Paper – X

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO-10-1	2	3	2	1	1	1	3	2	3	2
CO-10-2	3	1	3	3	2	2	3	2	2	2
CO-10-3	2	2	1	2	3	3	1	3	1	3
CO-10-4	1	1	2	2	3	2	2	2	2	3
CO-10-5	2	3	1	1	2	3	1	0	3	3
CO-10-6	2	2	3	2	2	1	2	3	1	2
CO-10-7	2	2	2	3	3	3	2	1	2	1
CO-10-8	3	1	1	2	2	2	1	2	3	0
CO-10-9	1	3	2	1	1	3	3	2	3	2
CO-10-10	2	3	1	2	2	3	1	0	3	3
TOTAL	20	21	18	19	21	22	19	17	23	21
AVERAGE	2.0	2.1	1.8	1.9	2.1	2.2	1.9	1.7	2.3	2.1

Table-III

CO-PO matrix for Paper – XI

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO-11-1	3	1	3	3	2	2	3	2	2	2
CO-11-2	2	2	1	2	3	3	1	3	1	3
CO-11-3	1	1	2	2	3	2	2	2	2	3
CO-11-4	2	3	1	1	2	3	1	0	3	3
CO-11-5	2	1	3	2	2	1	2	3	1	2
CO-11-6	2	2	2	3	3	3	2	1	2	1
CO-11-7	3	1	1	2	2	2	1	2	3	0
TOTAL	15	11	13	15	17	16	12	13	14	14
AVERAGE	2.14	1.57	1.86	2.14	2.43	2.29	1.71	1.86	2.0	2.0

Table-IV

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10
CO-9-1	1	3	3	2	1	2	2	3	1	1
CO-9-2	2	3	1	1	2	3	1	0	3	3
CO-9-3	2	1	3	2	2	1	2	3	1	2
CO-9-4	2	2	2	3	3	3	2	1	2	1
CO-9-5	3	1	1	2	2	2	1	2	3	0
CO-9-6	1	3	2	1	1	1	3	2	3	2
CO-9-7	1	1	2	2	3	2	2	2	2	3
CO-9-8	2	3	1	1	2	3	1	0	3	3
CO-9-9	2	1	3	2	2	1	2	3	1	2
TOTAL	16	18	18	16	18	18	16	16	19	17
AVERAGE	1.78	2.0	2.0	1.78	2.0	2.0	1.78	1.78	2.11	1.89

CO-PSO matrix for Paper – IX

Table-V

CO-PSO matrix for Paper – X

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSSO7	PSO8	PSO9	PSO10
CO-10-1	3	2	2	2	1	2	2	3	2	2
CO-10-2	2	3	1	1	2	3	1	0	3	3
CO-10-3	2	1	3	2	2	1	2	3	1	2
CO-10-4	2	2	2	3	3	3	2	1	2	1
CO-10-5	3	1	1	2	2	2	1	2	3	0
CO-10-6	1	3	2	1	1	1	3	2	3	2
CO-10-7	2	3	1	1	2	3	1	0	3	3
CO-10-8	1	3	3	2	1	2	2	3	1	1
CO-10-9	2	3	1	1	2	3	1	0	3	3
CO-10-10	2	1	3	2	2	1	2	3	1	2
TOTAL	20	22	19	17	18	21	17	17	22	19
AVERAGE	2.0	2.2	1.9	1.7	7.8	2.1	1.7	1.7	2.2	1.9

Table-VI

CO-PSO matrix for Paper – XI

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10
CO-11-1	2	2	2	3	3	3	2	1	2	1
CO-11-2	3	1	1	2	2	2	1	2	3	0
CO-11-3	2	3	1	1	2	3	1	0	3	3
CO-11-4	2	1	3	2	2	1	2	3	1	2
CO-11-5	2	2	2	3	3	3	2	1	2	1
CO-11-6	3	1	1	2	2	2	1	2	3	0
CO-11-7	1	3	2	1	1	1	3	2	3	2
TOTAL	15	13	12	14	15	15	12	11	17	9
AVERAGE	2.14	1.86	1.71	2.0	2.14	2.14	1.71	1.57	2.43	1.29

DEPARTMENT OF POLITICAL SCIENCE

THREE-YEAR DEGREE COURSE IN
POLITICAL SCIENCE (HONS) PART III

(B.A) Bachelor of Arts

Upon graduation, students earning any of these degrees should be able to:

PO 01. Assess the existing knowledge, concepts, techniques, and methodology appropriate to the graduate's chosen discipline.

PO O2. Conceive and plan a high-quality research project in the appropriate disciplinary or multi-disciplinary context.

PO 03. Apply discipline-based and/or cross –discipline-based knowledge to design a problem-solving strategy.

PO 04. Identify major issues, debates, or approaches appropriate to the discipline.

PO 05. Synthesize complex information appropriate to the discipline.

PO 06. Select and organize credible evidence to support converging arguments.

PO 07. Develop an argument in accordance with the methods of the discipline and acquire intellectual competence to advance the discourse.

PO 08. Solve discipline-based and/or cross –discipline-based problems using strategies appropriate to the subject.

PO 09. Employ expressive power appropriate to the discipline.

PO 10. Exhibit disciplined work habits as an individual.

Program Specific Outcomes: POLITICAL SCIENCE

PSO 1.Culminating an approach wide enough to draw analogy between several abstract concepts such as general notion of justice with specific reference to Rawls Theory of Justice and then encouraging them to relate it with concrete or live experience.

PSO 2.Enhancing the capacity to relate ideal types with actual situation like comparing Easton's system model or Morton's model of Structural–Functionalism with third world's variation of political system.

PSO 3.Inculcating analytical and interpretative temperament so that students can comprehend the contemporary relevance of a classical idea, like contemporary relevance of Machiavellian notion of power politics.

PSO 4.Invoking critical approach to concrete political situation as with time it is expected that the students become familiar with elementary political approaches and in light of them they could decipher the relevant social issues with potential political significance.

PSO 5.Encouraging the students to compare and analyze the significance and limitations of different political system while considering their socio-cultural context and subsequently appreciate the cultural relativism of each system.

PSO 6.Making them aware of the sociological aspect of pragmatic politics so that while they would be exposed to the abstract social discourses in later stage like discourses on political power, authority, question of legitimacy in politics, they can relate themselves.

PSO 7. To promote deliberately a situation of interactive learning where students are exposed to contemporary socio-political debates ranging from the debate related to grand or master narratives, parochialism in prevalent approaches to politics - its elitist, patriarchal and euro-centric tendencies.

PSO 8.Making them aware of some relevant and controversial issues related to state and civil domain of politics like social construction of gender ,marginalization and socio cultural significance of identity politics, the contemporary debate on a 'just' socio – political relationship between North and South divide of the world.

PSO 9.students will be able to develop the skill of presenting a socio-politically relevant issue in a logically consistent way and share their view points.

PSO 10. Students will be able to develop a faculty of contextualizing a social issue in a multidimensional and complex matrix of socio economic context.

PART –III POLITICAL SCIENCE HONS

COURSE:5. Meaning, nature and scope of International Relations,

CO5. 01.Define   Realist theory, System theory,   International Society Approach

CO5. O2.Define   Concept of National Power, Concept of National Power, Constituents of National Power, Measurability of National Power, Concept of National Power, Constituents of National Power, Measurability of National Power

CO5. O3. Describe the meaning of techniques and effectiveness of Balance of power; define Concepts of Bipolarity, Unipolarity and Multipotarity

CO5. 04.write down the Origin of Cold War,   End of Cold War, End of Cold War

CO5. O5.Define the meaning and importance of Globalization, Human Rights, Global Terrorism

CO5. 06.Describe Emergence of the United Nations, General Assembly, Security Council and Collective security, Secretary General and Secretariat, International court of justice; composition and function

CO5. O7.Define disarmament; PTBT, N P T and India's Position, C T B T and India's Position

CO5.O8.Describe the emergence of SAARC, objectives of SAARC, problems of SAARC, ASEAN Goal and Functioning.

CO5. O9.Define Foreign Policy and diplomacy.

CO5. 10.Describe Indian Foreign Policy and its basic tenets, Sino-Indian Relation, Indo-Pakistan Relation, Indo-Bangladesh Indo-US Relation

COURSE: 6. Sociology and Politics

CO6. 01.Define the meaning of Sociology, Sociology of Politics and Political Sociology.

CO6. O2.Describe Political Culture; Meaning, Component, Types, Political Socialization; Meaning, Role and Agencies

CO6. O3. Define Political Participation; its meaning and components

CO6. O4. Describe the concept of Political Development and Political Modernization.

CO6. O5. Define the concept of Power, its meaning and types of authority

CO6. O6. Define themeaning and significance of Feminism, write a comprehensive note on different schools of feminism

CO6. O7. Find a co- relation betweenEnvironment and Politics;Write a note on Environmental Movements and Eco feminism

CO6. O8. What is the role of religion in Politics, Define the concept of Secularism

CO6. O9. Interpret the relation between State and Civil Society, what is the role of Media in society and politics

CO6. 10.Describe the relation betweenEthnicity and Nationalism and impact of Globalization on Ethnic Politics

COURSE: 7. Public Administration

CO7. O1. Meaning, Nature and Scope of Public Administration, Relationship between Private and Public Administration, Evolution of Public Administration as discipline,

CO7. O2.Describe theconcepts and principles of administration, hierarchy, unity of commands, span of control, line and staff

CO7. O3. What are the nature and role of Bureaucracy anddefine the generalist and specialist approaches to administration

CO7. O4. Whatis Development Administration and its scope , define the interrelation betweenEcology and Sustainable Development and discuss theRiggsian model of administration

CO7. O5. Define the role of IAS, IPS, IFS, their recruitment and training, Composition, functions and role of UPSC, Composition, functions and role of SPSC,

CO7. O6. What is PMO, Cabinet Secretary and Secretariat, Define the inter relation between Cabinet Committees and PMO

CO7. O7. Describe Administrative Reforms in India, Impact of globalization, what isRTI, Role ofLokpal and Lokayukta in Indian Administration

CO7. O8.Define the role of Chief Secretary in West Bengal and the power and functions of Divisional Commissioner,Power and functions of District Magistrate and BDO.

CO7. O9. Describe the Rural Administration in West Bengal with special reference to Panchayati Raj

CO7. 1O. Describe the Urban Administration inWest Bengalwith special reference to Municipalities   2

COURSE-8 Indian Political Thought

CO8. O1.Describe the Indian ideas on state and Government, define Kautilyas theory of 'Saptanga', and'Dandaniti'

CO8. O2. Discuss the main features of medieval Muslim Political thought.

CO8. O3. Discuss Rammohan Ray's Perceptions about British Colonial rule and his role as a prominent modernizer

CO8. O4. Discuss Bankim's concept of Nationalism, Vivekananda's concept of Nationalism, with special reference to the concept of Social Regeneration

CO8. O5.   Discuss Gandhi's concept of 'Satyagraha', andnon-violence

CO8. O6. What is Tagore's concept of state, Society, and Nation

CO8. O7. Discuss Savarkar's Concept of Hindutva

CO8. O8. Discuss the role and contribution ofSyed Ahmed Khan and MA Jinnah with special reference to the Religion –Nationalism interphase

CO 8.O9. Discuss the socialist idea of Jawaharlal Nehru, Subhash Chandra Bose and Jay Prakash Narayan

CO8. 10. Discuss Ambedkar's concept of social justice

DEPARTMENT OF POLITICAL SCIENCE

THREE-YEAR DEGREE COURSE IN POLITICAL SCIENCE (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **highcorrelation**.

Table 1. CO – PSO Matrix for **Political Science Honours**

Table 1	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10
CO 5.O1	3	2	2	1	2	2	3	3	2	3
CO 5.02	2	2	3	2	1	3	2	2	3	2
CO 5.03	1	2	2	3	2	2	3	1	2	2
CO 5.04	2	3	3	2	3	2	3	3	3	1
CO 5.05	3	1	2	2	3	2	2	2	2	2
CO 5.06	3	2	1	2	2	1	3	2	2	3
CO 5.07	2	3	2	1	1	3	2	2	3	1
CO 5.08	2	2	2	2	3	2	1	3	2	2
CO 5.09	2	3	3	3	2	1	2	2	1	3
CO 5.10	3	2	3	3	1	2	2	3	2	2
Total	23	22	23	21	20	20	23	23	22	21
Average	**2.3**	**2.2**	**2.3**	**2.1**	**2**	**2**	**2.3**	**2.3**	**2.2**	**2.1**

Table 2. CO – PSO Matrix for **Political Science Honours**

Table 2	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10
CO 6.01	3	2	3	2	2	3	2	2	2	3
CO 6.02	3	3	2	2	1	2	3	1	2	2
CO 6.03	2	3	1	3	2	2	2	3	3	1
CO 6.04	2	2	2	2	3	1	2	2	2	2
CO 6.05	3	2	3	1	2	2	2	3	1	2
CO 6.06	1	2	2	2	3	2	3	2	3	3
CO 6.07	1	1	3	3	1	2	3	2	2	2
CO 6.08	2	2	2	2	2	3	2	3	2	1
CO 6.09	3	3	1	1	3	3	3	1	1	2
CO 6.10	2	3	3	2	1	2	2	2	1	3
Total	22	23	22	20	20	22	24	21	19	21
Average	**2.2**	**2.3**	**2.2**	**2**	**2**	**2.2**	**2.4**	**2.1**	**1.9**	**2.1**

Table 3. CO – PSO Matrix for **Political Science Honours**

Table 3	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10
CO 7.-01	2	2	3	2	3	2	3	2	3	2
CO 7.02	3	2	2	3	2	2	2	2	2	2
CO 7.03	3	3	2	2	2	3	2	2	2	3
CO 7.04	2	3	2	1	2	2	3	3	1	2
CO 7.05	1	3	1	2	2	1	3	2	1	2
CO 7.06	1	2	3	3	1	2	3	3	2	2
CO 7.07	2	1	2	2	2	2	2	2	2	2
CO 7.08	3	2	1	2	3	3	2	2	2	3
CO 7.09	2	2	3	3	2	2	1	2	3	2
CO 7.10	2	3	3	3	2	2	2	3	2	3
Total	21	23	22	23	21	21	23	23	20	23
Average	**2.1**	**2.3**	**2.2**	**2.3**	**2.1**	**2.1**	**2.3**	**2.3**	**2**	**2.3**

Table 4. CO – PSO Matrix for **Political Science Honours**

Table 4	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10
CO 8.01	2	3	3	2	2	2	3	3	2	3
CO 8.02	2	2	2	2	1	2	2	3	2	3
CO 8.03	2	3	2	3	3	3	2	1	2	2
CO 8.04	3	2	3	3	2	2	1	2	1	2
CO 8.05	3	2	1	2	3	3	2	2	3	1
CO 8.06	2	3	2	2	3	2	2	2	2	2
CO 8.07	3	2	3	2	2	2	3	2	2	2
CO 8.08	2	2	2	2	2	3	2	3	2	3
CO 8.09	2	2	3	3	2	2	2	3	3	3
CO 8.10	3	3	2	2	1	2	3	2	2	2
Total	24	24	23	23	21	23	22	23	21	23
Average	**2.4**	**2.4**	**2.3**	**2.3**	**2.1**	**2.3**	**2.2**	**2.3**	**2.1**	**2.3**

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DEPARTMENT OF POLITICAL SCIENCE
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN
POLITICAL SCIENCE(HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **highcorrelation**.

Table 5. CO – PO Matrix for **Bachelor of Arts**

Table 5	PO O1	PO O2	PO O3	PO O4	PO O5	PO O6	PO O7	PO O8	PO O9	PO 10
CO 5.O1	2	0	2	2	3	2	2	3	2	3
CO 5.02	2	0	2	2	2	2	3	2	2	2
CO 5.03	3	0	2	2	2	2	2	2	2	2
CO 5.04	2	0	3	3	2	3	1	3	3	2
CO 5.05	3	0	3	2	3	2	2	2	2	3
CO 5.06	2	0	3	2	2	2	2	2	2	2
CO 5.07	2	0	3	2	1	2	3	3	3	3
CO 5.08	2	0	2	3	2	2	2	2	2	2
CO 5.09	3	0	2	2	3	2	2	3	2	3
CO 5.10	2	0	2	3	2	3	3	2	2	3
Total	23	0	24	23	22	22	22	24	22	25
Average	**2.3**	**0**	**2.4**	**2.3**	**2.2**	**2.2**	**2.2**	**2.4**	**2.2**	**2.5**

Table 6. CO – PO Matrix for **Bachelor of Arts**

Table 6	PO O1	PO O2	PO O3	PO O4	PO O5	PO O6	PO O7	PO O8	PO O9	PO 10
CO 6.01	2	0	2	3	2	3	2	3	2	3
CO 6.02	3	0	3	2	3	2	2	2	3	3
CO 6.03	3	0	1	2	2	3	2	2	2	3
CO 6.04	2	0	2	3	2	3	2	3	2	3
CO 6.05	3	0	2	2	3	2	2	1	3	3
CO 6.06	3	0	3	3	2	2	3	2	3	3
CO 6.07	2	0	3	2	2	2	2	2	2	2
CO 6.08	3	0	2	2	2	2	3	3	2	3
CO 6.09	2	0	2	3	3	3	2	2	2	3
CO 6.10	2	0	3	3	2	2	2	2	3	3
Total	25	0	23	25	23	24	22	22	24	29
Average	**2.5**	**0**	**2.3**	**2.5**	**2.3**	**2.4**	**2.2**	**2.2**	**2.4**	**2.9**

Table 7. CO – PO Matrix for **Bachelor of Arts**

Table 7	PO O1	PO O2	PO O3	PO O4	PO O5	PO O6	PO O7	PO O8	PO O9	PO 10
CO 7.-01	3	0	2	3	2	2	3	2	3	3
CO 7.02	3	0	3	2	2	2	2	2	3	3
CO 7.03	2	0	2	2	3	3	2	2	2	2
CO 7.04	3	0	2	3	2	2	3	3	2	2
CO 7.05	2	0	3	3	3	2	2	2	3	3
CO 7.06	3	0	3	2	2	1	3	3	2	3
CO 7.07	2	0	2	3	3	2	2	2	3	3
CO 7.08	2	0	2	2	2	3	2	2	2	2
CO 7.09	3	0	3	2	2	2	3	2	2	3
CO 7.10	3	0	2	3	2	2	2	3	3	3
Total	26	0	24	25	23	21	24	23	25	27
Average	**2.6**	**0**	**2.4**	**2.5**	**2.3**	**2.1**	**2.4**	**2.3**	**2.5**	**2.7**

Table 8. CO – PO Matrix for **Bachelor of Arts**

Table 8	PO O1	PO O2	PO O3	PO O4	PO O5	PO O6	PO O7	PO O8	PO O9	PO 10
CO 8.01	3	0	2	2	2	3	2	1	2	3
CO 8.02	2	0	3	2	3	2	2	2	3	3
CO 8.03	3	0	2	3	2	2	2	2	2	3
CO 8.04	3	0	2	2	2	2	2	2	2	2
CO 8.05	3	0	2	3	2	2	3	3	2	3
CO 8.06	2	0	2	3	3	3	3	2	3	3
CO 8.07	2	0	3	2	2	3	3	3	3	2
CO 8.08	3	0	2	2	2	3	3	2	2	3
CO 8.09	2	0	3	3	3	2	2	3	2	3
CO 8.10	3	0	2	2	2	3	2	2	2	2
Total	26	0	23	24	23	25	24	22	23	27
Average	**2.6**	**0**	**2.3**	**2.4**	**2.3**	**2.5**	**2.4**	**2.2**	**2.3**	**2.7**

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DEPARTMENT OF ENGLISH
THREE-YEAR DEGREE COURSE IN
ENGLISH (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PSO Matrix for **English Honours**

	PSO1	PSO2	PSO3	PSO4
CO 1.-01	2	2	1	1
CO 1-02	1	2	3	2
CO 1-03	1	2	3	2
CO 1-04	2	2	3	1
CO 1-05	2	2	2	1
CO 1-06	2	2	1	1
Total	10	12	13	08
Average	**1.60**	**2.00**	**2.16**	**1.33**

Table 2. CO – PSO Matrix for **English Honours**

	PSO1	PSO2	PSO3	PSO4
CO 2.-01	2	2	2	1
CO 2.-02	2	2	3	1
CO 2.-03	2	2	2	2
CO 2.-04	1	2	2	2
CO 2.-05	2	3	2	2
CO 2.-06	2	2	2	1
Total	11	13	13	09
Average	**1.83**	**2.16**	**2.16**	**1.50**

Table 3. CO – PSO Matrix for **English Honours**

	PSO1	PSO2	PSO3	PSO4
CO 3.-01	2	2	3	2
CO 3.-02	1	2	3	2
CO 3.-03	2	2	3	1
CO 3.-04	2	2	3	1
CO 3.-05	1	1	3	1
CO 3.-06	1	2	3	0
Total	09	11	27	07
Average	**1.50**	**1.83**	**3.00**	**1.16**

Table 4. CO – PSO Matrix for **English Honours**

	PSO1	PSO2	PSO3	PSO4
CO 4.-01	1	2	1	1
CO 4.-02	2	2	2	2
CO 4.-03	1	2	2	1
CO 4.-04	1	2	1	1
CO 4.-05	2	2	2	2
CO 4.-06	1	2	1	1
CO 4.-07	1	2	1	1
CO 4.-08	1	2	1	1
CO 4.-09	1	2	2	2
CO 4.-10	1	2	2	2
CO 4.-11	1	2	2	1
Total	13	22	17	15
Average	**1.18**	**2.00**	**1.54**	**1.36**

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DEPARTMENT OF ENGLISH
THREE-YEAR DEGREE COURSE IN
ENGLISH (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PO Matrix for **Bachelor of Ar5ts**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 1.-01	3	2	2	3	2	2	1	2	3	1
CO 1-02	2	1	2	2	1	2	2	2	3	1
CO 1-03	2	1	2	2	1	2	1	1	3	1
CO 1-04	2	1	2	2	1	2	2	1	3	1
CO 1-05	2	1	2	2	1	2	1	2	3	1
CO 1-06	2	1	2	2	1	1	1	1	3	0
Total	13	7	12	13	7	11	8	9	18	5
Average	**2.16**	**1.16**	**2.00**	**2.16**	**1.16**	**1.83**	**1.33**	**1.50**	**3.00**	**0.83**

Table 2. CO – PO Matrix for **Bachelor of Arts**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 2.-01	3	2	3	3	2	2	2	2	3	1
CO 2.-02	2	1	2	3	1	2	2	2	3	1
CO 2.-03	2	1	2	3	1	1	2	2	3	1
CO 2.-04	3	1	2	3	2	2	3	2	3	1
CO 2.-05	3	2	3	3	2	2	2	2	3	1
CO 2.-06	2	2	2	3	1	1	2	2	3	1
Total	15	9	14	18	9	10	13	12	18	6
Average	**2.50**	**1.50**	**2.33**	**3.00**	**1.50**	**1.66**	**2.16**	**2.00**	**3.00**	**01**

Table 3. CO – PO Matrix for **Bachelor of Arts**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 3.-01	3	2	2	3	2	2	2	3	3	1
CO 3.-02	2	1	2	3	1	1	2	3	3	1
CO 3.-03	2	1	2	3	1	1	2	3	3	1
CO 3.-04	2	2	2	3	1	1	2	2	1	1
CO 3.-05	2	0	1	2	0	1	2	2	2	1
CO 3.-06	2	0	1	2	0	0	2	2	2	1
Total	13	6	10	16	5	6	12	15	14	6
Average	**2.16**	**1.00**	**1.66**	**2.66**	**0.83**	**1.00**	**2.00**	**2.50**	**2.33**	**1.00**

Table 4. CO – PO Matrix for **Bachelor of Arts**

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO 4.-01	2	2	2	3	2	2	1	2	2	1
CO 4.-02	2	1	1	2	1	1	2	2	3	1
CO 4.-03	2	1	1	2	1	2	2	2	3	1
CO 4.-04	2	2	1	3	1	2	2	2	2	1
CO 4.-05	3	2	2	2	2	1	1	2	2	1
CO 4.-06	2	2	1	2	2	2	2	2	3	1
CO 4.-07	2	2	1	2	2	2	2	2	2	1
CO 4.-08	2	2	1	2	1	1	2	2	2	1
CO 4.-09	2	2	1	2	2	2	2	2	2	1
CO 4.-10	2	2	1	2	2	1	2	2	2	1
CO 4.-11	2	2	1	2	1	2	2	2	2	1
Total	23	20	13	24	17	18	20	22	25	11
Average	**2.09**	**1.81**	**2.63**	**2.18**	**1.54**	**1.63**	**1.81**	**2.00**	**2.27**	**1.00**

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Date: 9/2/2018

COs of B.Sc.part III syllabus in Microbiology

CO1-01-   Knowledge of classical and modern molecular approach of genetics.

CO1-02-   Recombination and genetic mapping in prokaryotes.

CO1-03-   Knowledge of central dogma, DNA, RNA, protein synthesis andconcept of modern techniques in modern biologyand genetic engineering.

CO1-04-   Knowledge of normal microbial flora of human body

CO1-05-   Knowledge of symptoms, pathogenicity and preventive measures and treatment of microbial diseases.

CO1-06-   Knowledge of immune system and defence mechanism against infectious diseases.

CO1-07-   knowledge about microbial interactions in an environment such as participation in natural cycles, bioremediation, biodegradation, biomining, waste management.

CO1-08-   knowledge about role of microbes in production and spoilage of several foods, basic information about fermenter and production of Industrial Microbiological products and production of biofertilizer and its applications

POs of B.Sc. part III syllabus in Microbiology

PO1-   Problem analysis

PO2-   Design/development of solutions

PO3-   Conduct investigations of complex problems

PO4-　　　　Modern tool usage

PO5-　　　　Environment and sustainability

PO6-　　　　Ethics

PO7-　　　　Individual and team work

PO8-　　　　Lifelong learning.

PSOs of B.Sc. part III syllabus in Microbiology

PSO1- Molecular Microbiology: the physiology, biochemistry, and genetics of microorganisms, including such topics as structure, function, diversity, metabolism, and the genetics of metabolic regulation;

PSO2- Microbial Pathogenesis: the immune response and disease-causing microorganisms, including aspects of the humoral, cell-mediated and non-specific immune responses, as well as the molecular basis for pathogenesis;

PSO3- Environmental Microbiology: the taxonomic, ecological, and genetic relationships among microorganisms, including such topics as nutrient cycling, microbial diversity, and the biotechnological application of microorganisms to solve environmental problems;

PSO4- Industrial Microbiology: This topic helps to learn manipulating organisms in order to yield a specific product such as antibiotics, vitamins, enzymes, amino acids, solvents, alcohol and daily products. They can also be used in an agricultural application and use them as a bio-pesticide instead of using harmful chemicals or as inoculants and help plant proliferation.

PSO5- Relation of Microbiology to other aspects of Science: The curriculum also includes several interdisciplinary topics such as biochemistry, biophysics, bioinformatics, biohydrometallurgy, bioremediation, biodegradation Biostatistics etc. to ensure a wide range of options that allow students to choose modules from various departments that are best suited to their personal interests and career ambitions.

PSO6- Instruments/ Techniques usage: The use of various instruments/ techniques and their optimal usage can elucidate students to gain formal knowledge about the practicals as well as creates an opportunity to explore the further extent.

PSO7- Scientific Method: hypothesis generation and testing, including the development of theoretical and practical skills in the design and execution of experiments;

PSO8- Scientific Communication: the development and execution of oral and writing skills necessary for effective communication of experimental results, the ability to think critically regarding a discipline topic, and the conveyance of scientific principles to audiences of both scientists and non-scientists.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	3	3	2	1	3	2	2
CO2	3	2	3	2	0	3	1	2
CO3	3	2	3	3	1	3	1	2
CO4	3	3	2	2	2	3	2	2
CO5	3	2	2	2	2	3	1	2
CO6	3	2	3	3	0	3	2	2
CO7	3	3	3	2	3	3	1	3
CO8	3	2	1	2	3	3	2	3
Total	24	19	20	18	12	24	12	18
Average	3	2.38	2.5	2.25	1.5	3	1.5	2.25

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	3	1	1	1	3	3	3	3
CO2	3	1	1	2	3	2	3	2
CO3	3	0	1	1	3	2	3	3
CO4	1	3	2	2	3	2	3	3
CO5	2	3	3	2	3	2	3	2
CO6	3	3	3	2	3	2	3	2
CO7	1	2	3	3	3	2	3	2
CO8	1	1	3	3	3	2	3	2
Total	17	14	17	16	24	17	24	19
Average	2.13	1.75	2.13	2	3	2.13	3	2.38

DEPARTMENT OF NUTRITION
MUC WOMEN'S COLLEGE, BURDWAN
THREE-YEAR DEGREE COURSE IN
NUTRITION (HONS) PART III
COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PSO Matrix for **Nutrition Honours**

		PSO1	PSO2	PSO3	PSO4
Part A	CO 1.-01	1	0	0	1
	CO 1-02	1	0	1	1
	CO 1-03	1	1	1	0
	CO 1-04	1	1	1	0
	CO 1-05	2	1	1	0
	CO 1-06	3	1	1	0
Part B	CO 1-01	1	0	0	1
	CO 1-02	1	1	1	1
	CO 1-03	2	1	1	0
	CO 1-04	3	1	1	1
	CO 1.-05	3	1	1	1
	CO 1.-06	1	1	1	1
	CO 1.-07	1	0	1	1
Total		21	9	11	8
Average		**1.62**	**0.69**	**0.84**	**0.62**

Table 2. CO – PSO Matrix for **Nutrition Honours**

		PSO1	PSO2	PSO3	PSO4
Part A	CO 1.-01	1	1	0	0
	CO 1-02	2	1	0	3
	CO 1-03	2	1	0	2
	CO 1-04	1	1	1	0
	CO 1-05	2	1	1	2
Part B	CO 1-01	1	0	0	0
	CO 1-02	0	0	1	0
	CO 1-03	1	1	1	0
	CO 1-4	2	1	1	0
	CO 1.-5	2	1	1	1
	CO 1-06	1	1	1	0
	Total	15	9	7	8
	Average	**1.36**	**0.81**	**0.63**	**0.72**

DEPARTMENT OF NUTRITION
MUC WOMEN'S COLLEGE, BURDWAN
THREE-YEAR DEGREE COURSE IN
NUTRITION (HONS) PART III
COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 3. CO – PSO Matrix for **Nutrition Honours**

	PSO1	PSO2	PSO3	PSO4
CO 1.-01	1	1	0	1
CO 1-02	2	1	0	2
CO 1-03	1	2	1	0
CO 1-04	1	1	3	0
CO 1-05	3	0	0	3
Total	8	5	4	6
Average	1.6	1.0	0.80	1.2

Table 4. CO – PSO Matrix for **Nutrition Honours**

	PSO1	PSO2	PSO3	PSO4
CO 1-01	1	1	0	1
CO 1-02	1	1	0	1
CO 1-03	0	1	1	0
CO 1-04	1	0	1	1
CO 1-05	1	0	1	1
Total	4	3	3	4
Average	0.80	0.60	0.60	0.80

DEPARTMENT OF NUTRITION
MUC WOMEN'S COLLEGE, BURDWAN
THREE-YEAR DEGREE COURSE IN
NUTRITION (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PO Matrix for **Bachelor of Science**

		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
Part A	CO 1.-01	2	1	1	2	1	1	1	1	2	2
	CO 1-02	1	1	2	2	1	1	2	1	2	1
	CO 1-03	2	2	2	2	2	2	2	2	2	1
	CO 1-04	2	2	1	2	1	1	1	1	2	2
	CO 1-05	2	1	1	2	2	2	1	1	1	1
	CO 1-06	2	2	2	1	2	1	2	1	2	1
Part B	CO 1-01	1	2	1	2	1	1	1	2	2	1
	CO 1-02	1	2	2	2	1	1	2	1	1	2
	CO 1-03	2	1	1	1	1	2	2	1	1	2
	CO 1-04	2	2	2	2	2	1	2	2	1	1
	CO 1.-05	1	2	1	2	1	1	2	1	1	1
	CO 1.-06	2	1	2	2	1	2	1	2	1	2
	CO 1.-07	1	1	1	1	2	1	2	2	2	2
	Total	21	20	19	23	18	17	21	18	20	19
	Average	**1.61**	**1.53**	**1.46**	**1.76**	**1.38**	**1.30**	**1.61**	**1.38**	**1.53**	**1.46**

Table 2. CO – PO Matrix for **Bachelor of Science**

		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
Part A	CO 1.-01	2	1	1	1	2	1	2	2	1	1
	CO 1-02	1	2	1	1	2	2	1	1	1	1
	CO 1-03	1	1	1	1	1	1	1	1	1	1
	CO 1-04	1	1	2	2	2	1	1	1	1	1
	CO 1-05	1	1	1	1	1	1	2	2	2	1
Part B	CO 1-01	2	1	2	2	1	2	2	1	1	1
	CO 1-02	2	1	2	1	2	2	1	2	2	1
	CO 1-03	1	1	1	1	2	1	1	2	2	1
	CO 1-04	1	1	2	1	1	2	1	2	1	2
	CO 1.-05	1	2	1	1	1	2	1	1	2	2
	CO 1.-06	1	2	2	1	2	1	1	1	2	1
	Total	14	14	16	13	17	16	14	16	16	13
	Average	**1.27**	**1.27**	**1.45**	**1.18**	**1.54**	**1.45**	**1.27**	**1.45**	**1.45**	**1.18**

DEPARTMENT OF NUTRITION
MUC WOMEN'S COLLEGE, BURDWAN
**THREE-YEAR DEGREE COURSE IN
NUTRITION (HONS) PART III**

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 3. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 1.-01	1	1	1	1	1	1	0	1	1	1
CO 1-02	1	1	1	1	1	1	1	1	0	1
CO 1-03	2	0	1	2	0	1	1	2	1	1
CO 1-04	1	1	2	1	1	0	1	2	1	2
CO 1-05	1	1	1	1	1	1	1	1	1	2
Total	**6**	**4**	**6**	**6**	**4**	**4**	**4**	**7**	**4**	**7**
Average	**0.12**	**0.80**	**0.12**	**0.12**	**0.80**	**0.80**	**0.80**	**0.14**	**0.80**	**0.14**

Table 4. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 4.-01	1	2	1	1	1	2	1	1	2	2
CO 4.-02	1	1	2	2	2	1	1	1	1	2
CO 4.-03	1	2	2	2	1	1	2	1	1	2
CO 4.-04	2	1	1	2	1	2	2	2	1	1
CO 4.-05	1	2	2	1	1	1	2	2	2	1
Total	**6**	**8**	**8**	**8**	**6**	**7**	**8**	**7**	**7**	**8**
Average	**0.12**	**0.16**	**0.16**	**0.16**	**0.12**	**0.14**	**0.16**	**0.14**	**0.14**	**0.16**

SIGNATURE

DEPARTMENT OF BOTANY
MUC WOMEN'S COLLEGE, BURDWAN
THREE-YEAR DEGREE COURSE IN
BOTANY (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PSO Matrix for **BOTANY Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO 1.-01	3	3	1	0	3	3	3
CO 1-02	1	1	1	1	1	1	1
CO 1-03	3	3	1	3	2	2	3
CO 1-04	1	3	1	1	1	1	1
CO 1-05	3	3	3	3	3	2	2
CO 1-06	3	3	3	3	3	2	3
CO 1-07	1	2	3	2	3	3	3
CO 1-08	1	2	0	1	1	2	2
CO 1-09	2	1	2	3	2	3	2
CO 1-10	3	3	2	2	2	3	2
CO 1.-11	3	3	3	3	3	3	3
Total	24	27	20	22	24	25	25
Average	2.18	2.45	1.81	2.0	2.18	2.27	2.27

Table 2. CO – PSO Matrix for **Botany Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO 2.-01	3	2	0	1	1	2	3
CO 2-02	2	3	2	3	3	2	2
CO 2-03	1	2	2	0	1	1	2
CO 2-04	2	3	1	1	0	1	2
CO 2-05	1	3	0	0	0	0	1
CO 2-06	2	2	1	1	2	1	2
CO 2-07	1	2	0	0	1	0	0
CO 2-08	2	3	0	0	0	1	2
CO 2-09	2	2	0	1	3	2	3
CO 2-10	3	3	3	2	3	2	3
CO 2.-11	3	2	3	2	3	3	3
CO 2.-12	3	2	3	3	3	3	3
CO 2.-13	3	3	3	3	3	3	3
Total	28	32	18	17	23	21	29
Average	2.15	2.46	1.38	1.30	1.76	1.61	2.23

DEPARTMENT OF BOTANY
MUC WOMEN'S COLLEGE, BURDWAN
THREE-YEAR DEGREE COURSE IN
BOTANY (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 3. CO – PSO Matrix for **Botany Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO 3.-01	1	2	2	2	1	2	2
CO 3.-02	3	3	3	2	3	3	3
CO 3.-03	3	3	3	3	3	3	3
CO 3.-04	3	3	3	3	3	3	3
CO 3.-05	2	3	3	3	3	3	3
CO 3.-06	3	3	3	3	3	3	3
CO 3.-07	3	3	3	1	3	3	3
CO 3.-08	1	2	0	1	3	3	3
CO 3.-09	1	3	3	0	3	1	3
Total	20	25	23	18	25	24	26
Average	**2.22**	**2.77**	**2.55**	**2.0**	**2.77**	**2.66**	**2.88**

Table 4. CO – PSO Matrix for **Botany Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO 4.-01	2	3	2	3	3	2	3
CO 4.-02	3	3	3	2	3	3	3
CO 4.-03	2	2	3	3	3	3	3
Total	7	8	8	8	9	8	9
Average	**2.33**	**2.66**	**2.66**	**2.66**	**3.0**	**2.66**	**3**

DEPARTMENT OF BOTANY
MUC WOMEN'S COLLEGE, BURDWAN
THREE-YEAR DEGREE COURSE IN
BOTANY (HONS) PART III

COURSE OUTCOME ASSESSMENT

Table 5. CO – PSO Matrix for **Botany Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO 5.-01	0	2	1	0	3	0	3
CO 5.-02	0	2	0	0	3	2	2
CO 5.-03	2	3	2	0	3	0	2
CO 5.-04	2	2	3	0	2	1	3
CO 5.-05	1	2	3	0	2	1	2
CO 5.-06	2	2	3	0	2	1	3
CO 5.-07	3	3	3	3	3	2	3
CO 5.-08	3	2	3	3	3	2	3
CO 5.-09	2	1	1	2	2	1	2
CO 5.-10	3	1	0	0	2	3	1
CO 5.-11	3	2	2	0	3	2	2
Total	21	22	21	8	28	15	26
Average	**1.90**	**2.0**	**1.90**	**0.72**	**2.54**	**1.36**	**2.36**

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 1.-01	3	2	1	1	2	1	2	1	2	1
CO 1-02	3	1	2	3	3	2	3	2	3	3
CO 1-03	3	3	1	3	3	2	2	2	3	2
CO 1-04	3	2	2	2	3	1	2	2	3	3
CO 1-05	3	3	1	3	3	2	3	2	3	2
CO 1-06	3	3	1	2	3	1	3	2	3	2
CO 1-07	3	3	2	3	3	1	2	2	3	3
CO 1-08	3	2	1	3	3	1	3	1	3	2
CO 1-09	3	3	2	2	3	2	2	2	3	3
CO 1-10	3	3	1	3	3	2	2	2	3	3
CO 1.-11	3	3	2	3	3	2	3	2	3	3
Total	33	28	16	28	32	17	27	20	32	27
Average	3.0	2.54	1.45	2.54	2.90	1.54	2.45	1.81	2.90	2.45

Table 2. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 2.-01	3	3	3	3	2	3	2	3	3	2
CO 2.-02	3	3	3	2	1	2	2	3	2	2
CO 2.-03	3	3	3	2	2	3	2	3	3	2
CO 2.-04	3	3	3	2	1	2	2	3	2	2
CO 2.-05	3	3	3	1	1	3	2	3	3	2
CO 2.-06	3	3	3	2	2	2	2	3	2	2
CO 2.-07	3	3	3	3	1	3	2	3	2	2
CO 2.-08	3	3	3	2	1	2	2	3	2	2
CO 2.-09	3	3	3	1	2	3	2	3	3	2
CO 2.-10	3	3	3	2	1	2	2	3	3	2
CO 2.-11	3	3	3	3	2	2	2	3	2	2
CO 2.-12	3	3	3	1	2	2	2	3	2	2
CO 2.-13	3	3	3	3	2	2	2	3	2	2
Total	39	39	39	27	20	31	26	39	31	26
Average	3.0	3.0	3.0	2.07	1.53	2.38	2.0	3.0	2.38	2.0

DEPARTMENT OF BOTANY
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN
BOTANY (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 3. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 3.-01	2	2	3	2	2	2	1	2	1	2
CO 3.-02	2	2	2	1	2	1	2	2	1	2
CO 3.-03	2	3	3	2	3	2	3	2	2	2
CO 3.-04	3	3	3	1	3	1	3	2	2	2
CO 3.-05	3	3	3	2	3	1	3	2	2	2
CO 3.-06	2	2	2	2	2	2	2	2	1	2
CO 3.-07	3	3	3	2	3	2	3	2	2	2
Total	17	18	19	12	18	11	17	14	11	14
Average	2.42	2.57	2.71	1.71	2.57	1.57	2.42	2.0	1.57	2.0

Table 4. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 4.-01	3	3	3	3	3	3	3	3	2	3
CO 4.-02	3	3	3	3	3	3	3	3	2	3
CO 4.-03	3	3	3	3	3	3	3	3	2	3
Total	9	9	9	9	9	9	9	9	6	9
Average	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	3.0

Table 5. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO5.-01	3	2	3	1	1	3	2	3	2	3
CO5.-02	3	2	2	2	1	3	3	3	1	3
CO5.-03	3	2	2	1	1	3	2	3	1	3
CO5.-04	3	2	3	1	1	3	3	3	2	3
CO5.-05	3	2	2	1	1	3	2	3	2	3
CO5.-06	3	2	2	2	1	3	3	3	1	3
CO5.-07	3	2	2	1	1	3	3	3	2	3
CO5.-08	3	2	3	1	1	3	2	3	1	3
CO5.-09	3	2	3	2	1	3	2	3	2	3
CO5.-10	3	2	2	2	1	3	3	3	2	3
CO5.-11	3	2	2	1	1	3	2	3	1	3
Total	33	22	26	15	11	33	27	33	17	33
Average	3.0	2.0	2.36	1.36	1.0	3.0	2.45	3.0	1.54	3.0

DEPARTMENT OF ZOOLOGY
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN
ZOOLOGY (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PSO Matrix for **Zoology Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10
CO 1.-01	2	0	3	2	2	2	1	0	0	1
CO 1-02	2	0	2	3	2	3	2	0	0	2
CO 1-03	3	2	3	2	0	0	0	0	3	2
CO 1-04	0	0	3	2	3	1	1	1	3	1
CO 1-05	2	2	3	2	1	1	1	0	3	3
CO 1-06	2	2	3	1	0	1	0	0	3	3
CO 1-07	2	2	3	3	2	1	1	0	3	2
CO 1-08	2	2	3	3	2	1	2	0	3	3
CO 1-09	0	0	3	1	3	3	2	1	3	1
CO 1-10	3	3	2	2	0	0	0	0	1	3
CO 1.-11	3	3	2	2	0	0	0	0	1	3
Total	21	16	30	23	15	13	10	2	23	24
Average	**1.90**	**1.45**	**2.72**	**2.09**	**1.36**	**1.18**	**0.90**	**0.18**	**2.09**	**2.18**

Table 2. CO – PSO Matrix for **Zoology Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10
CO 2.-01	1	0	3	3	3	1	2	2	2	2
CO 2.-02	1	0	3	3	3	1	3	2	2	2
CO 2.-03	1	0	3	3	3	1	3	2	2	2
CO 2.-04	1	0	3	3	3	1	3	2	2	2
CO 2.-05	1	0	3	3	3	1	3	1	2	2
CO 2.-06	1	0	3	2	2	1	2	2	2	2
CO 2.-07	2	1	3	2	2	1	2	0	2	2
CO 2.-08	0	0	3	2	2	1	2	2	2	2
CO 2.-09	2	2	3	2	2	1	2	2	3	2
CO 2.-10	1	1	3	2	3	1	2	1	3	2
CO 2.-11	1	0	3	0	1	0	0	0	0	0
Total	12	4	33	25	27	10	24	16	22	20
Average	**1.09**	**0.36**	**3.00**	**2.27**	**2.45**	**0.90**	**2.18**	**1.45**	**2.00**	**1.81**

DEPARTMENT OF ZOOLOGY
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN
ZOOLOGY (HONS) PART III
COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 3. CO – PSO Matrix for **Zoology Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10
CO 3.-01	2	0	3	2	1	1	1	3	1	2
CO 3.-02	2	0	3	2	1	1	1	3	0	2
CO 3.-03	2	0	3	1	1	2	0	3	1	1
CO 3.-04	2	0	3	2	2	1	0	3	1	2
CO 3.-05	2	0	3	3	2	1	1	3	1	2
CO 3.-06	2	0	3	2	2	2	1	3	0	2
CO 3.-07	2	0	3	3	1	1	1	3	1	2
CO 3.-08	2	0	3	1	2	1	0	3	0	1
CO 3.-09	2	0	3	2	1	2	2	3	0	1
Total	18	0	27	18	13	12	7	27	5	15
Average	**2.00**	**0.00**	**3.00**	**2.00**	**1.44**	**1.33**	**0.77**	**3.00**	**0.55**	**1.66**

Table 4. CO – PSO Matrix for **Zoology Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10
CO 4.-01	0	0	3	1	1	1	1	2	1	2
CO 4.-02	0	0	3	2	2	1	1	2	1	2
CO 4.-03	0	0	3	1	1	1	1	2	1	2
CO 4.-04	0	0	3	1	1	2	1	2	1	2
CO 4.-05	0	0	3	2	2	1	1	2	1	2
CO 4.-06	0	0	3	1	1	1	1	2	0	1
CO 4.-07	0	0	3	2	2	2	1	2	0	2
CO 4.-08	0	0	3	1	1	1	1	2	0	2
CO 4.-09	0	0	3	2	2	2	1	2	1	2
CO 4.-10	0	0	3	2	2	1	1	2	0	2
CO 4.-11	0	0	3	1	1	2	1	2	1	2
Total	0	0	33	16	16	15	11	22	7	21
Average	**0.00**	**0.00**	**3.00**	**1.45**	**1.45**	**1.36**	**1.00**	**2.00**	**0.63**	**1.90**

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DEPARTMENT OF ZOOLOGY
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN
ZOOLOGY (HONS) PART III
COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 1.-01	2	2	3	2	2	2	1	2	2	1
CO 1-02	2	2	2	2	2	2	2	2	2	2
CO 1-03	3	2	2	2	1	2	2	1	3	2
CO 1-04	2	2	3	2	3	1	1	1	3	1
CO 1-05	2	1	2	2	1	1	1	2	3	2
CO 1-06	2	2	3	1	1	1	2	2	3	2
CO 1-07	2	2	1	2	2	2	1	1	3	2
CO 1-08	2	2	3	2	2	1	2	1	3	2
CO 1-09	2	2	1	1	2	3	2	1	3	1
CO 1-10	3	3	2	2	2	2	2	2	1	2
CO 1.-11	3	3	2	2	2	2	2	1	1	2
Total	25	23	24	20	20	19	18	16	27	19
Average	**2.27**	**2.09**	**2.18**	**1.81**	**1.81**	**1.72**	**1.63**	**1.45**	**2.45**	**1.72**

Table 2. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 2.-01	2	2	3	3	3	1	2	2	2	2
CO 2.-02	2	2	3	3	3	1	3	2	2	2
CO 2.-03	2	2	3	3	3	1	2	2	2	1
CO 2.-04	1	2	3	3	3	1	3	2	1	2
CO 2.-05	1	2	3	3	3	1	2	1	2	2
CO 2.-06	1	2	3	2	2	1	2	2	2	1
CO 2.-07	2	1	3	2	2	1	2	0	1	2
CO 2.-08	2	2	3	2	2	1	2	2	2	2
CO 2.-09	2	2	3	2	2	1	2	2	2	2
CO 2.-10	1	1	3	2	3	1	2	1	3	2
CO 2.-11	1	1	3	1	1	1	1	1	1	1
Total	17	19	33	26	27	11	23	17	20	19
Average	**1.54**	**1.72**	**3.00**	**2.36**	**2.45**	**1.00**	**2.09**	**1.54**	**1.81**	**1.72**

DEPARTMENT OF ZOOLOGY
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN
ZOOLOGY (HONS) PART III
COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 3. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 3.-01	2	2	3	2	2	2	2	2	1	2
CO 3.-02	3	2	2	1	2	2	1	3	2	2
CO 3.-03	2	2	3	2	2	2	2	3	1	1
CO 3.-04	2	2	2	2	2	2	2	2	1	2
CO 3.-05	3	2	3	2	2	1	1	3	1	2
CO 3.-06	2	2	2	2	2	2	2	2	2	2
CO 3.-07	1	2	3	3	1	2	1	3	1	2
CO 3.-08	3	1	3	1	2	2	2	3	2	1
CO 3.-09	2	2	3	2	1	2	2	3	2	1
Total	20	17	24	17	16	17	15	24	13	15
Average	**2.22**	**1.88**	**2.66**	**1.88**	**1.77**	**1.88**	**1.66**	**2.66**	**1.44**	**1.66**

Table 4. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 4.-01	2	2	3	1	3	2	2	2	2	2
CO 4.-02	2	3	2	2	2	1	2	2	2	2
CO 4.-03	2	3	3	2	1	2	2	2	2	2
CO 4.-04	2	2	3	3	1	2	2	2	2	2
CO 4.-05	2	2	2	2	2	1	3	2	2	2
CO 4.-06	2	2	2	1	1	2	2	2	2	1
CO 4.-07	2	2	3	2	2	2	2	2	2	2
CO 4.-08	2	3	3	1	1	1	2	2	2	2
CO 4.-09	2	3	2	2	2	2	2	2	1	2
CO 4.-10	2	3	3	2	2	1	2	2	2	2
CO 4.-11	2	3	3	1	1	2	2	2	1	2
Total	22	28	29	19	18	18	23	22	20	21
Average	**2.00**	**2.54**	**2.63**	**1.72**	**1.63**	**1.63**	**2.09**	**2.00**	**1.81**	**1.90**

SIGNATURE

DEPARTMENT OF MATHEMATICS
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN MATHEMATICS (HONS)
PART III

Program Outcomes:

(B.Sc.)Bachelor of Science

Upon graduation, students earning any of these degrees should be able to:

PO 01.   Assess the existing knowledge, concepts, techniques, and methodology appropriate to the graduate's chosen discipline.

PO 02.   Conceive and plan a high-quality research project in the appropriate disciplinary or multi-disciplinary context.

PO 03.   Apply discipline-based and/or cross-discipline-based knowledge to design a problem-solving strategy

PO 04.   Identify major issues, debates, or approaches appropriate to the discipline

PO 05.   Synthesize complex information appropriate to the discipline

PO 06.   Select and organize credible evidence to support converging arguments

PO 07.   Develop an argument in accordance with the methods of the discipline and acquire intellectual competence to advance the discourse

PO 08.   Solve discipline-based and/or cross-discipline-based problems using strategies appropriate to the subject

PO 09.   Employ expressive power appropriate to the discipline

PO 10.   Exhibit disciplined work habits as an individual

Program Specific Outcomes:

MATHEMATICS

PSO 01 :

Graduates will have experience working with the ideas representing the breadth of the mathematical sciences. Students should see a number of contrasting but complementary points of view in the topics (continuous and discrete), techniques (algebraic and geometric), and approaches (theoretical and applied) to mathematics.

PSO 02 :

Graduates will develop mathematical thinking, progressing from a procedural/computational understanding of mathematics to a broad understanding encompassing logical reasoning, generalization, abstraction, and formal proof.

PSO 03 :

Graduates will communicate mathematics to others in both oral and written form with precision, clarity

and organization.

PSO 04 :

Graduates will acquire sufficient knowledge and proficiency in the use of appropriate technology to assist in the learning and investigation of mathematics.

PSO 05 :

Graduates will study at least one area of mathematics in depth, drawing on ideas and tools from previous coursework to extend their understanding.

PART III MATHEMATICS HONOURS

Course outcomes:

CO 01 :   Metric spaces :

•A metric space is a set for which distances between all members of the set are defined

•It is used in fixed point theorem and mapping principles.

•To study continuous functions on metric spaces.

•To learn connected metric spaces.

•To understand complete metric spaces.

•To study compact metric spaces.

CO 02: Complex Analysis:

•It is widely used in Fluid Mechanics and Electrical engineering.

•To learn properties of complex numbers.

•To understand the use of complex numbers in the field of Calculus.

•To learn the importance of analytic functions.

•To gain knowledge of singularities and residues.

•To apply the knowledge of residues in complex integration.

CO 03: Numerical Methods:

•It is used for solving a system of equations

•It has application in all branches of engineering.

•To know how to find the roots of transcendental equations.

•To learn how to interpolate the given set of values

•To understand the curve fitting for various polynomials

•T learn numerical solution of differential equations

CO 04.: Method of Real Analysis:

•It is a branch of pure mathematics.

•It is useful and Statistics, Probability, Operations Research, etc.

•To study sequences.

•To study series of real functions.

•To know the Fourier series.

•To study half range series.

CO 05 : Optimization Techniques:

•Optimization techniques is a branch of Operations Research.

•It deals with minimization of cost or maximization of profit.

•It is used in Production engineering, Mathematics of finance, Networking, etc.

•To study linear programming problems.

•To learn about transportation problems.

•To know the fundamentals of game theory.

CO 06: Applied Numerical Methods:

•It is a branch of numerical analysis

•It is used for solving a system of equations and used in all branches of engineering.

•To solve a system of linear equations.

•To learn numerical differentiation and integration.

•To learn about interpolation polynomials.

•To apply numerical methods for differential equation.

DEPARTMENT OF MATHEMATICS
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN MATHEMATICS(HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1: CO – PSO Matrix for **Mathematics Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5
CO 1.-01	2	3	1	2	2
CO 1-02	2	2	1	2	3
CO 1-03	3	3	2	3	3
CO 1-04	3	2	1	2	3
CO 1-05	3	3	3	2	2
CO 1-06	3	2	3	3	3
Total	16	15	11	14	16
Average	**2.7**	**2.5**	**1.8**	**2.3**	**2.7**

Table 2. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 1.-01	3	3	2	0	1	1	3	1	0	0
CO 1-02	3	3	1	0	2	2	3	1	1	1
CO 1-03	3	3	3	3	2	2	3	3	1	2
CO 1-04	3	3	2	1	1	3	2	1	0	1
CO 1-05	3	3	2	3	2	1	1	1	1	1
CO 1-06	3	3	3	2	2	2	2	2	1	2
Total	18	18	13	09	10	11	14	09	04	07
Average	**3.0**	**3.0**	**2.2**	**1.5**	**1.7**	**1.8**	**2.3**	**1.5**	**0.67**	**1.2**

DEPARTMENT OF GEOGRAPHY
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN GEOGRAPHY (HONS) PART III

Program Outcome

(BA/B.Sc.) Bachelor of Arts

Upon graduation, students earning any of these degrees should be able to:

PO1· Assess the existing knowledge, concepts, techniques, and methodology appropriate to the graduate's chosen discipline.

PO2· Conceive and plan a high-quality research and/or creative capstone project in the appropriate disciplinary or multi-disciplinary context.

PO3· Apply discipline-based and/or cross-discipline-based knowledge to design a problem-solving strategy

PO4· Identify major issues, debates, or approaches appropriate to the discipline

PO5· Synthesize complex information appropriate to the discipline

PO6· Select and organize credible evidence to support converging arguments

PO7· Develop an argument in accordance with the methods of the discipline

PO8· Solve discipline-based and/or cross-discipline-based problems using strategies appropriate to the subject

PO9· Employ writing conventions appropriate to the discipline

PO10· Exhibit disciplined work habits as an individual

Program Specific Outcomes (PSOs)

Geography

PSO 1.Students will be able to understand, analyse and interpret the key concepts in physical and human geography of environmental systems, major landforms, process linkages, variable scale, and "cause and effect" and how they relate to the influence of climate, geology, and human activities in shaping the earth surface.

PSO 2Students will develop an in-depth understanding of the concepts of "space," "place" and "region" and the importance of spatial and temporal patterns in explaining world affairs.Students will be able to analyse and interpret the different economic, social, cultural, demographic and economic processes, economic regions and their relation with physical and cultural environment.

PSO 3. Students will be able to apply field, laboratory, geospatial, statistical and RS, GIS techniques to quantify the quantity, characteristics, and history of physical phenomena for geographic research and natural resources management. Students will learn scientific methods including critical thinking, sampling, hypothesis formulation and testing, and controlled experimentation to assess environmental problems, and be able to effectively communicate research objectives, methodology, results, interpretations, and conclusions in oral and written formats.

PSO 4 Students will be able to synthesize geographic knowledge and apply innovative research strategies to solve problems in resource conservation, environmental change, and sustainable development within the community, region, and world

PART IIIGEOGRAPHY (HONS)

COURSE OUTCOMES (Theory):

COURSE 1:NATURE OF GEOGRAPHY

CO1·Define Scope and Content of Geography

CO2·Describe theDevelopment of Geography in the Ancient and Mediaeval
Periods (up to 19th Century)

CO3· Describe and analyse the Development of Modern Scientific Geography in the 19th
Centurywith particular reference to the Contributions of Humboldt and Ritter
CO4· Describe and analysethe Development of Geography in the 20th Century (upto 1970)

CO5· Understand and analyse the Development Of Schools Of ThoughtIn Modern
Geography:German School, French School, American School, Indian School

CO6·Understand the variousConcepts of Determinism, Possibilism and Neo-Determinism,

Empiricism and Positivism

CO7·Analyse and interpret the variousApproaches to Geographic Studies: Systematic vs

Regional and Ecological

CO8· Critically evaluate the impact of Quantitative Revolution in Geography

CO9· Understand the various Approaches To Regional Studies, Concepts and Types of

Region, Bases and Methods of Regionalisation,Scale and Hierarchy of Region, Region and

Regionalism

CO10· Understand the Relationship among Population Growth, Economic Development and
Environmental Conservation
CO 11. Understand the various Environmental Issues Related to Urban and Industrial
Expansion,Environmental issues of Large Dams, Sustainable Development

COURSE OUTCOMES (Theory):

COURSE 2:ECONOMIC AND SOCIAL GEOGRAPHY

CO1· Understand the Concept and Classification of resources, Economic and
Environmental Approaches of Resource Utilisation

CO2· Understand and describe the Different sources of Energy Resources, their Relative
Importance, Production and Consumption

CO3· Know the various Problemsof Resource Depletion and the Global Scenario (Forest, Water, Fossil Fuels),

CO4· Describe and Analyse the Necessity and Methods of Resource Conservation; Expanding
 Oceanic Resource Horizon.

CO5· Describe the differentAgricultural Systems: Plantation Agriculture and Mixed Farming

CO6· Write a note on theModels of Economic Activities: Von-Thunen, Weber, Losch

CO7· Describe the different Industrial Regions: Great Lakes, Mumbai-Pune, Asansol-

Durgapur and analyse the causes for their development

CO8· Understand International Trade with Special Reference to WTO, EEC and SAARC

CO9· Understand the Nature and Content of Social Geography, Evolution of Social Geography, Races and Ethnicity: Major Racial Groups of the World

CO10· Descibe and understand the Concept of Culture and Its Components; Innovation, Diffusion and Convergence of Culture, Cultural Realms of the World and their Characteristics

CO 11. Describe and understand Concept of Rural and Urban Settlement, Problems of Definition and Classification of Urban Settlement, Types and Patterns of Rural Settlement, Theories of Urban Structure Propounded by E.W. Burgess, Harris Ullman and Homer Hoyt, Functional Hierarchy of Urban Settlement with Special Reference to Christaller's Central Place Theory

CO 12. Find out the Determinants and Dynamics of Population Growth, Growth of World Population; Demographic Transition Model, Migration: Types and Impact on Place of Origin and Destination, Population Policy: India and China

COURSE OUTCOMES (Theory):

COURSE 3: GEOGRAPHY OF INDIA

CO1· Describe theGeology and Structure with Special Reference to Himalayan
Structure and Evolution of the Peninsular India

CO2· Describe the Drainage Systems: Evolution and Characteristics of Peninsular
 and Extra-Peninsular Rivers

CO3· Describe the Climatic Characteristics: Seasonality, Unevenness and
Unreliability of Rainfall, Drought and Floods

CO4· Understand and describe the Classification and Characteristics of Soils, Causes and Consequences of Deforestation

CO5· Describe the Agricultural Policy and Development since Independence and Industrial

Policy and Development since Independence

CO6· Understand and describe the recent trends of Industrialization with Special Reference to SEZs

CO7· Briefly describe the Agro-Climatic Regions in India and Impact of Green Revolution

CO8· Understand and describe the Population Growth and Human Development since Independence, Languages Groups: Characteristics and Spatial Distribution, Caste and Social Morphology in Rural India, Characteristics and Recent Trends of Urbanisation

CO9· Briefly describe the Physiographic Region of West Bengal, Problems of Flood and Drought and their Management, Regional Problems of Darjeeling Hill Region and Sundarbans, Population Growth and Human Development

CO10· Understand and describe the Bases and Schemes of Regionalization of India into Geographical Regions, Chotoanagpur Plateau, West Bengal Delta, Malabar Coast

COURSE OUTCOMES (Practical):

COURSE 4:APPLIED GEOGRAPHICAL TECHNIQUES

CO1· Drawing and Construction of Geological Section of Horizontal, Uniclinal, Folded and Faulted Structures Along with Igneous Intrusions and Line of Unconformity,
CO2· Identify Succession and Relation with Rock Groups, Topography and its Relation with Underlying Structures, Interpretation of Geological History
CO3· Prepare Rainfall Dispersion Diagram, Construction of Station Model (Indian Context),
CO4· Preparation of Synoptic Chart and Interpretation (Indian Context),

CO5· Interpretation of Daily Weather Maps Prepared by Indian Meteorological Department
CO6· Learning of Data Entry: Arrangement into Ascending and Descending Order; Cartograms Using Excel: Bar, Pie, Line Graph and Doughnut Chart, Calculation of Central Tendency and Standard Deviation Using Fomula,
CO7· Calculate Bivariate Techniques: Scatter Diagram and Fitting of Trend Lines

CO8· Describe the basic concepts of Remote Sensing, GIS and GPS

CO9· Finding out the Location of a Place Using GPS; Georeferencing of Scanned Maps and Images (Using Software)
CO10·Learn Principles of Preparing and Interpretation of Standard FCC of Images; Digital Classification and Extraction of Physiographic and Cultural Features (Using Software)

DEPARTMENT OF GEOGRAPHY
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN GEOGRAPHY (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **highcorrelation**.

Table 1.Course 1- CO – PSO Matrix for **GeographyHonours**

	PSO1	PSO2	PSO3	PSO4
CO 1.-01	1	2	3	2
CO 1-02	3	2	2	3
CO 1-03	2	2	3	2
CO 1-04	1	2	2	2
CO 1-05	2	2	1	2
CO 1-06	2	2	2	1
CO 1-07	2	2	1	3
CO 1-08	2	2	3	2
CO 1-09	1	2	3	2
CO 1-10	2	1	2	2
CO 1.-11	3	1	2	2
Total	21	20	24	23
Average	**1.91**	**1.82**	**2.18**	**2.09**

Table 2.Course 2- CO – PSO Matrix for **GeographyHonours**

	PSO1	PSO2	PSO3	PSO4
CO 2.-01	1	1	2	2
CO 2.-02	2	2	3	3
CO 2.-03	1	1	2	3
CO 2.-04	2	2	2	2
CO 2.-05	1	2	3	3
CO 2.-06	1	1	3	2
CO 2.-07	2	1	3	2
CO 2.-08	1	2	3	2
CO 2.-09	2	2	3	2
CO 2.-10	2	1	3	2
CO 2.-11	1	2	3	2
CO2-12	2	2	2	2
Total	18	19	32	27
Average	**1.5**	**1.58**	**2.67**	**2.25**

DEPARTMENT OF GEOGRAPHY
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN
GEOGRAPHY (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **highcorrelation**.

Table 3.Course 3- CO – PSO Matrix for **GeographyHonours**

	PSO1	PSO2	PSO3	PSO4
CO 3.-01	1	2	2	2
CO 3.-02	2	1	2	2
CO 3.-03	2	2	3	2
CO 3.-04	1	2	2	2
CO 3.-05	2	2	2	1
CO 3.-06	2	1	2	2
CO 3.-07	2	1	1	1
CO 3.-08	2	1	2	1
CO 3.-09	2	1	2	2
CO 3-10	2	2	2	1
Total	18	0	20	16
Average	**1.8**	**1.5**	**2.0**	**1.6**

Table 4.Course 4- CO – PSO Matrix for **GeographyHonours**

	PSO1	PSO2	PSO3	PSO4
CO 4.-01	1	1	3	1
CO 4.-02	1	1	3	1
CO 4.-03	1	1	3	1
CO 4.-04	1	1	3	1
CO 4.-05	1	1	3	1
CO 4.-06	1	1	3	1
CO 4.-07	1	1	3	1
CO 4.-08	1	1	3	1
CO 4.-09	1	1	3	1
CO 4.-10	1	1	3	1
Total	10	10	33	10
Average	**1**	**0.00**	**3.00**	**1.0**

DEPARTMENT OF GEOGRAPHY
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN GEOGRAPHY (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **highcorrelation**.

Table 1. Course 1 CO – PO Matrix for **Bachelor of Arts**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 1.-01	2	2	2	2	2	2	1	2	2	2
CO 1-02	2	2	2	2	2	2	2	2	2	2
CO 1-03	2	2	2	2	1	2	2	1	2	2
CO 1-04	2	2	2	2	1	1	1	1	2	2
CO 1-05	2	1	2	2	1	1	1	2	2	2
CO 1-06	2	2	2	1	1	1	2	2	1	2
CO 1-07	2	2	1	2	2	2	2	1	2	2
CO 1-08	2	2	2	2	2	1	2	1	1	2
CO 1-09	2	2	1	1	2	2	2	1	2	1
CO 1-10	2	2	2	2	2	2	2	2	1	2
CO 1.-11	2	2	2	2	2	2	2	1	1	2
Total	22	21	20	20	18	18	19	16	18	21
Average	**2.0**	**1.90**	**1.81**	**1.81**	**1.63**	**1.63**	**1.72**	**1.45**	**1.63**	**1.90**

Table 2. Course 2-CO – PO Matrix for **Bachelor of Arts**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 2.-01	2	2	2	2	2	1	2	2	2	2
CO 2.-02	2	2	2	2	3	2	3	2	2	2
CO 2.-03	2	2	3	2	2	1	2	2	2	1
CO 2.-04	1	2	3	2	3	1	2	2	1	2
CO 2.-05	1	1	2	2	2	1	2	1	2	2
CO 2.-06	1	2	3	2	2	1	2	2	2	1
CO 2.-07	2	1	3	2	2	1	2	1	1	2
CO 2.-08	2	2	3	2	2	1	2	2	2	2
CO 2.-09	2	2	2	2	2	1	2	2	2	2
CO 2.-10	1	1	2	2	3	1	2	1	3	2
CO 2.-11	1	1	3	1	1	1	1	1	1	1
CO 2-12	2	1	2	1	2	2	1	2	1	2
Total	18	19	30	22	26	14	23	20	21	21
Average	**1.5**	**1.58**	**2.5**	**1.83**	**2.16**	**1.16**	**1.91**	**1.66**	**1.75**	**1.75**

DEPARTMENT OF GEOGRAPHY
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN
GEOGRAPHY (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **highcorrelation**.

Table 3.Course 3- CO – PO Matrix for **Bachelor of Arts**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 3.-01	2	2	2	2	2	2	2	2	2	2
CO 3.-02	3	2	2	1	2	2	1	2	2	2
CO 3.-03	2	2	3	2	2	2	2	2	1	1
CO 3.-04	2	2	2	2	2	2	2	2	1	2
CO 3.-05	2	2	3	2	2	1	1	1	1	2
CO 3.-06	2	2	2	2	2	2	2	2	2	2
CO 3.-07	1	2	3	2	1	2	1	2	1	2
CO 3.-08	2	1	1	2	2	2	2	2	2	1
CO 3.-09	2	2	2	2	1	2	2	2	2	2
CO 3-10	2	2	2	2	2	2	2	2	2	2
Total	20	19	22	19	18	19	17	19	16	18
Average	**2.0**	**1.9**	**2.2**	**1.9**	**1.8**	**1.9**	**1.7**	**1.9**	**1.6**	**1.8**

Table 4.Course 4- CO – PO Matrix for **Bachelor of Arts**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 4.-01	2	2	1	2	2	2	2	2	2	2
CO 4.-02	2	3	2	2	2	1	2	2	2	2
CO 4.-03	2	2	2	2	1	2	2	2	1	2
CO 4.-04	2	2	2	3	1	2	2	2	2	2
CO 4.-05	2	2	2	2	2	2	2	2	2	2
CO 4.-06	2	2	2	1	2	2	2	2	2	1
CO 4.-07	1	2	3	2	2	2	2	1	1	2
CO 4.-08	2	2	3	1	2	1	2	2	2	2
CO 4.-09	2	3	2	2	2	2	2	2	1	2
CO 4.-10	1	2	2	2	2	2	2	1	2	2
Total	18	22	21	19	18	18	20	18	17	19
Average	**1.8**	**2.2**	**2.1**	**1.9**	**1.8**	**1.8**	**2.0**	**1.8**	**1.7**	**1.90**

SIGNATURE

Program Outcomes (POs) for Chemistry:

PO1· Assess the existing knowledge, concepts, techniques, and methodology appropriate to the graduate's chosen discipline.

PO2· Conceive and plan a high-quality research and/or creative capstone project in the appropriate disciplinary or multi-disciplinary context.

PO3· Apply discipline-based and/or cross-discipline-based knowledge to design a problem-solving strategy

PO4· Identify major issues, debates, or approaches appropriate to the discipline

PO5· Synthesize complex information appropriate to the discipline

PO6· Select and organize credible evidence to support converging arguments

PO7· Develop an argument in accordance with the methods of the discipline

PO8· Solve discipline-based and/or cross-discipline-based problems using strategies appropriate to the subject

PO9· Employ writing conventions appropriate to the discipline

PO10· Exhibit disciplined work habits as an individual

Program Specific Outcomes (PSOs) for Chemistry

1. PSO1 Understanding the market for chemical industry.

2. PSO2 Ethically improves the mother environment clean by disposing the hazardous chemical in a systematic way.

3. PSO3 Understanding the need of modern tools in chemical sciences.

4. PSO4 Improving their knowledge in higher education.

5. PSO5 Record keeping and managing the records.

6. PSO6 Critical thinking of a problem.

7. PSO7 Safety in laboratory.

8. PSO7 Understanding how to be law abide citizen.

Course Outcomes (COs) for Chemistry :

Course 1

CO1.1 – This course gives the student idea about the nature and purity of the crystal.

CO1.2 – This course is very important for the student. This course gives student idea about the way a reaction proceeds and kinetics in details, specially for inorganic reaction.

CO1.3 – This course is more related to biochemistry. This course gives the student idea about the effect of metal ions in living system and also with different drugs.

CO1.4 – Organometallic compounds are very important in biological bodies like haemoglobin, chlorophylls, Vitamin B_{12} and also they can be used as chemical reagent. This course discussed about the synthesis and properties of these organometallics.

CO1.5 – This course gives student knowledge about the synthesis of different complexes and their analytical study by spectroscopy.

CO1.6 – Nanoscience is very important for modern scientific community. CO1.6 discuss details about the application of some specific nano molecules. This course also discuss details of synthesis, structure as well as reaction of supramolecules which are very important for biological body.

CO1.7 – This is related to nuclear chemistry. It has a broad application from designing nuclear weapons to the use in medical sciences.

CO1.8 – Data analysis is very important for modern chemical sciences. This course gives a detail knowledge to the student about the analysis of statistical data they got through from different chemical experiment.

CO1.9 – Metal ion estimation is very important for industry. This is discussed in this course and also students get idea of different methods of estimation of a large number of ions present.

CO1.10 – Purification and separation of compounds need special techniques. These are solvent extraction, chromatographies etc. This is discussed in this course and students learn the application of it.

Course 2

CO2.1 – Dyes are very important class of organic chemicals. They are the source of colour in different colouring chemicals available in market. In this course the synthesis and usefulness of different dyes are discussed.

CO2.2 – Nowadays synthesis of medicine is a very important issue for pharmaceutical industry. The medicines can be antipyretic drugs like paracitamol or antibiotic like penicillin. This course mainly deals with the structural determination, synthesis and uses of some drugs such as antipyretics, analgesic, sulpha-drugs penicillin etc.

CO2.3 – Heterocyclic compounds are very interesting due to their distinct structure and the availability of this kind of heterocyclic structures in medicinal drugs. So the technique of synthesis of heterocyclic compounds is important in the synthesis of different drugs. This course gives the quantitative ideas about the synthesis, properties and uses of such heterocyclic compounds like pyrole, pyridine qunolene, thiophene, furan etc.

CO2.4 - Proteins are important kind of chemicals in biological bodies. The preliminary unit of proteins are amino acids. This course discussed the methods of synthesis of proteins. Also the conversion of one amino acid to other by protection and de-protection of different groups are also discussed here.

CO2.5 – Carbohydrates, starch etc. are different class of macromolecules consisting of preliminary units like glucose, mannose etc. Their structure are also a matter of constant study due to their uniqueness. The are available in different foods like potato and recently they are being used in medicinal sciences also. This course deals with determination of structure of these class of chemicals and also their preliminary units. Inter-conversion of one preliminary unit to other is also discussed here.

CO2.6 – Alkaloids and tarpenes are two very important class of organic chemicals available in different kind of drugs and perfumery chemicals like ephedrine, conium, citral, jesmone etc. The contents of this course deals with synthesis and structural determination of these class of chemicals. Few reactions of them are also discussed here.

CO2.7 – Synthesis of organic reaction is itself involves a large part of organic chemistry. This is called synthetic organic chemistry. This is discussed in a simple way for some simple molecule to the students. This includes fragmentation and retrosynthetic analysis and also finding synthon or reactive starting molecule of a target molecule.

CO2-8 – Pericyclic reactions are used in a vast way in nature and also by organic chemist. This course gives the student the theoretical basis of this kind of reaction and also helps them to find a way to carry out these types of reaction.

CO2.9 – To determine the structure is very important for organic chemst. Various spectroscopic methods are available like NMR, IR, UV absorption spectroscopies are few of them. The students are given a very preliminary idea on in this course.

CO2.10 – Hereditary its transfer is a matter of discussion among the scientist for a long time. De-oxy ribo nuclic acid (DNA) is responsible for this. RNA (ribo nuclic acid) is also another class of nuclic acid. This course gives the students a basic idea about the structure and nature of these types of compounds.

CO2.11 – Use of green chemistry in modern chemical transformation is a becoming very important tool recently. The course taught here gives the student the principle of green chemistry and few methods of using green chemistry in chemical transformations.

Course 3

CO3.1 – Electrochemistry discussed electrical properties of ionic solutions. Different applications are there of this course.

CO3.2 – Properties of solid surface is unique in nature. They can adsorb different chemicals and also this adsorbed solid can be used as catalyst. Micelle and reverse micelle are also two different name of substances where solids adsorbed different chemicals. This is very important in enzyme chemistry. This is discussed here.

CO3.3 – This course deals with molecular symmetry which is very fundamental in spectroscopic study.

CO3.4 – Quantum chemistry started to flourish in 20th century. This is a very important topic of theoretical research work in chemistry. This chemistry gives idea about the theoretical estimation of different physical and chemical properties of chemicals.

CO3.5 – Photo means light. Exposure of light on different chemicals produce colour of chemicals and also can carry out chemical conversion. This course discussed the theoretical basis of photochemistry as well as different types of spectroscopy.

CO3.6 – This chapter deals with different types of quantum particles like boson, fermion. This is very fundamental in nature and can be studied in particle physics.

DEPARTMENT OF CHEMISTRY
MUC WOMEN'S COLLEGE, BURDWAN

THREE-YEAR DEGREE COURSE IN
CHEMISTRY (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PSO Matrix for **Chemistry Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO 1.-01	2	0	1	2	3	1	1	0
CO 1-02	1	0	2	2	2	2	1	0
CO 1-03	2	2	3	3	3	3	2	2
CO 1-04	2	1	3	3	3	2	2	2
CO 1-05	2	1	1	2	2	2	1	2
CO 1-06	3	1	3	3	3	2	1	0
CO 1-07	3	3	3	2	2	2	3	3
CO 1-08	2	2	2	2	2	2	0	0
CO 1-09	2	2	2	2	2	2	2	2
CO 1-10	3	2	3	2	2	2	1	1
Total	22	14	23	23	24	20	14	12
Average	**2.2**	**1.4**	**2.3**	**3.3**	**2.4**	**2**	**1.4**	**1.2**

Table 2. CO – PSO Matrix for **Chemistry Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO 2.-01	3	2	2	2	2	2	2	1
CO 2.-02	3	3	3	3	3	3	3	3
CO 2.-03	3	3	3	3	3	2	3	3
CO 2.-04	2	2	3	3	3	3	3	1
CO 2.-05	3	1	3	2	3	2	1	0
CO 2.-06	3	3	3	3	3	3	3	3
CO 2.-07	3	1	2	2	2	2	1	1
CO 2.-08	1	1	1	2	3	1	2	1
CO 2.-09	3	0	3	3	3	3	1	0
CO 2.-10	3	3	3	3	3	3	2	2
CO 2.-11	2	3	2	1	2	1	1	3
Total	29	26	28	27	30	25	22	17
Average	**2.63**	**2.36**	**2.54**	**245**	**2.72**	**2.27**	**2**	**1.54**

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CHEMISTRY (HONS) PART III
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Table 3. CO – PSO Matrix for **Chemistry Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO 1.-01	3	1	2	2	2	3	1	0
CO 1.-02	3	2	3	3	3	3	1	0
CO 1.-03	1	0	1	2	2	3	0	1
CO 1.-04	1	0	3	3	3	3	0	0
CO 1.-05	2	2	3	2	2	3	2	2
CO 1.-06	1	0	3	3	3	3	0	1
Total	11	5	15	15	15	18	4	4
Average	1.83	0.83	2.5	2.5	2.5	3	0.66	0.66

Gautam Bhattacharya & Piyali Ghosh

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THREE-YEAR DEGREE COURSE IN

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COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 2.-01	3	1	2	1	1	2	1	1	2	1
CO 2-02	3	2	1	1	2	1	1	1	2	2
CO 2-03	3	2	2	2	2	2	2	1	3	2
CO 2-04	2	2	2	1	2	2	2	2	1	2
CO 2-05	2	1	1	2	2	1	1	1	2	2
CO 2-06	3	3	3	2	1	1	2	3	2	1
CO 2-07	3	3	2	1	2	3	2	2	1	2
CO 2-08	1	1	1	1	2	1	2	2	2	1
CO 2-09	2	3	2	1	3	2	1	2	2	2
CO 2-10	2	2	1	2	3	1	1	3	1	2
Total	24	22	17	14	20	16	15	18	18	17
Average	**2.4**	**2.2**	**1.7**	**1.4**	**2.0**	**1.6**	**1.5**	**1.8**	**1.8**	**1.7**

Table 2. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 3.-01	2	3	1	2	3	2	2	2	2	3
CO 3.-02	3	3	2	3	2	1	2	1	2	1
CO 3.-03	3	2	2	1	2	3	3	3	2	2
CO 3.-04	3	3	2	2	3	1	2	3	2	1
CO 3.-05	2	2	3	1	2	2	3	2	2	3
CO 3.-06	3	3	3	2	2	2	2	1	1	2
CO 3.-07	2	2	2	2	1	2	2	3	2	1
CO 3.-08	1	1	2	1	1	1	1	1	2	1
CO 3.-09	3	3	3	2	2	2	2	2	2	2
CO 3.-10	2	3	2	2	3	2	1	2	2	1
CO 2.-11	2	1	2	2	2	1	2	2	1	2
Total	26	26	24	20	23	19	22	22	20	19
Average	**2.36**	**2.36**	**2.18**	**1.81**	**2.09**	**1.72**	**2.0**	**2.0**	**1.81**	**1.72**

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THREE-YEAR DEGREE COURSE IN
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COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 3. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 3.-01	2	1	2	3	1	2	1	3	2	2
CO 3.-02	2	2	1	3	2	1	2	3	2	1
CO 3.-03	3	2	2	2	3	2	1	2	2	2
CO 3.-04	2	1	1	2	3	2	2	2	2	1
CO 3.-05	2	1	1	2	3	3	1	3	3	1
CO 3.-06	1	1	2	1	1	2	2	3	1	3
Total	12	08	09	13	14	12	09	16	12	11
Average	2.0	1.33	1.5	2.16	2.33	2.0	1.5	2.66	2.0	1.83

Gautam Bhattacharya & Piyali Ghosh

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DEPARTMENT OF BOTANY
MUC WOMEN'S COLLEGE, BURDWAN
THREE-YEAR DEGREE COURSE IN BOTANY (HONS) PART III

Program Outcomes:

(B.Sc) Bachelor of Science

Upon graduation, students earning any of these degrees should be able to:

PO1· Assess the existing knowledge, concepts, techniques, and methodology appropriate to the graduate's chosen discipline.

PO2· Conceive and plan a high-quality research and/or creative capstone project in the appropriate disciplinary or multi-disciplinary context.

PO3· Apply discipline-based and/or cross-discipline-based knowledge to design a problem-solving strategy

PO4· Identify major issues, debates, or approaches appropriate to the discipline

PO5· Synthesize complex information appropriate to the discipline

PO6· Select and organize credible evidence to support converging arguments

PO7· Develop an argument in accordance with the methods of the discipline

PO8· Solve discipline-based and/or cross-discipline-based problems using strategies appropriate to the subject

PO9· Employ writing conventions appropriate to the discipline

PO10· Exhibit disciplined work habits as an individual

Program Specific Outcomes

BOTANY

PSO 1: Understand the importance of plants and microorganisms, their diversity and its conservation.

PSO 2: Achieve   knowledge of pure and applied botany.

PSO 3: Understand contribution of botany in increase and improve our supply of medicines, food ,fibers and other plant products.

PSO 4 : Understand health and environmental protection and to solve the pollution problems.

PSO 5: Understand knowledge of botany is an essential pre-requisite for the pursuit of many applied sciences like Agriculture, Horticulture, Sericulture, Forestry, Pharmacology and Medicine.

PSO 6: Understand to care Nature

PSO 7: Understand experiments in botany.

PART-III BOTANY HONOURS

Course: 1. Microbiology, Economic Botany, Pharmacognosy, Palynology, Reproductive Biology and Ecology

Course outcomes:

Theory

CO 01. What are Bacteria and Archaea. Describe the structure of Bacterial Capsule, flagella, pili, Cell envelopes , ribosomes, cytoplasmic inclusions (PHB, Volutin), Plasmids and bacterial chromosome, endospore. Briefly mention the functions of these bacterial structures.

CO 02. Write down the basis of bacterial Taxonomy in light of recent molecular approaches. Briefly describe the Prokaryotic classification based on Bergey's Mannual of systematic Bacteriology, 2nd edition, 2001).

CO 03. Mention the agricultural, industrial and medical applications of microorganisms. Produce a brief idea about epidemiology, causal organism and control of Influenza, Cholera, Boutulism.

CO 04. Describe Transformation, Conjugation and Transduction in bacteria.What are the general characteristics of virus. Describe the structure of TMV, T_2 and HIV. Describe Lytic and Lysogenic multiplication of Virus. What do you mean by Prion and Viroid.

CO 05. Describe the methods of cultivation, processing and utilities of the products of Rice, Tea and Jute. Mention the use of economically important parts of Cotton (fibre), Sal (wood), Sugarcane (sugar), Mustard (oil) and Cocoanut (oil).

CO 06. Define pharmacognosy, drugs, folk medicine, active principles, Pharmacy, Pharmacognosy, Pharmacopeia and adulteration.

CO 07. Elucidate the diagnostic features, active principles and uses of root of *Rauwolfia serpentina* , leaf of *Adhatoda vasica* , seed of *Strychnos nuxvomica* ,bark of *Cinchona succirubra*.

CO 08. Define microsporogenesis and megasprogenesis. Describe polarity, size, shape, symmetry, aperture and sculpture of Spore/pollen morphology. Mention the types of ovules. Development of male and female gametophytes (*Polygonum* type) Define and describe an orthotropous ovule. Describe different types of Pollination and its contrivances. Describe Fertilization process and development of free nuclear type of endosperm in plants. Elucidate the development of crucifer-type of embryo.

CO 09. Define the Autecology and Synecology Ecosystem, ecological pyramids and energy flow . Mention the role of Climatic, edaphic and biotic factors in ecology.: Definition, concept of ecosystem,ecological pyramids.Describe the Ecological succession (Hydrosere, Xerosere) and morphological, anatomical and physiological adaptations of xerophytes, hydrophytes, halophytes and epiphytes.

CO 10. Define Biodiversity *in-situ-, ex-situ* conservation, *inter-situ* conservation and cryopreservation.

CO 11. Define Pollution. Describe causes of different types with special reference to air and water pollution.

Course: 2. Cell Biology, Biotechnology , Genetics & Plant Breeding

Course outcomes:

Theory

CO 01. Describe Cell structure: Ultrastructure and functions of Plasma membrane, Mitochondrion, Chloroplast, Nuclear envelope with nuclear pore complex, Golgi apparatus, Endoplasmic reticulum and Ribosome.

CO 02. Describe Nucleic acid: DNA and RNA – Types, Physical and Chemical structures of B-DNA and t-RNA. Point out total process of replication of DNA - Mechanism and evidence of semi-conservative replication in prokaryotes. Briefly describe the transcription of DNA: Mechanism in Prokaryotes; Nuclear mRNA processing in Eukaryotes (Capping, Polyadenylation or tailing and Splicing) and Translation: Mechanism in Prokaryotes.

CO 03. Define Genetic code:, salient features and deciphering the genetic code.

CO 04 Gene regulation in Prokaryotes: Lac operon (negative and positive control).

CO 05. Eukaryotic chromosome structure: Ultrastructure of chromatin and its organization into chromosome, Concept of euchromatin and heterochromatin. **.** Cell cycle and its regulation (MPF only), phases and events of Mitosis and Meiosis with their significance.

CO 06. Brief idea: Transposable elements, Gene amplification (PCR), Transgenic plant (Bt cotton).

CO 07. Recombinant DNA Technology: Basic concepts; Tools - Restriction enzymes (types with examples); Lygase; Vectors (Plasmid and Bacteriophage).Plant tissue culture: General techniques, concept of Basal medium, Micropropagation, Application of Plant tissue culture.

CO 08. Mendelism and Chromosomal basis of inheritance. Modified Mendelian Ratios: Lethal gene, Epistasis and Complementary gene interaction.

CO 09. Basic concept of Linkage: General idea of Crossing over including molecular mechanism (Holiday Model).

CO 10 Structural changes of chromosome (Deletion, Duplication, Translocation and Inversion) with their meiotic behavior and genetic consequences. Numerical changes of chromosome (Euploidy and Aneuploidy) and their applications.

CO 11. Gene mutation- types, physical & chemical mutagens and their effects.

CO 12. Aims and methods of Plant breeding: Introduction, Acclimatization, Domestication, Selection and Hybridization.

CO 13. Biometry: Frequency distribution - mean, median, mode, class range, standard deviation and standard error. Probability: product law, Sum law, conditional probability, Chi-square test of goodness of fit;

Course: 3. Plant physiology and Biochemistry

Course outcomes:

Theory

CO 01. What are the chemical and physical nature of water. Point out Importance of water in plant life. What do you mean by Water potential. Describe the components of water potential. Mention the status of water in soil and plant cell. What are the routes of water absorbtion, cavitation in xylem and embolism. Define Transpiration, its types. Describe the mechanism of stomatal transpiration effected by CO_2, blue light, potassium ion. Define Antitranspirants and their roles in agriculture.

CO 02. What are Essential elements which help in mineral nutrition in plants. Define macro- and micro nutrients. Describe the role of minerals in plant life. Describe different routes and mechanism of ion-uptake.

CO 03. Define Photosynthesis with equation. Discovery of Pigment System and its evolutionary significance. Mention different photosynthetic pigments and their organization in Pigment System. Describe the Role of main and accessory plant pigments in light trapping. Describe the photosynthetic light reaction along with Z-scheme. Discovery of C3-cycle. Distinguish C_3-, C_4 - and CAM pathways of CO_2 fixation. Mechanism of C_3-, C_4 - and CAM pathways and advantages of C4 and CAM over C3. Activation and Role of Rubisco. Define Photorespiration its operation in different plant cell organelles and importances. Define Respiration. Distinguish respiration and photosynthesis. Basic concept of Aerobic and Anaerobic respiration. Describe the Glycolysis, Krebs cycle, electron transport system. What do you mean by phosphorylation. Describe mechanism of oxidative phosphorylation by chemiosmotic system. Distinguish photophosphorylation and oxidative phosphorylation. What is Girdling hypothesis for phloem translocation. Define sink and source. What is P-Protein. What are Phloem loading and unloading. Describe phloem loading for long distance transport in light of Pressure flow hypothesis. What is Polymer Trapping.

CO 04. Importance and source of Nitrogen in plant life. Nitrogen metabolism in plant cell using nitrate reductase and nitrite reductase. Nitrogen fixation from environment by

nitrogen fixing organisms (free living, symbiotic and associative symbiotic organisms). Mechanism of asymbiotic and symbiotic nitrogen fixation with special reference to nitrogenase and leghaemoglobin. Describe nitrogen cycle in environment.

CO 05. Define growth and development. Define phytohormone. What are the main Phytohormones and their chemical nature. Describe the physiological roles of Auxins, Gibberellins, Cytokinins, Abscisic acid and Ethylene. Define Bioassay. Describe bioassay of IAA and GA_3. Concept of immunoassay and radio immunoassay (RIA) of phytohormones. Concept of Biological clock and sense of stimulus. Define photoperiodism and vernalization. Concept of LDP , SDP, LSDP, SLDP, DNP. What is Phytochrome, mention chemical nature nad photobiological properties. Role of phytochrome in role in flowering.

CO 06. Define dormancy of plant propagules, quiescence and germination. Dormancy – describe types of dormancy , their causes and significance. How to break dormancy. Describe different phases of germination mentioning the role of hormones.

CO 07. Define Carbohydrates, Amino acids, Protein and Lipid. Classify Carbohydrates, Amino acids, Protein and Lipid . Concept of reducing and non-reducing sugars and their structures. Molecular bonding for amino acids and protein. Describe primary, secondary (∞- helix & ß-pleated sheet), tertiary and quaternary structures of proteins , structure of fatty acids. Describe ß-oxidation pathway. Define Enzymes. Biological properties of enzymes and kinetics of emzymatic reactions. Define co-factors and prosthetic group with examples. Describe Lock-key model, induced-fit model. Classification of enzymes as IUB system of 1961. Describe the factors affecting enzyme action. Concept of Ribozyme, allosteric enzyme, abzyme.

Course: 4. Practical

Course outcomes:

Practical

CO 01.Concept of mitotic cell division and chromosome complement. Workout, light microscopic examination and characterization of mitotic cell division and chromosome complement of in *Allium cepa* by aceto-orcein squash technique and meiotic division in *Allium cepa* and *Rhoeo spathacea / discolor* by aceto carmine staining technique. Determine mitotic index in *Allium cepa* root tip by aceto-orcin squash technique. Study the Testing of goodness of fit with Mendelian mono- and dihybrid ratios.

CO 02. Preparation of standard bacteriological medium (Nutrient agar, Nutrient broth and glucose – peptone medium) and Description of Aseptic methodology. Demonstration and practice of Sterilization technique by Autoclaving, Hot air oven and surface sterilization, preparation of slant and plates, subculturing of pure bacteriological culture by dilution streak method. Microscopic examination of bacteria from natural habitats: curd and root nodules of leguminous plants. Methods of bacterial Gram staining.

CO 03. Microscopic examination of morphological of *Impatiens* and *Hibiscus* pollens form prepared slides.

Course: 5. Practical

Course outcomes:

Practical

CO 01. Methods of preparation of percent, normal, molal and molar solutions of sucrose and bicarbonates.

CO 02. Determine isotonic concentration and osmotic pressure of cell sap by plasmolytic method.

CO 03. Compare imbibation of starchy, proteinaceous and fatty seeds. Determine viability of seeds by TTC (TZ) test.

CO 04. Determine amount of water absorption, retention and transpiration by plant parts.Determine transpiration rate and effect of environmental factors (Humidity and light) by plant parts.

CO 05. Determine the effect of KNO_3 solution on stomatal opening using *Basella* leaf peelings.

CO 06. Determine the rate of respiration of different plant parts using Ganong's respirometer or respiroscope. Determine RQ of different types of seeds (starchy, proteinaceous and fatty seeds) using Ganong's respirometer or respiroscope.

CO 07. Determine the effect of CO_2 concentration on the rate of photosynthesis using molar solution of bicarbonate and by measurement of volume of O_2 liberation.

CO 08. Demonstration of General test for detection of carbohydrates, reducing and non-reducing sugars and proteins and Calcium, magnesium, iron and phosphorus from plant ash; oxalic, citric, tartaric and malic. Demonstration of specific tests for glucose, sucrose and starch.

CO 09. Microscopic examination of Ecological adaptive characters of *Ipomoea aquatica* stem, Phyllode of *Acaccia auriculiformis*, *Nerium* leaf and *Vanda* root

CO 10. Demonstration of Quadrat method using minimum size of quadrat, species area curve method and minimum number of quadrats).

CO 11. Identify plant drug materials pharmacognostically - *Adhatoda* (leaf), b) Ginger (rhizome) and c) *Strychnos* (seeds) on the basis of salient organoleptic and microscopic features of fresh and powder materials.

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Table 1. CO – PSO Matrix for **BOTANY Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO 1.-01	3	3	1	0	3	3	3
CO 1-02	1	1	1	1	1	1	1
CO 1-03	3	3	1	3	2	2	3
CO 1-04	1	3	1	1	1	1	1
CO 1-05	3	3	3	3	3	2	2
CO 1-06	3	3	3	3	3	2	3
CO 1-07	1	2	3	2	3	3	3
CO 1-08	1	2	0	1	1	2	2
CO 1-09	2	1	2	3	2	3	2
CO 1-10	3	3	2	2	2	3	2
CO 1.-11	3	3	3	3	3	3	3
Total	24	27	20	22	24	25	25
Average	**2.18**	**2.45**	**1.81**	**2.0**	**2.18**	**2.27**	**2.27**

Table 2. CO – PSO Matrix for **Botany Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO 2.-01	3	2	0	1	1	2	3
CO 2-02	2	3	2	3	3	2	2
CO 2-03	1	2	2	0	1	1	2
CO 2-04	2	3	1	1	0	1	2
CO 2-05	1	3	0	0	0	0	1
CO 2-06	2	2	1	1	2	1	2
CO 2-07	1	2	0	0	1	0	0
CO 2-08	2	3	0	0	0	1	2
CO 2-09	2	2	0	1	3	2	3
CO 2-10	3	3	3	2	3	2	3
CO 2.-11	3	2	3	2	3	3	3
CO 2.-12	3	2	3	3	3	3	3
CO 2.-13	3	3	3	3	3	3	3
Total	28	32	18	17	23	21	29
Average	**2.15**	**2.46**	**1.38**	**1.30**	**1.76**	**1.61**	**2.23**

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Table 3. CO – PSO Matrix for **Botany Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO 3.-01	1	2	2	2	1	2	2
CO 3.-02	3	3	3	2	3	3	3
CO 3.-03	3	3	3	3	3	3	3
CO 3.-04	3	3	3	3	3	3	3
CO 3.-05	2	3	3	3	3	3	3
CO 3.-06	3	3	3	3	3	3	3
CO 3.-07	3	3	3	1	3	3	3
CO 3.-08	1	2	0	1	3	3	3
CO 3.-09	1	3	3	0	3	1	3
Total	20	25	23	18	25	24	26
Average	**2.22**	**2.77**	**2.55**	**2.0**	**2.77**	**2.66**	**2.88**

Table 4. CO – PSO Matrix for **Botany Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO 4.-01	2	3	2	3	3	2	3
CO 4.-02	3	3	3	2	3	3	3
CO 4.-03	2	2	3	3	3	3	3
Total	7	8	8	8	9	8	9
Average	**2.33**	**2.66**	**2.66**	**2.66**	**3.0**	**2.66**	**3**

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Table 5. CO – PSO Matrix for **Botany Honours**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO 5.-01	0	2	1	0	3	0	3
CO 5.-02	0	2	0	0	3	2	2
CO 5.-03	2	3	2	0	3	0	2
CO 5.-04	2	2	3	0	2	1	3
CO 5.-05	1	2	3	0	2	1	2
CO 5.-06	2	2	3	0	2	1	3
CO 5.-07	3	3	3	3	3	2	3
CO 5.-08	3	2	3	3	3	2	3
CO 5.-09	2	1	1	2	2	1	2
CO 5.-10	3	1	0	0	2	3	1
CO 5.-11	3	2	2	0	3	2	2
Total	21	22	21	8	28	15	26
Average	**1.90**	**2.0**	**1.90**	**0.72**	**2.54**	**1.36**	**2.36**

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COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 1. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 1.-01	3	2	1	1	2	1	2	1	2	1
CO 1-02	3	1	2	3	3	2	3	2	3	3
CO 1-03	3	3	1	3	3	2	2	2	3	2
CO 1-04	3	2	2	2	3	1	2	2	3	3
CO 1-05	3	3	1	3	3	2	3	2	3	2
CO 1-06	3	3	1	2	3	1	3	2	3	2
CO 1-07	3	3	2	3	3	1	2	2	3	3
CO 1-08	3	2	1	3	3	1	3	1	3	2
CO 1-09	3	3	2	2	3	2	2	2	3	3
CO 1-10	3	3	1	3	3	2	2	2	3	3
CO 1.-11	3	3	2	3	3	2	3	2	3	3
Total	33	28	16	28	32	17	27	20	32	27
Average	**3.0**	**2.54**	**1.45**	**2.54**	**2.90**	**1.54**	**2.45**	**1.81**	**2.90**	**2.45**

Table 2. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 2.-01	3	3	3	3	2	3	2	3	3	2
CO 2.-02	3	3	3	2	1	2	2	3	2	2
CO 2.-03	3	3	3	2	2	3	2	3	3	2
CO 2.-04	3	3	3	2	1	2	2	3	2	2
CO 2.-05	3	3	3	1	1	3	2	3	3	2
CO 2.-06	3	3	3	2	2	2	2	3	2	2
CO 2.-07	3	3	3	3	1	3	2	3	2	2
CO 2.-08	3	3	3	2	1	2	2	3	2	2
CO 2.-09	3	3	3	1	2	3	2	3	3	2
CO 2.-10	3	3	3	2	1	2	2	3	3	2
CO 2.-11	3	3	3	3	2	2	2	3	2	2
CO 2.-12	3	3	3	1	2	2	2	3	2	2
CO 2.-13	3	3	3	3	2	2	2	3	2	2
Total	39	39	39	27	20	31	26	39	31	26
Average	**3.0**	**3.0**	**3.0**	**2.07**	**1.53**	**2.38**	**2.0**	**3.0**	**2.38**	**2.0**

DEPARTMENT OF BOTANY
MUC WOMEN'S COLLEGE, BURDWAN
THREE-YEAR DEGREE COURSE IN
BOTANY (HONS) PART III

COURSE OUTCOME ASSESSMENT

COs and PSOs and COs and POS on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

Table 3. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 3.-01	2	2	3	2	2	2	1	2	1	2
CO 3.-02	2	2	2	1	2	1	2	2	1	2
CO 3.-03	2	3	3	2	3	2	3	2	2	2
CO 3.-04	3	3	3	1	3	1	3	2	2	2
CO 3.-05	3	3	3	2	3	1	3	2	2	2
CO 3.-06	2	2	2	2	2	2	2	2	1	2
CO 3.-07	3	3	3	2	3	2	3	2	2	2
Total	17	18	19	12	18	11	17	14	11	14
Average	**2.42**	**2.57**	**2.71**	**1.71**	**2.57**	**1.57**	**2.42**	**2.0**	**1.57**	**2.0**

Table 4. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO 4.-01	3	3	3	3	3	3	3	3	2	3
CO 4.-02	3	3	3	3	3	3	3	3	2	3
CO 4.-03	3	3	3	3	3	3	3	3	2	3
Total	9	9	9	9	9	9	9	9	6	9
Average	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**2.0**	**3.0**

Table 5. CO – PO Matrix for **Bachelor of Science**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO5.-01	3	2	3	1	1	3	2	3	2	3
CO5.-02	3	2	2	2	1	3	3	3	1	3
CO5.-03	3	2	2	1	1	3	2	3	1	3
CO5.-04	3	2	3	1	1	3	3	3	2	3
CO5.-05	3	2	2	1	1	3	2	3	2	3
CO5.-06	3	2	2	2	1	3	3	3	1	3
CO5.-07	3	2	2	1	1	3	3	3	2	3
CO5.-08	3	2	3	1	1	3	2	3	1	3
CO5.-09	3	2	3	2	1	3	2	3	2	3
CO5.-10	3	2	2	2	1	3	3	3	2	3
CO5.-11	3	2	2	1	1	3	2	3	1	3
Total	33	22	26	15	11	33	27	33	17	33
Average	**3.0**	**2.0**	**2.36**	**1.36**	**1.0**	**3.0**	**2.45**	**3.0**	**1.54**	**3.0**

বাংলা বিভাগ

এম.ইউ.সি. উইমেন্স কলেজ, বর্ধমান
তৃতীয় বর্ষ বাংলা সাম্মানিক

কোর্স আউটকাম

পঞ্চম পত্র : উপন্যাস (চন্দ্রশেখর, চোখের বালি, গৃহদাহ ও গণদেবতা)

১. উপন্যাস পাঠের মাধ্যমে সৃজনশীল রচনা পাঠের অভ্যাস তৈরি করা এবং সৃজনশীল রচনার অভ্যাস তৈরি করা।

২. মনস্তত্ত্বমূলক উপন্যাস সম্পর্কে ধারণা তৈরি করা এবং মানব মনের জটিলতা বিশ্লেষণের ক্ষমতা তৈরি করা।

৩. বাংলার সমাজ ও সংস্কৃতিতে পুরুষতন্ত্রের কাঠামো ও নারীর অবস্থান বুঝে নেওয়া।

৪. নৈতিকবোধ সম্পর্কে সচেতন হওয়া।

৫. উপন্যাস পাঠের মাধ্যমে ছাত্রীদের সামাজিকতা , বুদ্ধিবৃত্তি , মননশীল , চিন্তাশক্তি ও যুক্তিশীলতার উন্মেষ ঘটানো।

Table I – co-po Martin for Bengali Hons. Course paper - V

	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010
CO-01	3	3	2	2	2	2	3	1	3	3
CO-02	3	3	3	2	1	2	2	2	2	3
CO-03	1	2	1	1	3	2	2	2	1	3
CO-04	0	0	1	1	0	1	0	0	0	3
CO-05	2	2	3	2	2	2	2	1	2	1
Total	9	10	10	8	8	8	9	6	8	13
Average	1.8	2	2	1.6	1.6	1.6	1.8	1.2	1.6	2.6

ষষ্ঠপত্র :- নাটক (নীলদর্পন,প্রফুল্ল, শারদোৎসব ও দেবীগর্জন)

১. উনিশ ও বিশশতকের নাট্যকারদের জীবন দৃষ্টি, সামাজিক ও সাংস্কৃতিক প্রেক্ষাপট ও সমস্যা সম্পর্কে বিস্তারিত জ্ঞান লাভ করা।

২. গণনাট্যের উদ্ভব ও এই আন্দোলনের প্রেক্ষিতে বিজন ভট্টাচার্যের নাটকের মূল্যায়ন করা।

৩. Performing Art বা প্রায়োগিক শিল্প সম্পর্কে ধারণা লাভ।

৪. সমাজ সচেতনতা এবং বিশ্লেষনী শক্তির বিকাশ সাধন করা।

৫. ঔপনিবেশিক শাসন - শোষনের প্রেক্ষিত এবং তার বিরুদ্ধে প্রতিবাদী আন্দোলনের স্বরূপ বিশ্লেষণ।

Table II – co-po Martin for Bengali Hons. Course paper -VI

	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010
CO-01	2	3	3	2	2	2	1	2	2	2
CO-02	2	2	2	0	2	2	2	1	1	2
CO-03	1	2	1	0	1	2	1	1	1	2
CO-04	1	2	2	3	2	1	1	1	1	2
CO-05	2	2	2	2	1	1	2	2	1	1
Total	8	11	10	7	8	8	7	7	6	9
Average	1.6	2.2	2	1.4	1.6	1.6	1.4	1.4	1.2	1.8

সপ্তম পত্র :- (গল্প গুচ্ছ, একালের গল্প, বাংলা প্রবন্ধ ও কাব্য জিজ্ঞাসা)

১. ছাত্রীদের নান্দনিক চাহিদার চরিতার্থতা এবং সৃজনশীলতা ও কল্পনা শক্তির বিকাশ সাধন করা।

২. বর্তমান সময়ের সংকটকে বিশ্লেষণের মাধ্যমে বাঁচার সঠিক পথের সন্ধান করা।

৩. ভারতীয় সাহিত্যতত্ত্ব ও সাহিত্য বিশ্লেষণের ধারা সম্পর্কে জ্ঞান লাভ ।

৪. বিষয়ের গভীরতা উপলব্ধির দক্ষতাবৃদ্ধি এবং সৃষ্টিধর্মী রচনার সমালোচনায় পারদর্শী হওয়া। সাহিত্য সমালোচক হওয়ার প্রাথমিক পাঠগ্রহণ।

৫. লোকশিক্ষা , ভাষা, জাতি ও সংস্কৃতি সম্পর্কে জ্ঞানলাভ এবং তত্ত্ব ও তথ্য দিয়ে ঘটনার বিচার-বিশ্লেষণের দক্ষতা অর্জন।

Table III – co-po Martin for Bengali Hons. Course paper - VII

	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010
CO-01	1	2	2	2	1	2	1	2	1	2
CO-02	3	2	2	2	1	2	2	2	1	2
CO-03	2	2	1	2	1	3	3	2	1	3
CO-04	3	3	2	3	2	3	2	2	0	2
CO-05	2	2	3	3	2	3	3	2	1	2
Total	11	11	10	12	8	13	11	10	4	11
Average	2.2	2.2	2	2.4	1.6	2.6	2.2	2	0.8	2.2

অষ্টম পত্র :- (সংস্কৃত ও ইংরেজি সাহিত্যের ইতিহাস ও সাহিত্যের রূপরীতি)

১. অতীতের মানবজীবন-রাজনীতি-ধর্ম-অর্থনীতি সম্পর্কে ধারণালাভ।

২. প্রাচ্য ও পাশ্চাত্যের সাহিত্যের ইতিহাস সম্পর্কে জ্ঞানলাভ করে মাতৃভাষায় আরো
   দক্ষতা অর্জন করা।

৩. ইউরোপ ও এশিয়ার মানবজীবন, সংস্কৃতি, ঐতিহ্য ধর্ম প্রভৃতি সম্পর্কে ধারণা তৈরি
   করা।

৪. তত্ত্বকাঠামোয় বিশ্লেষণের দক্ষতা অর্জন এবং প্রাচ্য ও পাশ্চাত্যের সাহিত্যের
   তুলনামূলক আলোচনা।

৫. জীবন ও জগৎ সম্পর্কে বিস্তারিত ও সুবৃহৎ পরিসরে ভাবনার অভ্যাস তৈরি।

Table IV – co-po Martin for Bengali Hons. Course paper - VIII

	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010
CO-01	3	2	2	3	2	2	2	2	2	2
CO-02	3	2	2	1	1	2	1	1	1	2
CO-03	2	2	1	2	1	3	3	2	1	3
CO-04	3	2	2	3	3	2	2	2	2	3
CO-05	2	2	2	3	2	3	2	2	0	0
Total	13	10	9	12	10	12	10	9	6	10
Average	2.6	2	1.8	2.4	2	2.4	2	1.8	1.2	2

পি.এস.ও

১. শিক্ষকতা

২. গবেষণা

৩. সাংবাদিকতা

৪. প্রশাসনিক কাজ

৫. বেতার দূরদর্শনে ঘোষক/ঘোষিকার কাজ বা প্রায়গিক শিল্পে (Performing Art) দক্ষতা অর্জন।

Table V – co-pso (Bengali Hons)

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO-01 (paper-V)	3	2	1	1	1
CO-02 (paper-VI)	3	2	1	1	3
CO-03 (paper-VII)	3	1	1	1	1
CO-04 (paper-VIII)	3	3	2	1	1
TOTAL	12	8	5	4	6
AVERAGE	3	2	1.25	1	1.50