COURSE OUTCOME

Arya Vidyapeeth College was conferred autonomous status by the UGC in May, 2022.TheCollege continued to follow the programme wise curriculum designed by Gauhati University in the academic session 2022-23. The learning outcomes of the programmes and courses are clearly specified by the University and it is published in the official website of the University. The same can be downloaded by the affiliated colleges.

The College has its own mechanism to communicate the learning outcomes of the curriculum to the teachers and the students. The following measures are adopted:

- Hard copy of the syllabi and learning outcomes are available in all the departments for ready reference to the teachers and students.
- A web link to the Gauhati University Curriculum and learning outcomes of Programmes and Courses (both UG &PG) is also provided in the College website for reference.
- The departments also arrange Orientation Programmes/Tutorial Meetings to make the students aware of the curriculum and the learning outcomes.

Name of the Department: ASSAMESE

Course Outcome (B.A/B.Sc/B.Com CBCS Honours)

Semester	Paper Name	Paper Code	Course Outcome
1st	**History of Assamese Literature (Charyapada to Shankarian Era)**	**ASM-HC-1016**	After completion of this paper the students will be able to know about Assamese Literature from ancient period to medieval period in chronological order. Besides that the students will Know the classification and background of Assamese Literature, characteristics, brief introduction to the writer and their literature of that period
	History of Assamese literature (Post Shankardeva period to Orunodoi period)	**ASM-HC-1026**	The aim of the course is to introduce Assamese Literature from Post Shankardeva period to Orunodoi period. Intends to give the historical and literary background, the writers and their literary contribution of that period. Besides this students will know about descriptive analysis of the contribution of Christian and non-christian writer to the Assamese literature, language, culture.
2nd	**Introduction of Linguistics**	**ASM-HC-2016**	This course is designed to introduce to the definition of Linguistics, relation of Philology and Grammar with Linguistics, By studying this course the students will learn about the Branches of Linguistics ie. Descriptive, Historical, Comparative Contrastive & sociolinguistics etc. Moreover students will know the levels of Linguistics ie. Phonology, Morphology, Semantics& Syntax etc. Intends to give an outline to the history language study.

	Litarary Criticism.	**ASM-HC-2026**	This course will help students to enhance their interpretative skills, develop critical thinking, understanding of historical &cultural context. This paper aims at introducing the history & basic concept of eastern and western criticism
3rd	**Asomiya Sahitya Prabesh**	**ASM-HC-3016**	In this paper some creative & criticism writings are included which will draw interest in reading literature among the students.
	Assamese Poetry	**ASM-HC-3026**	This paper will introduce the different types of Assamese poetry by selecting text from different era of Assamese literary history
	Culture of Assam	**ASM-HC-3036**	By studying this paper Students will get knowledge of folk customs, religious tradition, festivals, folk performing art, traditional sports, sculpture & art painting of Assamese culture
4th	**Comparative Indian Literature**	**ASM-HC-4016**	By studying this course students will know introduction & background of comparative literature .students will be introduced to the Indian literature of modern era with some selected short story & novel of different writer of Bangla and Hindi literature
	Assimilation of Assamese Language: Aryan and other than Aryan	**ASM-HC-4026**	Students will be able to determine the relation of Assamese language with Sanskrit, Prakrit, Oria, Bangla etc. languages through this paper. Likewise they will also have the knowledge on impact and elements of Tai-Ahom, Bodo, Rabha, Khasi etc. languages upon Assamese language.
4th	**ASSAMESE PROSE**	**ASM-HC-4036**	In order to incorporate a clear idea in the

	(From the Beginning to 18th Century		minds of students regarding Assamese prose an inclusion has been made here right from the prose composed by Srimanta Sankardeva to the prose of Buranji.
5th	**Assamese Drama and Performing style**	**ASM-HC-5016**	From this paper students will know an outline of Assamese Dramatic History with the special reference from Shankardeva to Modern Assamese Drama. Besides that students will able to know the performing style of Assamese Drama from early period to the 18th century.
	Assamese Grammar	**ASM-HC-5026**	By studying this course students will know the background, history and concept of Assamese Grammar, specially students will be able to know about phonemes, Mophemes, Words, Sentence Vowels, Consonants, Number, Gender, etc of Assamese Language. Besides this they will know the classification of Assamese sentence, structure of Assamese sentence etc.
	Study of Assamese folk literature	**ASM-HE-5016**	By studying this course students will learn about various forms and contents of Assamese Folk literature. Intends to give an outline of various elements of folk literature
	Sankardev	**ASM - HE – 5036**	After completion of this course students will know about the revolutionary works of Srimanta Sankardeva's Borgeet, Keertan Ghosa, Poetry and dramas.)
6th	**Assamese short story and novel**	**ASM-HC-6016**	This course will give a brief concept of Assamese creative prose especially short story and novel. Students will learn origin and development of Assamese short story

			and novel with some selected texts of different author.
	History of Assamese script	**ASM - HC–6026**	By studying this course students will learn the history of Assamese script along with that they will have glimpse of inscriptions and copper plate inscriptions of Assam
	Lakshminath Bezbaruah	**ASM-HE-6016**	After completion of this course the students will know about the contribution of Lakshminath Bezbaruah –A distinguished author of modern Assamese literature
	Project	**ASM-HE-6056**	

Course outcome(B.A/B.Sc/B.Com CBCS Generic/Regular)

Sem	Paper Name	Paper Code	Course Outcome
1st	**History of Assamese Language(Asomiya Bhashar Itihas)**	**ASM-HG/RC-1016**	After completion of this paper the students will be able to know about evolution of assamese language.
2nd	**History of Assamese Literature (From the beginning to 18th century)**	**ASM-HG/RC-2016**	After completion of this paper the students will be able to know about Assamese Literature from ancient period to medieval period in chronological order.
3rd	**Asomiya Natak aru Manchakala**	**ASM-HG/RC-3016**	After completion of this paper the students will be able to know about Assamese folk drama, proscenium stage, alternative stage and accessories of stage and acting.
4th	**Adhunik Asamiya Giti Sahitya**	**ASM-HG/RC-4016**	After completion of this paper the students will be able to know about Assamese eternal songs and its introduction and also the set up the intimacy with students of those songs .
5th	**Sankardev**	**ASM- RE/RG-5016**	After completion of this course students will know about the revolutionary works of Srimanta Sankardeva's Borgeet, Keertan Ghosa, Poetry and dramas.)
6th	**Verse and figures of speech (Chanda aru Alankar)**	**ASM -RE/RG-6016**	After completion of this paper the students will be able to know about verse and figures of speech.

Course outcome [Modern Indian Language(MIL)

Sem	Paper Name	Paper Code	Course Outcome
3rd	**Old Assamese Literature (Prachin Asomiya Sahitya)**	**ASM-CC-3016**	After completion of this paper the students will be able to gather knowledge on old assamese song, verse, poetry, prose, drama etc.
4th	**Modern Assamese Literature (Adhunik Asomiya Sahitya)**	**ASM-CC-4016**	After completion of this paper students will be familiar with selective modern assamese poetry, short story, article, drama etc.

Course outcome (SKILL ENHANCEMENT COURSE)

Sem	Paper Name	Paper Code	Course Outcome
3rd	**Functional Assamese (Byawoharik Asomiya)**	**ASM- SE- 3014**	After completion of this paper the students will be able to know about primary and applied knowledge about various professions.
4th	**Creative Literature (Srijanimulok Sahitya)**	**ASM-SE-4014**	After completion of this paper the students will be able to know about poetry and story writing skill.
5th	**Art of Recitation (Abritti Kala)**	**ASM-SE-5014**	This course will equip students with theoretical and practical knowledge for recitation.
6th	**Assamese Orthography (Asamiya Akhar-Jotani)**	**ASM-SE-6014**	This course covers the rules and skills of Assamese orthography. It will enhance students' proficiency in using the language at a professional level.

Course outcome (ABILITY ENHANCEMENT COMPULSORY COURSE)

Sem	Paper Name	Paper Code	Course Outcome
1st	**Communicative Assamese (Jogajogmulak Asamiya)**	**ASM-AE-1014**	This course will enable students to acquire theoretical and practical knowledge for enhancing their proficiency in using Assamese language as a means of communication both in speaking and writing.

Name of the Department: BENGALI

Course Outcome (B.A/B.Sc/B.Com CBCS Honours)

Seme ster	Paper Name	Paper Code	Course Outcome
1st	প্রাগাধুনিক সাহিত্য পাঠ ১	BEN-HC-1016	বাংলা সাহিত্যের ক্রমবিকাশের পরিচয়লাভসাহিত্যেরশিক্ষার্থীদেরকাছেঅত্যন্তগুরুত্বপূর্ণ। সেইক্রমবিকাশেরপথেথেআদিওমধ্যযুগেরসাহিত্যধারাসম্পর্কেজ্ঞানঅর্জনেরলক্ষ্যপূরণেএইপাঠক্রমতৈরিক রাহয়েছে।শিক্ষার্থীরাএখানেচর্যাপদ, শ্রীকৃষ্ণকীর্তনওবৈষ্ণবপদাবলিরপ্রাক্চৈতন্যযুগের পদরচনাসঙ্গেপরিচিতহবে।
	প্রাগাধুনিকসাহি ত্যপাঠ২	BEN-HC-1026	বাংলাসাহিত্যেরক্রমবিকাশেরপরিচয়লাভসাহিত্যেরশিক্ষার্থীদেরকাছেঅত্যন্তগুরুত্বপূর্ণ।এইপরিচয়েরদ্বি তীয়পর্বেচৈতন্যোত্তরবৈষ্ণবপদাবলি, অন্নদামঙ্গলকাব্যআরশাক্তপদেরবিষয়েজানবে।বাঙালিরসমাজ, ধর্মওসংস্কৃতিরবিবর্তনেরগতিরেখাঅনুধাবনকরতেপারবেএইপাঠক্রমসম্পূর্ণকরারপর।
2nd	বাংলাভাষাপরিচয়	BEN-HC-2016	সাহিত্যেরশিক্ষার্থীহিসাবেবাংলাভাষাতত্ত্ব, ধ্বনিতত্ত্বওশব্দতত্ত্বসম্পর্কেধারণাথাকাজরুরি।এইপাঠক্রমসেইলক্ষ্যপূরণেরসমর্থ।
	বাঙালিরসামাজি কওসাংস্কৃতিকপ রিচয়	BEN-HC-2026	বাংলাভাষারউদ্ভবেরকালথেকেঔপনিবেশিককালপর্যন্তজাতিরসামাজিকওসাংস্কৃতিকবিকাশেরগতিরেখার সঙ্গেশিক্ষার্থীদেরপরিচয়ঘটানোইএইপাঠক্রমেরউদ্দেশ্য।বাঙালিরইতিহাস, জনজীবনওসংস্কৃতিগড়েওঠারপ্রবণতাগুলোসম্পর্কেএখানেজানাযাবে।
3rd	লোকসংস্কৃতিও লোকসাহিত্য	BEN-HC-3016	বাঙালিওতারসংস্কৃতিকেজানতেগেলেলোকসংস্কৃতিওলোকসাহিত্যেরপাঠগ্রহণজরুরি।বাংলারসমৃদ্ধলো কঐতিহ্যেরথেকেনির্বাচিতকয়েকটিপ্রসঙ্গএখানেপড়ুয়াদেরচর্চারজন্যরাখাহয়েছে।বাংলারলোকসংস্কৃতিস ম্পর্কেএইপাঠক্রমশিক্ষার্থীদেরমনেআগ্রহতৈরিকরবেওক্ষেত্রভিত্তিকগবেষণায়উৎসাহিতকরবে
	ছন্দ ,অলংকারওপ্রাচ্য কাব্যতত্ত্ব	BEN-HC-3026	সাহিত্যেরশিক্ষার্থীদেরকবিতারছন্দ, অলংকারএবংভারতীয়কাব্যতত্ত্বসম্বন্ধেজ্ঞানথাকাআবশ্যক।এইপাঠক্রমসেইপ্রয়োজনীয়তাস্বীকারকরে।এ ইপাঠক্রমতাদেরকাব্যবোধওরুচিকেগড়েতুলবে।
	বাংলাসাহিত্যেরই তিহাস (প্রাচীনওমধ্যযুগ)	BEN-HC-3036	বাংলাভাষাওসাহিত্যেরউদ্ভবেরকালথেকেবিভিন্নধারারসঙ্গেশিক্ষার্থীদেরপরিচয়ঘটবেএইপাঠক্রমে।সাহি ত্যেররসআস্বাদনেরপরএরপ্রধানপ্রধানধারাগুলোসম্বন্ধেএকটিস্পষ্টধারণাদেবেএইপাঠক্রম।
4th	বাংলাসাহিত্যেরই তিহাস (আধুনিকযুগ)	BEN-HC-4016	ঔপনিবেশিকআধুনিকতারসংস্পর্শেএসেআমাদেরচিন্তা-চেতনাওজীবনমানসাহিত্যেযেআধুনিকতারসঞ্চারকরেছিল, তারসঙ্গেশিক্ষার্থীদেরএখানেপরিচয়ঘটবে।মহাকাব্য, গীতিকাব্য, নকশাজাতীয়রচনাওযুক্তি-নিষ্ঠপ্রবন্ধসাহিত্যেকীভাবেএইআধুনিকচিন্তারপ্রতিফলনঘটেছে, তাশিক্ষার্থীরাআয়ত্তকরতেপারবে।
	আধুনিকবাংলাসা হিত্য : সূচনাপর্ব	BEN-HC-4026	ঔপনিবেশিকআধুনিকতারসংস্পর্শেএসেআমাদেরচিন্তা-চেতনাওজীবনমানসাহিত্যেযেআধুনিকতারসঞ্চারকরেছিল, তারসঙ্গেশিক্ষার্থীদেরএখানেপরিচয়ঘটবে।মহাকাব্য, গীতিকাব্য, নকশাজাতীয়রচনাওযুক্তি-নিষ্ঠপ্রবন্ধসাহিত্যেকীভাবেএইআধুনিকচিন্তারপ্রতিফলনঘটেছে, তাশিক্ষার্থীরাআয়ত্তকরতেপারবে।
	রবীন্দ্রসাহিত্য	BEN-HC-4036	বাংলাসাহিত্যেরশিক্ষার্থীদেরকাছেরবীন্দ্রনাথঠাকুরপ্রবাদপ্রতিমব্যক্তিত্ব।এশিয়ামহাদেশেসাহিত্যেরপ্রথম নোবেলপ্রাপকএইকৃতিব্যক্তিত্বেরসৃষ্টিরাজিকেসংক্ষেপেপরিক্রমাকরেনেবারসুযোগআছেএইপাঠক্রমে।মূ লতবাংলাছোটগল্পেরস্রষ্টা, অসংখ্যকবিতারর চয়িতাওউপন্যাসেররূপকাররবীন্দ্রনাথএখানেশিক্ষার্থীদেরকাছেপ্রতিভাতহবেন।

5th	আধুনিকবাংলাসাহিত্য : প্রাক্‌স্বাধীনতাপর্ব	BEN-HC-5016	আধুনিকবাংলাগীতিকবিতা, সূচনাওবিকাশপর্বেরবাংলাপ্রবন্ধএবংউপন্যাসেরসম্রাটবঙ্কিমচন্দ্রেরহাতেসৃষ্টউপন্যাসপড়ারমাধ্যমেশিক্ষার্থীরাএখানেস্বাধীনতাপূর্বকালেরবাংলাসাহিত্যসম্পর্কেসম্যকজ্ঞানঅর্জনকরবে।
	আধুনিকবাংলাসাহিত্য : স্বাধীনোত্তরপর্ব	BEN-HC-5026	আধুনিকসময়েরজটিলতা, ব্যষ্টিওসমষ্টিরদ্বন্দ্ব, প্রবীণওনবীনেরসংঘাত, নরনারীরপ্রেম-সংকটইত্যাদিসম্পর্কেজ্ঞানঅর্জনেরসুযোগরয়েছেবর্তমানপাঠক্রমে। আধুনিকজীবনযাত্রারনানাপ্রবণতাসম্পর্কেশিক্ষার্থীদেরধারণাগড়েউঠবে।
	শিশুওকিশোরসাহিত্য	BEN-HE-5016	বাংলাশিশু-কিশোরসাহিত্যেরসুগভীরঐতিহ্যরয়েছে। বর্তমানপাঠক্রমেএইবিশেষসাহিত্যধারারবৈশিষ্ট্যজানারসুযোগরয়েছে। কয়েকটিনির্বাচিতপাঠঅবলম্বনকরেশিক্ষার্থীরাবাংলাশিশুসাহিত্যেরআঙ্গিকগুলোসম্পর্কেজ্ঞানঅর্জনকরবে। কল্পবিজ্ঞানএবংফ্যান্টাসিজাতীয়রচনারসঙ্গেওতারাপরিচিতহবে।
	জীবনীসাহিত্যও স্মৃতিকথা	BEN-HE-5026	বাংলাসাহিত্যেরজনপ্রিয়ধারাগুলোরমধ্যেঅন্যতমহলজীবনী, আত্মজীবনীওস্মৃতিকথা। বর্তমানপাঠক্রমেশিক্ষার্থীরাএইধারাসম্পর্কেএকটিসুনির্দিষ্টধারণাগড়েতুলতেপারবে। ব্যক্তিবিবেকানন্দওরবীন্দ্রনাথঠাকুরেরব্যক্তিজীবনেরএকটিবিশেষপর্বকেজানারসঙ্গেসঙ্গেউপেন্দ্রনাথর চিতস্মৃতিচিত্রেভারতেরস্বাধীনতাসংগ্রামেরএকবিশেষঅধ্যায়সম্পর্কেওজ্ঞানলাভকরবে।
6th	সাহিত্যেরসংজ্ঞা ওস্বরূপ	BEN-HC-6016	সাহিত্যেরনানাসংরূপের (Genre) আঙ্গিকওপ্রকাশভঙ্গিসম্পর্কেজ্ঞানঅর্জনেরপাশাপাশিশিক্ষার্থীরাসমালোচনাসাহিত্যেরবিবর্তনসম্পর্কেঅবহিতহতেপারবে। শিক্ষার্থীরাসাহিত্যেরআঙ্গিকসম্বন্ধেধারণাগঠনকরেসমালোচকহিসাবেনিজেদেরগড়েতুলতেসক্ষমহবে।
	পাশ্চাত্যসাহিত্য তত্ত্বওসমালোচনা	BEN-HC-6026	আধুনিকসাহিত্যসমালোচনাওরচনাবোধঅসম্পূর্ণথাকেপাশ্চাত্যসমালোচনারীতিসম্পর্কেউপযুক্তজ্ঞানন থাকলেসেইলক্ষ্যপূরণেএইপাঠক্রমেপাশ্চাত্যসমালোচনারীতিওধারাসম্বন্ধেপ্রাথমিকজ্ঞানঅর্জনেসক্ষমহ বেশিক্ষার্থীরা।
	উত্তরপূর্বেরবাংলা সাহিত্য	BEN-HE-6016	উত্তরপূর্বাপূর্বোত্তরেরবাংলাসাহিত্যভারতেরউত্তরপূর্বেবাঙালিদেরবসবাসেরএকটিপ্রাচীনইতিহাসরয়েছে। পরিস্থিতিরসঙ্গেখাপখাইয়ে, এতদঞ্চলেরপরিবেশতথামানুষজন, সংস্কৃত, রাজনীতিওভৌগোলিকঅর্থনীতিরএকটিবিশেষপরিষদবাংলাসাহিত্যেগড়েদিতেখুবইসাহিত্যিকওনাট্যকার এরাসক্ষমহয়েছেন। শিক্ষার্থীরানির্বাচিতপাঠঅবলম্বনেতাকেজানারসঙ্গেসঙ্গেএইঅঞ্চলেরসাহিত্যনিয়েগবে ষণারঅবকাশকেসমৃদ্ধকরতেপারবে।
	প্রতিবেশীসাহিত্য অথবা গবেষণামূলকসন্দ ভলিখন	BEN-HE-6026 Or BEN-HE-6036	ভারতীয়সাহিত্যচর্চাসম্পর্কেজ্ঞানঅর্জনএইপাঠক্রমেরউদ্দেশ্য। বাংলাসাহিত্যকেজানারপাশাপাশিসমকালী নভারতীয়সাহিত্যবিশেষকরেঅসমীয়া, ওড়িয়াএবংহিন্দিসাহিত্যেরনির্বাচিতপাঠেএসম্পর্কেপ্রাথমিকধারণাগড়েউঠবেওশিক্ষার্থীদেরতুলনামূলকঅ ধ্যয়নেআগ্রহতৈরিহবে। / শিক্ষার্থীদেরসাহিত্যিকগবেষণাসম্পর্কেআগ্রহগড়েতোলারপাশাপাশিবিভিন্নবিষয়ভাবনাকেসুষ্ঠুওনির্দিষ্টনিয় মমেনেবিশ্লেষণকরতেসাহায্যকরবে। আধুনিকবাঙালিরচিন্তাচেতনারবাহকহিসাবেবাংলাসাময়িকপত্রেরভূ মিকাসম্বন্ধেগভীরঅধ্যয়নেরপাশাপাশিকথাসাহিত্যেরপ্রতিকপ্রকৃতিনিয়েনিজস্বমতামতগড়েতুলতেসক্ষম হবে।

Course Outcome (B.A/B.Sc/B.Com CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	মধ্যযুগেরসাহিত্য পাঠ	BEN-HG-1016/BEN-RC-1016	বাংলাসাহিত্যেরক্রমবিকাশেরপরিচয়লাভসাহিত্যেরশিক্ষার্থীদেরকাছেঅত্যন্তগুরুত্বপূর্ণ।সেইক্রমবিকাশেরপথেআদিওমধ্যযুগেরসাহিত্যধারাসম্পর্কেজ্ঞানঅর্জনেরলক্ষ্যপূরণেএইপাঠক্রমতৈরিকরাহয়েছে।
2nd	লোকসাহিত্যপাঠ	BEN-HG-2016/BEN-RC-2016	বাঙালিওতারসংস্কৃতিকেজানতেগেলেলোকসংস্কৃতিওলোকসাহিত্যেরপাঠগ্রহণজরুরি।বাংলারসমৃদ্ধলোকঐতিহ্যেরথেকেনির্বাচিতকয়েকটিপ্রসঙ্গএখানেপড়ুয়াদেরচর্চারজন্যরাখাহয়েছে।বাংলারলোকসংস্কৃতিসম্পর্কেএইপাঠক্রমশিক্ষার্থীদেরমনেআগ্রহতৈরিকরবেওক্ষেত্রভিত্তিকগবেষণায়উৎসাহিতকরবে
3rd	উনিশশতকেরসাহিত্যপাঠ	BEN-HG-3016/BEN-RC-3016	আধুনিকবাংলাগীতিকবিতা, সূচনাওবিকাশপর্বেরবাংলাপ্রবন্ধএবংউপন্যাসেরসম্রাটবঙ্কিমচন্দ্রেরহাতেসৃষ্টউপন্যাসপড়ারমাধ্যমেশিক্ষার্থীরাএখানেস্বাধীনতাপূর্বকালেরবাংলাসাহিত্যসম্পর্কেসম্যকজ্ঞানঅর্জনকরবে।
4th	কুড়িশতকেরসাহিত্যপাঠ	BEN-HG-4016/BEN-RC-4016	আধুনিকসময়েরজটিলতা, ব্যষ্টিওসমষ্টিরদ্বন্দ্ব, প্রাচীনওনবীনেরসংঘাত, নরনারীরপ্রেমসংকটইত্যাদিসম্পর্কেজ্ঞানঅর্জনেরসুযোগরয়েছেবর্তমানপাঠক্রমে।আধুনিকজীবনযাত্রারনানাপ্রবণতাসম্পর্কেশিক্ষার্থীদেরধারণাগড়েউঠবে।
5th	উনিশওকুড়িশতকেরবাংলাসাহিত্য-১	BEN-RG-5016	ঔপনিবেশিকআধুনিকতারসংস্পর্শেএসেআমাদেরচিন্তা- চেতনাও জীবন মানসাহিত্যেযেআধুনিকতারসঞ্চারকরেছিল, তারসঙ্গেশিক্ষার্থীদেরএখানেপরিচয়ঘটবে।মহাকাব্য, গীতিকাব্য, নকশাজাতীয়রচনাওযুক্তি-নিষ্ঠপ্রবন্ধসাহিত্যেকীভাবেএইআধুনিকচিন্তারপ্রতিফলনঘটেছে, তাশিক্ষার্থীরাআয়ত্তকরতেপারবে।
6th	উনিশওকুড়িশতকেরবাংলাসাহিত্য-২	BEN-RG-6016	ঔপনিবেশিকআধুনিকতারসংস্পর্শেএসেআমাদেরচিন্তাচেতনাওজীবনমানসাহিত্যেযেআধুনিকতারসঞ্চারকরেছিল, তারসঙ্গেশিক্ষার্থীদেরএখানেপরিচয়ঘটবে।মহাকাব্য, গীতিকাব্য, নকশাজাতীয়রচনাওযুক্তি-নিষ্ঠপ্রবন্ধসাহিত্যেকীভাবেএইআধুনিকচিন্তারপ্রতিফলনঘটেছে, তাশিক্ষার্থীরাআয়ত্তকরতেপারবে।

Course Outcome (B.A/B.Sc/B.Com CBCS Honours/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	ব্যবহারিকবাংলা	BEN-AE-1014	বাংলাভাষাচর্চারক্ষেত্রেঅত্যন্তগুরুত্বপূর্ণবিষয়ভাষাগঠনপ্রক্রিয়াসম্বন্ধেসমর্থকজ্ঞান।এইপাঠক্রমশিক্ষার্থীদেরসেইসুযোগএনেদেবে।শিক্ষার্থীরাভাষারজ্ঞানঅর্জনেরসঙ্গেতাকেবিভিন্নকর্মক্ষেত্রেযথোপযুক্তভাবেপ্রয়োগকরতেসক্ষমহবে।পড়ারসঙ্গেসঙ্গেনির্ভুলভাবেলেখারঅভ্যাসওগড়েতুলতেপারবে।
3rd	পাণ্ডুলিপিপ্রস্তুতি	BEN-SE-3014	সাহিত্যওপ্রযুক্তিরমেলবন্ধনঘটিয়েতারক্রমবিস্তারেকর্মসংস্থানেরসম্ভাবনাবৃদ্ধিকরারলক্ষ্যেএইপাঠক্রমেরপরিকল্পনাকরাহয়েছে।সাহিত্যচর্চারপাশাপাশিমুদ্রণওপ্রকাশনাসংক্রান্তধারণাগড়েউঠবেশিক্ষার্থীদের।লেখারভুলসংশোধনপ্রক্রিয়াসম্বন্ধেজেনেবিভিন্নপ্রকাশনসংস্থায়দক্ষকর্মীহিসেবেগড়েতোলারসুযোগআছেএইপাঠক্রমে।

4th	প্রুফসংশোধন	BEN-SE-4014	সাহিত্যওপ্রযুক্তিরমেলবন্ধনঘটিয়েতারক্রমবিস্তারেকর্মসংস্থানেরসম্ভাবনাবৃদ্ধিকরারলক্ষ্যেএইপাঠক্রমের পরিকল্পনাকরাহয়েছে।সাহিত্যচর্চারপাশাপাশিমুদ্রণওপ্রকাশনাসংক্রান্তধারণাগড়েউঠবেশিক্ষার্থীদের। লেখারভুলসংশোধনপ্রক্রিয়াসম্বন্ধেজেনেবিভিন্নপ্রকাশনসংস্থায়দক্ষকর্মীহিসেবেগড়েতোলারসুযোগআ ছেএইপাঠক্রমে।
5th	চিত্রনাট্যরচনাওবাংলাসাহিত্য	BEN-SE-5014	এইপাঠক্রমটিকর্মসংস্থানেরদিকেলক্ষ্যরেখেতৈরিকরাহয়েছে।বাংলাসাহিত্যেরসঙ্গেনাটক, চলচ্চিত্র, টি.ভিধারাবাহিকইত্যাদিরগভীরযোগাযোগরয়েছে।শিক্ষার্থীরাএইপাঠক্রমসম্পূর্ণকরেরএইক্ষেত্রেনিজেদেরদক্ষতাবৃদ্ধিকরতেপারবেএবংপেশাহিসেবেএকেগ্রহণকরতেপারবে।
6th	অনুবাদচর্চা	BEN-SE-6014	এইপাঠক্রমেরয়েছেকর্মসংস্থানবৃদ্ধিরসুযোগ।তুলনামূলকঅধ্যয়নবাগবেষণা, বিভিন্নগুরুত্বপূর্ণগ্রন্থেরঅনুবাদ, সরকারিওবেসরকারিসংস্থায়অনুবাদকেরকাজকরারজন্যপ্রাথমিকজ্ঞানলাভেরসুযোগএখানথেকেশিক্ষার্থীরানিতেপারবে।অনুবাদেরকর্মশালাগুলোশিক্ষার্থীদেরঅভিজ্ঞকরেতুলবে।

Course Outcome (B.A/B.Sc/B.Com CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
3rd	উনিশওকুড়িশতকেরবাংলাসাহিত্যও-১	BEN -CC-3016	এইপাঠক্রমটিছাত্রছাত্রীদেরসঙ্গেউনিশওকুড়িশতকেরবাংলাসাহিত্যেরপরিচয়করিয়েদেবারউদ্দেশ্যেপরিকল্পনাকরাহয়েছে।এইদুটিশতকবঙ্গেরইতিহাসেখুবইগুরুত্বপূর্ণএকটিসময়।এইসময়েইবঙ্গদেশেনবজাগরণতারপ্রভাববিস্তারকরেছিল।কাজেইএইসময়েরসাহিত্যপাঠেরমাধ্যমেছাত্রছাত্রীরাযুক্তিবাদীওমানবতাবাদীচিন্তাধারায়ঋদ্ধহয়েউঠবে।
4th	উনিশওকুড়িশতকেরবাংলাসাহিত্য-২	BEN-CC-4016	এইপাঠক্রমটিরঅন্তর্ভুক্তগল্প, নাটকআদিরমাধ্যমেছাত্রছাত্রীরাসমাজেরনানাদিকগুলোসম্পর্কেসচেতনহবে।এইপাঠক্রমটিতাদেরমানবমনস্তত্ত্বসম্পর্কেওসজাগকরবে।এছাড়াওবর্তমানেএইবৈশ্বিকউষ্ণতারযুগেগল্পগুলোছাত্রছাত্রীদেরবর্তমানযুগেরআবহাওয়াওবৃক্ষরোপণেরপ্রয়োজনীয়তাসম্পর্কেঅবহিতহবে।

Name of the Department: ECONOMICS

Course Outcome (BA CBCS Honours course)

Seme ster	Paper name	Paper code	Course outcome
1st	Introductory Microeconomics	ECO-HC-1016	This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.
	Mathematical Methods for Economics-I	ECO-HC-1026	The course is designed to make the learners familiar with basic mathematics that enables the study of economic theory, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set in the present syllabus
	Principles of Microeconomics–I	ECO-HG/RC-1016	The course intends to expose the students to the basic principles in Microeconomic Theory. The course lays emphasis on how microeconomic concepts is applicable in various situations.
2nd	Introductory Macroeconomics	ECO-HC-2016	This course aims to introduce the students to the basic concepts of macroeconomics. It discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variables like savings, investment, money, inflation etc
	Mathematical Methods for Economics-II	ECO-HC-2026	This course emphasizes on the application of mathematical techniques to various economic theories.
	Principles of Microeconomics–II	ECO-HG/RC-2016	This course is in continuation to the course Principles of Microeconomics–I covered in the first semester.
3rd	Intermediate Microeconomics-I	ECO-HC-3016	The course is designed to provide a sound training in microeconomic theory and help the learners to formally analyze the behaviour of individual agents.
	Intermediate Macroecono	ECO-HC-3026	The course introduces the students to formal modelling of a

	mics-I		macro economy in terms of analytical tools. It discusses various alternative theories of output and employment determination.
	Statistical Methods for Economics	ECO-HC-3036	The course starts with some basic concepts and terminology which are very important for statistical analysis and inference. It then discusses the notion of probability followed by probability distribution of both discrete and continuous series.
	Skill Enhancement Course (SEC)-I	ECO-SE-3014	This course helps students to understand the collection and use of data and also presentation of data using computer software like MS-Excel.
	Principles of Macroeconomics–I	ECO-HG/RC-3016	This course introduces students to the basic concepts in Macroeconomics that basically deals with the aggregate economy. Here students are introduced to the definition, measurement of the macroeconomic variables like GDP, consumption, savings, investment and balance of payment.
4th	Intermediate Microeconomics-II	ECO-HC-4016	This course is a continuation of the course Intermediate Microeconomics-1 of the third semester. The course emphasis on providing the students conceptual clarity and they are also taught the use of mathematical tools and reasoning.
	Intermediate Macroeconomics-II	ECO-HC-4026	This course is a continuation of the course Macroeconomics-1 taught in the third semester. Through this course, the students are introduced to long run dynamic issues like growth and technical progress.
	Introductory Econometrics	ECO-HC-4036	This course provides a comprehensive introduction to basic econometric concepts and techniques. Different statistical concepts of hypothesis, testing, estimation are covered in this course.
	Skill Enhancement Course (SEC)-II	ECO-SE-4014	This course teaches the students as to how data can be summarized and analyzed for drawing statistical interference.
	Principles of Macroecono	ECO-HG/RC-	This course in a continuation of the course Principles of

	mics–II	4016	macroeconomics-1 taught in the third semester. Various theories of determination of National Income is analyzed here elaborately. Students are introduced to the concept of inflation, its relationships with unemployment and also some basic concepts in an open economy
5th	Indian Economy-I	ECO-HC-5016	Using appropriate analytical framework, this course reviews major trends in economic indicators and policy debates In India in the post independence period.
	Development Economics-I	ECO-HC-5026	The course begins with a discussion of alternative conceptions of development and their justification. It then proceeds to aggregate models of growth and cross national comparisons of the growth experience that can help evaluate these models.
	Money and Financial Markets	ECO-HE-5026	This course exposes students to the theory and functioning of the monetary and financial sectors of the economy.
	Public Finance	ECO-HE-5036	This course looks into the efficiency and equity aspects of taxation of the centre, state and local governments and the issues of fiscal federalism and decentralized in India
	Economic Development and Policy in India–I	ECO-RG-5016	Economic development and policy in India-1 This course reviews major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the post interdependence period.
	Money and Banking	ECO-RE-5026	This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and
6th	Environmental Economics	ECO-HE-6016	This course focuses on economic causes of environmental problems. Economic implications of environmental policy are also addressed as well as valuation of environmental quality.
	International Economics	ECO-HE-6026	The course develops a systematic exposition of models that try to explain the composition, directions and consequences of

			international trade and the determination and effects of trade policy.
	Public Finance	ECO-RE-6036	This course is a non-technical overview of government finances with special reference to India. This course looks into the efficiency and equity aspects of taxation of the centre, states and the local governments and the issues of fiscal federalism and decentralization in India.
	Indian Economy-II	ECO-HC-6016	This course examines sectors specific policies and their impact in shaping trends in key economic indicators in India It highlights and evaluates the Indian empirical evidence
	Development Economics-II	ECO-HC-6026	The course begins with basic demographics concepts and their evolution during the process of development
	Environmental Economics	ECO-HE-6016	This course focuses on economic causes of environmental problems. Economic implications of environmental policy are also addressed as well as valuation of environmental quality.
	International Economics	ECO-HE-6026	The course develops a systematic exposition of models that try to explain the composition, directions and consequences of international trade and the determination and effects of trade policy.
	Public Finance	ECO-RE-6036	This course is a non-technical overview of government finances with special reference to India. This course looks into the efficiency and equity aspects of taxation of the centre, states and the local governments and the issues of fiscal federalism and decentralization in India.
	Economic Development and Policy in India–II	ECO-RG-6016	This course builds on the more aggregative analysis of trends in the Indian economy offered in Economic development and policy-1,this course examines sector-specific trends in key indicators and their implications in the post Independence period.

Name of the Department: EDUCATION

Course Outcome (B.A CBCS Honours)

Semester	Paper Name	Paper Code	Course Outcome
1st	Principles of Education	EDU-HC-1016	After completing the course, students will acquire knowledge about different aims of Education, role of education in socialization process, develop responsibility toward society.
	Psychological Foundations of Education & Laboratory Practical	EDU-HC-1026	After completing the course, students will acquire knowledge of Education, Psychology and also understand the relation between Psychology and Education and uses of various psychological methods in education along with importance of educational psychology in students life.
2nd	Philosophical and Sociological Foundations of Education	EDU-HC-2016	After completing the course, students will acquire knowledge of Education, Philosophy and also understand the relation between Philosophy and Education in student's life.
	Development of education in India -I	EDU-HC-2026	The students will gain knowledge about the various committees and commissions and their contribution towards Indian education, formed before independence.
3rd	Development of Education in India -II	EDU-HC-3016	The students will gain knowledge about the various committees and commissions and their contribution towards Indian education, formed after independence.
	Educational Technology and Teaching Methods	EDU-HC-3026	After completing the course,students will acquire knowledge of Education, technology and uses of technology in education along with importance and application of educational technology in students'life.
	Value and Peace Education	EDU-HC-3036	After completing the course, students will acquire knowledge of different values of society along with importance of value education in students life and significance of peace education students practical life.

4th	Great Educational Thinkers	EDU-HC-4016	After completing the course, students will acquire knowledge of different Great educational thinkers along with their contributions towards education and society.
	Educational Statistics & Practical	EDU-HC-4026	After completing the course, students will acquire knowledge of different Educational Statistics and their applications in different walks of life along with importance in the process of education.
	Emerging Issues in Education	EDU-HC-4036	After completing the course, students will acquire knowledge ofdifferent contemporary issues and their relevance in practical life.
5th	Measurement and evaluation in Education & Laboratory Practical	EDU-HC-5016	After completing the course, students will acquire knowledge of different methods of measurement and evaluation and their application in different educational and practical aspects .
	Guidance and Counselling	EDU-HC-5026	Students will gain the knowledge of different system of guidance and counseling and their importance in everyday's life, after completing the course.
	Developmental Psychology	EDU-HE-5026	Students will gain knowledge about the life cycle and its importance of human being from prenatal stage to adult hood along with importance of value education in students life
	Teacher Education in India	EDU-HE-5046	After completing the course, students will acquire knowledge about different organization for teacher education program.
6th	Education and Development	EDU-HC-6016	Students will acquire different modern concept of education withcontribute to the development of the country.
	Project	EDU-HC-6026	Students will acquire research basedpractical knowledge on different topic related to the academic and social life.
	Mental Health	EDU-HE-	Students will gain knowledge about different issues

	& Hygiene	6016	related to mental health and they will be able to understand the mental hygiene to overcome those issues.
	Educational Management	EDU-HE-6036	Students will gain knowledge about management, institutional planning, accountability and ethics which are important for student's life.

Course outcome (BA CBCS Generic and Regular)

1st	Foundations of Education	EDU-HG-1016	After completing the course, students will acquire knowledge about different aims of Education, role of education in socialization process, develop responsibility toward society.
2nd	Psychology of Adolescents	EDU-HG-2016	After completing the course, students will acquire knowledge of Education, Psychology, specially the adolescent period and its importance in life span of the child.
3rd	Guidance and Counselling	EDU-HG-3016	Students will gain the knowledge of different system of guidance and counseling and their importance in everyday's life, after completing the
	Public Speaking Skill	EDU-SEC-3014	After completing the course, students will acquire different communication skill and develop the capacities of public speaking.
4th	History of Education in India	EDU-HG-4016	The students will acquire knowledge about the various committees and commissions formed to bring development towards education of India.
	Writing Biodata and Facing an Interview	EDU-SE-4014	Students will acquire knowledge about how to write biodata and they will develop skill to face an interview.
5th	Distance Education	EDU-RG 5016	After completing the course students will be able to understand the meaning of distance education, its development, different methodologies of distance education.

	Developmental Psychology	EDU-RE-5026	After completing the course, students will understand the life cycle of human being from pre-natal stage to adolescence, importance of different stages and their scientific interpretations.
	Extension Activities	EDU-SE-5014	Students will acquire knowledge about visiting nearby village area to collect data on different economic and educational status of the village people where they will apply research-based knowledge of data collection.
6th	Mental Health and Hygiene	EDU-RE-6016	Students will be able to deal with different mental health issues and their causes along with their significant outcome.
	Developing teaching Skills	EDU-SE-6014	Students will acquire different teaching skills and they will be able to prepare teaching plan

Name of the Department: ENGLISH

Course Outcome (B.A CBCS Honours)

Semester	Paper Name	Paper Code	Course Outcome
1st	Indian Classical Literature	ENG-HC-1016	Students will gain knowledge about a rich and diverse selection of Classical Indian literature in English translation. They will be able to think laterally about literatures of the world, and the possibility of cultural exchange.
	European Classical Literature	ENG-HC-1026	The students will be familiarized with the enriching literary tradition of Classical writing in Europe through the study of representative texts belonging to the Classical Period. The students will be exposed to divergent compositions by Classical European writers that reveal the consolidation of a rich cultural discourse.
2nd	Indian Writing in English	ENG-HC-2016	Familiarize with the issues of politics of language and gender, nationalism and modernity pertaining to pre and post-Independence India that have been responsible for the emergence of Indian English literature. Understand the place of English Writing in India in the larger field of English Literature. Learn to discuss critically the use of literary forms of the novel, poetry and drama by Indian English writers in distinctive ways against Indian historical and cultural contexts
	British Poetry and Drama: 14th to 17th Centuries	ENG-HC-2026	Students will gain knowledge about the two major forms in British literature from the 14th to the 17th centuries – poetry and drama. They will be able to critically analyze the texts in relation to contexts of the Renaissance, the Elizabethan Age and understand the implications of the emergence of new trends.
3rd	History of English Literature	ENG-HC-3016	Students will acquire a sense of the historical development of each literary form.

	and Forms		They will gain understanding of the contexts in which literary forms and individual texts emerge. They will also be able to analyze texts as representative of broad generic explorations.
	American Literature	ENG-HC-3026	Comprehend the main currents of American literature in its social and cultural contexts. Students will be acquainted with the American society in its evolutionary stages from the beginnings of modernism to the present as well as with exciting generic innovations and developments that have tried to keep pace with social changes.
	British Poetry and Drama: 17th and 18th Centuries	ENG-HC-3036	Students will acquire the knowledge about British literature in the 17th and 18th centuries. They will also be able to comprehend the impact of the literature of this period on the society.
4th	British Literature: The 18th Century	ENG-HC-4016	The students will be familiarized with British literature in the 18th century. The students will gain an overview of the age and the writings that the age produced through the selection of representative texts.
	British Romantic Literature	ENG-HC-4026	The students will be able to appreciate the essence of the Romantic vision through selections from works of major Romantic poets which address various issues pertaining to the relationship between humans and nature and the role of the poet. The students will be encouraged to re-read canonical texts like *Frankenstein* to discern divergent ideas of Romanticism.
	British Literature: The 19th Century	ENG-HC-4036	The students will be introduced to selected texts from Austen to Rossetti and will learn how these works represent a remarkable literary development and address a very diverse array of social preoccupations.

			The students will be exposed to the ground-breaking efforts of the poets as well to the works of fiction writers who manage to consolidate and refine upon the achievements of the novelists of the 18th century.
5th	British Literature: The 20th Century	ENG-HC-5016	The students will be introduced to the spirit of modernism through the works of the writers that represent a break from the codes and conventions of the past and experiment with new forms and idioms. The students will be acquainted with the ethos of postmodernism through a reading of recent poetic and fictional works.
	Women's Writing	ENG-HC-5026	The students will be introduced to the nineteenth and twentieth century writings by women living in different geographical and socio- cultural settings. The students will be acquainted with the situationally distinct experiences of women articulated in a variety of genres- poetry, novels, short stories, and autobiography. The students will be able to analyze how the women writers deal with the themes of Gender, sexual/textual politics, feminism, body, identity, class, location, voice, space, gender and narrative in their writing.
	Modern Indian Writing in English Translation	ENG-HE-5026	The students will be introduced to the richness and diversity of Indian literature written in different regional languages. The students will be acquainted with the diverse cultural and regional preoccupations through selected texts written in different regional languages translated in English.
	Literary Criticism and Literary Theory	ENG-HE-5056	The students will be familiarized with important texts on literary criticism and literary theory beginning from William Wordsworth's Preface to the *Lyrical Ballads*. The students will be able to critically read and interpret texts across genres applying different critical approaches.

6th	Modern European Drama	ENG-HC-6016	The students will be introduced to the innovative dramatic works of modern playwrights from different locations in Europe. The students will gain an understanding of the emergence of avant-garde movements and trends and dramatic devices and techniques during the period of modernism which eventually influenced theatrical practices in other nations of the world.
	Post colonial Literatures	ENG-HC-6026	The students will be introduced to the impact and effects of the colonial experience in many countries around the world in the postcolonial era. The students will be acquainted with some of the novels, short stories and poems from postcolonial literatures across the world, showcasing the many regional, cultural differences and peculiarities, as well as common and shared experiences of the postcolonial condition.
	Partition Literature	ENG-HE-6036	The students will be able to comprehend the Partition as a major socio-historical phenomenon and assess its reflection in literature. The students will be able to study the impact of communalism and violence and its treatment in literature. The students will be acquainted with the issues of colonialism, homelessness, exile and women in the representative writings of Partition literature.
	Writings from North East India	ENG-HE-6066	The students will be introduced to the unique experience of the North East Indian region through literary engagements with issues like politics, insurgency, sectarian violence, periphery/center debate, etc. The students will be acquainted with the rich oral tradition of the region as well as with the experimental endeavours of North East writers like Arun Sarma in the field of theatre.

Course Outcome (B.A/B.Sc CBCS Honours/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	English I	ENG-CC-1016	Students will gain knowledge about two literary genres-- drama and short-story. They will be able to read and respond to representations of issues in contemporary life and culture in the English language. Their English language skills will develop through practice of grammar.
	English Communication	ENG-AE-1014	Students will develop their communication skills in Reading, Writing, Vocabulary and Grammar. Their fluency in English will be strengthened through exercise-based texts.
2nd	English II	ENG-CC-2016	Students will gain knowledge about the genre of poetry. They will be able to read and respond to representations of issues in contemporary life and culture in the English language. Their English language skills will develop through practice of grammar.
3rd	Alternative English I	ALT-CC-3016	Students will be able to comprehend the major genres of English literature through texts which are landmarks of each genre. They will be able to read the prescribed texts in their social and cultural contexts.
4th	Alternative English II	ALT-CC-4016	Students will learn about the different forms of literature, texts and their contexts. They will be able to critically appreciate the social, cultural and political background of the prescribed texts.

Name of the Department: HINDI
Course Outcome (B.A/B.Sc/B.Com CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	हिंदीसाहित्यकाइतिहास	HIN-HG/RC-1016	हिंदी साहित्यकेचारप्रमुखकालोंकेसंबंधमेंसामान्यजानकारीप्राप्तहोगा हिंदीसाहित्यकेप्रतिएकसमीक्षात्मकदृष्टिकोणबनेगा
	हिंदीव्याकरणऔरसंप्रेषण	HIN-AE-1014	हिंदीव्याकरणकेविविधइकाइयोंसेपरिचयप्राप्तकरेगा संप्रेषणकेसंबंधमेंतात्विकएवंव्यावहारिकज्ञानप्राप्तहोगा पल्लवनकीकलाविकसितहोगी
2nd	मध्यकालीनहिंदीकविता	HIN-HG/RC-2016	भक्तिकालकेप्रमुखकवियोंकीकविताओंसेपरिचयप्राप्तकरेगा रीतिकालकेप्रमुखकवियोंकीकविताओंसेपरिचयप्राप्तकरेगा
3rd	आधुनिकहिंदीकविता	HIN-HG/RC-3016	आधुनिककविताकेसंदर्भमेंएकसामुहिकधारणाप्राप्तक्रेगा आधुनिककालकेप्रमुखकवियोंकीकविताओंकेप्रतिसमीक्षात्मकदृष्टिकोणप्राप्तकरेगा
	कार्यालयीनहिंदी	HIN-SE-3014	भाषाकेविविधरूपोंसेपरिचयहोगा राजभाषाहिंदीकीसंवैधानिकस्थितिकेसंदर्भमेंज्ञानप्राप्तहोगा प्रशासनिकपत्रावलीकीनिष्पादनप्रक्रियाकेसंदर्भमेंव्यावहारिकज्ञानप्राप्तहोगा कार्यालयीनप्रयोजनोंमेंविभिन्नयांत्रिकउपकरणोंकेअनुप्रयोगकाव्यावहारिकज्ञानप्राप्तहोगा
	हिंदीकाव्यधारा	HIN-CC-3016	भक्तिकालीनप्रमुखकवियोंकीकविताओंकेसंदर्भमेंसामग्रिकज्ञानप्राप्तकरेगा आधुनिककालकेप्रमुखकवियोंकीकविताओंकेसंदर्भमेंसामग्रिकज्ञानप्राप्तकरेगा
4th	हिंदीगद्यसाहित्य	HIN-HG/RC-4016	हिंदीउपन्याससाहित्यकेसाथपरिचयहोगा सांप्रदायिकदृष्टिकोणसे 'तमस' उपन्यासकेप्रतिसमीक्षात्मकदृष्टिकोणप्राप्तकरेगा हिंदीकहानीसाहित्यकेप्रमुखकहानियोंकेसंदर्भमेंसमीक्षात्मकविचारबनेगा हिंदीसाहित्यकेप्रमुखनिबंधकारोंकेनिबंधोंसेपरिचयप्राप्तकरेगा
	अनुवादविज्ञान	HIN-SE-4014	अनुवादकातात्विकज्ञानप्राप्तकरेगा सर्जनात्मकसाहित्यकेअनुवादकीप्रक्रियाकाव्यावहारिकज्ञानप्राप्तकरेगा कार्यालयीनदस्तावेजोंकेअनुवादकाव्यावहारिकज्ञानप्राप्तकरेगा

	हिंदीकथासाहित्य	HIN-CC-4016	हिंदीउपन्याससाहित्यकेसाथपरिचयहोगा प्रेमचंद-कृत 'निर्मला' उपन्यासकेप्रतिसमीक्षात्मकदृष्टिकोणप्राप्तकरेगा हिंदीकहानीसाहित्यकेप्रमुखकहानियोंकेसंदर्भमेंसमीक्षात्मकविचारबनेगा
5th	लोक-साहित्य	HIN-RE-5016	• लोकसाहित्यएवंलोकसंस्कृतिकातात्विकज्ञानप्राप्तकरेगा • भारतकेविविधलोकगीतोंसेपरिचयप्राप्तकरेगा • लोक-नाट्यऔरलोक-कथाओंसेपरिचयप्राप्तकरेगा
6th	छायावाद	HIN-RE-6016	• छायावादकीपृष्ठभूमिकेसंबंधमेंज्ञानप्राप्तकरेगा • छायावादकेप्रमुखचारकवियोंकीकविताओंकासमीक्षात्मकज्ञानहोगा

Name of the Department: HISTORY

Course Outcome (B.A/B.Sc/B.Com CBCS **Honours**)

Semester	Paper Name	Paper Code	Course Outcome
1st	History of India-I	**HIS-HC-1016**	After the completion of this paper, the students will be able to explore and effectively use historical tools in reconstructing the remote past of ancient Indian pre and proto history and also to analyse the various stages of evolution of human cultures and the belief systems in the proto history period.
	Social Formations and Cultural Patterns of the Ancient World	**HIS-HC-1026**	With the completion of this paper, the students will be able to explain the processes and stages of the evolution of the variety of cultural patterns throughout the antiquarian periods in history. Students will be able to relate the connections between the various Bronze Age Civilizations in the ancient world as well as development of slave and polis societies in ancient Greece.
2nd	History of India-II	**HIS-HC-2016**	On successful completion of this course, the

			students will be able to explain the economic and socio-cultural connections, transitions and stratifications during the ruling houses, empires and the politico-administrative nuances of early Indian History from 300 BCE to 300 CE.
	Social Formations and Cultural Patterns of the Medieval World	**HIS-HC-2026**	After the completion of this course, the students will be able to analyse and explain the historical socio-political, administrative and economic patterns of the medieval world. And also will be able to describe the emergence, growth and decline of various politico-administrative and economic patterns and the resultant changes therein.
3rd	History of India III (c. 750 -1206)	**HIS-HC-3016**	The completion of this paper will enable the students to relate and explain the developments in India in its political and economic fields and its relation to the social and cultural patterns therein in the historical time period between c.700 to 1206. They will also be able to analyse India's interaction with another wave of foreign influence and the changes brought in its wake in the period
	Rise Of The Modern West:	**HIS-HC-3026**	On completion of this course, the students will be able to explain the major trends and developments in the Western world between the 14th to the 16th century CE and explore and analyse the significant historical shifts and events and the resultant effects on the civilizations of Europe in the period.
	History of India IV (c.1206 - 1550)	**HIS-HC-3036**	After completion of this course students will be able to explain the political and administrative history of medieval period of India from 1206 to 1550 AD and analyse the sources of history, regional variations, social, cultural and economic

			set up of the period.
	Historical Tourism in North East India	HIS –SE-3014	Explain tourism in N.E India with special reference to the historical monuments, cultural and ecological elements and places and relate to the growing vocation of tourism as an industry and applicability of historical knowledge for its growth.
4th	Rise of the Modern West – II	HIS-HC-4016	After the completion of this course, the student will be able to explain the political and intellectual currents in Europe in the Modern Age and relate the circumstances and causal factors of the intellectual and revolutionary currents of both Europe and America at the beginning of the Modern age
	History of India V (C. 1550 - 1605)	HIS-HC-4026	At the completion of this course, the students will be able to analyse the circumstances and historical shifts and foundations of a variety of administrative and political setup in India between c.1550-1605. They will also be able to describe the inter relationships between the economy, culture and religious practices of the period
	History of India VI (C. 1605 - 1750)	HIS-HC-4036	After the completion of this course, the students will be able to explain and reconstruct the linkages of the history of India under the Mughal Rule and relate to the socio-economic and religious orientation of the people of Medieval period in India.
	Oral Culture and Oral History	HIS-SE-4014	Explain complex inter relations of structures or events in the context of broader social and cultural framework of societies through public memory and use oral history to preserve oral culture and local history. Use public memory as a tool and a source not only to write public history but also to explore new

			knowledge in the humanities, social sciences as well as in disciplines like architecture, communication studies, gender studies, English, History, Philosophy, Political Science ,Religion and Sociology.
5th	History of Modern Europe- I (c. 1780-1939)	HIS-HC-5016	After the completion of this course the students will be able to evaluate the historical evolution and political developments that occurred in Europe in the period between 1780 to 1939, critically analyse the evolution of social classes, nation states, evolution of capitalism and nationalist sentiment in Europe and relate to the variety of causes that dragged the world into devastating wars in the intervening period
	History of India VII(1780-1857)	HIS-HC-5026	At the completion of this course, the learners will be able to analyse the course of British colonial exploitation during the period between c.1780 to 1857. The learners will also be able to analyze how /if it is justified to say that the revolt of 1857 was the first war of Indian independence.
	History of Assam Up to c. 1228	HIS –HE-5016	General outline of the history of Assam from the earliest times to the advent of the Ahoms in the 13th century. Students will be acquainted with major stages of developments in the political, social and cultural history of Assam during the early times.
	History of Assam (c. 1228 –1826)	HIS –HE-5026	On completion of this paper, students will be able to identify major stages of developments in the political, social and cultural history of Assam during the medieval times. This paper will also explain the history of Assam

			from the 13th century to the occupation of Assam by the English East India Company in the first quarter of the 19th century.
6th	History of India VIII (c. 1857 - 1950)	**HIS-HC-6016**	At the completion of this course, the learners will be able to analyse the course of British colonial exploitation, the social mobilizations during the period between c.1857 to 1950 and also the techniques of Indian resistance to British policies. It will also enable the students to explain the circumstances leading to de-colonization and also the initial period of nation building in India
	History of modern Europe II (c. 1780 - 1939)	**HIS-HC-6026**	After the completion of this course, the students will be able to analyse the historical developments in Europe between c.1780 to 1939. As the course structure of this paper focuses on the democratic and socialist foundations modern Europe, the students will be able to situate the historical development of working class movements, socialist upsurge and the economic forces of the two wars and the other ideological shifts of Europe in the period
	History of Assam (c. 1826 – 1947)	**HIS –HE-6016**	Upon completion of this course, students will be able to describe the period of British rule in Assam after its annexation by the imperialist forces. Situate the development of nationalism in Assam and its role in India's freedom struggle. Analyse the main currents of the political and socio-economic developments in Assam during the colonial period.
	Assam since independence	**HIS –HE-6026**	Students will be able to assess the aftermath of Partition and other socio-economic developments in post-independence Assam upon completion of

| | | | this course. |
| | | | They will also be able to identify the main currents of political and socio-economic development in Assam after India's independence and the causes and impact of various struggles and movements in contemporary Assam. |

Course Outcome (B.A/B.Sc/B.Com CBCS (Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	History of India (From The Earliest Times Up To C. 1206)	**HIS–HG-1016**	Upon completion of this course, students will be able to explain the emergence of state system in North India, development of imperial state structure and state formation in South India in the early period. This will help the students to understand the changes and transformations in polity, economy and society in early India and the linkages developed through contacts with the outside world.
2nd	History of India (c.1206 to 1757)	**HIS –HG-2016**	Upon completion of this course, students will be able to analyse the political and social developments in India between 1206-1757. It will explain the formation of different States during this period along with their administrative apparatuses, and the society, economy and culture of India in the 13th to mid-18th century period
3rd	History of India (c. 1757 to 1947)	**HIS–HG-3016**	Upon completion of this course, students will be able to understand the major factors that led to the establishment and consolidation rule in India. They will also be able to identify the process of growth of resistance against colonial rule and the eventual

			growth of Indian nationalist movement, which ultimately led to the end of the British rule in the country.
4th	Social and Economic History of Assam	**HIS–HG-4016**	Upon completion of this course, students will be able to: Analyse and explain the socio-economic history of Assam including among others the development of caste system, religious beliefs, agriculture and land system, the social organization, trade and commerce, various agricultural regulations, plantation economy, development of modern industries, transport system, education, the emergence of middle class, development of literature and press, and growth of public associations.
5th	History Of Assam : Earliest Times To 1826	**HIS-RE-5016**	This course will give a general outline of the history of Assam from the earliest times to the advent of the British. Identify major stages of developments in the political history of Assam from the earliest times to the occupation of Assam by the English East India Company in the quarter of the 19th Century.
	History Of Europe:1684-1870	**HIS-RG-5016**	After the completion of this course students will be able to explain the emergence of new state system in Europe and the rise of modernity. Analyze the revolutionary heavals of Europe that changed and shaped the world.
6th	History of Assam : 1826-1947	**HIS-RE-6016**	Upon completion of this course, students will be able to describe the period of British rule in Assam after its annexation by the imperialist forces. Situate the development of nationalism in Assam and its role in India's freedom struggle. Analyze the main currents of the political and socio-economic developments in Assam during the colonial period.

	History of Europe: 1870-1939	**HIS-RG-6016**	After the completion of this course students will be able to explain the major political developments in Europe during the specified period. Delineate how the rise of two unified nations, Germany and Italy gave rise to intense imperialistic contest all over the world. Analyze the causes and consequences of World War I along with the developments that lead to World War II.

Name of the Department: PHILOSOPHY

Course Outcome (B.A/B.Sc/B.Com CBCS Honours)

Semester	Paper Name	Paper Code	Course Outcome
1st	Indian Philosophy-I	PHI-HC-1016	Aims to acquaint students with the ancient Indian Texts-Vedas, Upanisads and Bhagavad gita - their meanings and different divisions etc. It also intends to acquaint students with the development of Indian Philosophy-its nature, scope and characteristics, schools of Indian Philosophical system especially the astika schools i.e, Carvaka, Jainism and Buddhism and also the schools of Buddhism.
	Logic-I	PHI-HC-1026	Aims to acquaint students with deductive and inductive reasoning, immediate inference and its classification, the difference between proposition and argument, truth and validity, categorical propositions and its types, rules of categorical syllogism and how to apply these rules in determining the validity of a syllogistic arguments, Venn Diagrams and its applications and the types of set and

			its operations.
2nd	Greek Philosophy	PHI-HC-2016	It intends to acquaint students with the pre- Socratic Philosophers and their philosophical doctrines such as water philosophy of Thales, Philosophy of Flux of Heraclitus, Atomism of Democritus etc. It also seeks to acquaint students with the philosophy of the Sophists, Socrates' method and his concept of virtue, Plato's theory of forms, his concept of knowledge and opinion as well as Aristotle's classification of cause, his concept of actuality and potentiality, form and matter.
	Logic-II	**PHI-HC-2026**	Students will be acquainted with the development of symbolic logic from its traditional form, the uses of symbols in logic, the concept of variables and constant, types of logical connectives, the concept of truth table and truth function, construction of truth table. Students will also learn how to translate an ordinary sentence into a strict logical form, the technique of formal proof of validity in determining the validity of an argument, modern classification of proposition and the symbolization of universal and existential propositions.
3rd	Western Philosophy: Descartes to Hegel	PHI-HC-3016	This course aims to acquaint students with the Rationalists philosophers and the Empiricists philosophers and their philosophical doctrines such as Descartes 'method of doubt, mind-body dualism, Spinoza's substance, Leibnitz' Monadology and Pre- established Harmony, Locke's criticism of innate ideas, primary and secondary qualities, his theory of substance, Kant's concept of space and time, categories, Hegel's dialectical method and Absolute Idealism
	Indian Philosophy-II	PHI-HC-3026	Aims to acquaint students with the Vedic schools of Indian Philosophy and their different philosophical theories such as Purusa and Prakrti of Sankhya ,the theory of

			Satkaryavada, Nyaya's division of perception and inference, Vaisesika's seven categories(padarthas) and its atomic theory, Mimamsa's pramanas etc. It also aims to acquaint students with Sankara and Ramanuja's philosophy of Brahman, Atman etc. And also, Sankaradeva's philosophy of God and Bhakti.
	Ethics	PHI-HC-3036	This course seeks to acquaint students with the meaning, nature and scope of Ethics and the relationship of Ethics with other disciplines of study, object of moral judgement and moral obligations, the postulates of morality, concept of deontological and teleological ethics virtue ethics of Aristotle, Kant's deontological ethics, utilitarianism of Mill and Bentham, different theories of Punishment, the concept of professional ethics and environmental ethics, and the study of the law of karma, varna-asrama dharma, Buddhists pancasila, Jaina's Triratna and its other related topics.
4th	Contemporary Indian Philosophy	PHI-HC-4016	The course outcome is to make students aware about the philosophical thoughts of different Contemporary Indian Philosophers such as Aurobindo, Radha krishanan, Gandhi and Vivekananda.
	Philosophy of Religion	PHI-HC-4026	The course outcome is to understand the critical examination of religion and to understand contemporary challenges to religion.
	Political and Social Philosophy	PHI-HC-4036	The course outcome is to understand the present- day situation of society and politics and the different challenges of the present society and also to have an in-depth knowledge of different political theories, viz., humanism, secularism, multiculturalism.
5th	Analytic Philosophy	PHI-HC-5016	The course aims to acquaint students with the analytic philosophy of Moore, Russell, Wittgenstein and their major philosophical theories.

	Phenomenology and Existentialism	PHI-HC-5026	The course aims to have an understanding of the phenomenological and existential theories of Kierkegaard, Sarte, Heidegger and Husserl.
	Philosophy of Upanishads	PHI-HE-5016	The course aims to acquaint students with Upanisadic Philosophy viz., its method and philosophers and with different theories such as the theory of Brahman, Atman, Cosmic, Acosmic, Karma, theory of liberation and other related theories.
	Philosophy of Gita	PHI-HE-5026	The course aims to acquaint students with the Philosophy of Bhagavad gita - different concept such as ksetra, ksetrajna, purusa, prakrti, theory of ultimate reality, individual self, the concept of yoga as found in the Bhagavad gita and other related theories.
6th	Philosophy of Mind	PHI-HC-6016	The outcome of the course is to understand the Philosophy of Mind such as Cartesian Dualism, Parallelism, Occasionalism and other related theories.
	Meta Ethics	PHI-HC-6026	Aims to acquaint students with the ethical concepts such as Meta Ethical theories, its relation with Normative Ethics and the meta ethical theories of different moral philosophers, viz., Moore' concept of good, Ayer and Stevenson' moral discourse and R.M Hare' universal prescriptivism and other related theories.
	Philosophy of Language	**PHI-HE-6016**	Students will be acquainted with thephilosophy of language related to linguistic philosophers such as Frege, Russell and different related theories such as use theory of meaning, referential theory, ideational theory, correspondence, coherence and pragmatic theory etc.
	Applied Ethics	**PHI-HE-6026**	Students will be acquainted with theconcept of applied ethics, its nature and scope, the concept of environmental ethics, animal rights, cyber ethics, Bio-medical ethics and other related applied ethical theories.

Name of the Department: POLITICAL SCIENCE

Course Outcome (B.A/B.Sc/B.Com CBCS Honours)

Semester	Paper Name	Paper Code	Course Outcome
1st	Understanding Political Theory	POL HC 1016	To introduce the idea of political theory and various approaches To enable the students to assess the contemporary trends of political theory To reconcile theory and practice in relation to democracy
	Constitutional Government and Democracy in India	POL HC 1026	To acquaint students with constitutional design of state structures and institutions To understand the conflicts in constitutional provisions To make them comprehend the state institutions in relation to extra constitutional environment.
2nd	Political Theory-Concepts and Debates	POL HC 2016	Understand the various concepts in political theory and appreciate how they can be helpful to analyse crucial political issues Understand the significance of debates in political theory in exploring multiple perspectives to concepts, ideas and issues. Appreciate how these concepts and debates enrich political life and issues surrounding it.
	Constitutional Government and Democracy in India	POL HC 2026	Understand the working of major political institutions in India Understand the major debates in Indian politics along the axes of caste, gender, region and religion Understand the changing nature of the Indian

			state and the contradictory dynamics of modern state power
3rd	Introduction to Comparative Government and Politics	POL HC 3016	To make students understand the basic concepts in comparative politics, To make students classify the different political systems and historical context of modern governments, To enable students to have a comparative analysis of countries related to their political institutions and behaviour.
	Perspectives on Public Administration	POL HC 3026	To enable students to learn the basic concepts related to public administration and its importance, To make students learn the major theories of public administration, To enable students to have an understanding of public policy and its formulation, To familiarize students with the major approaches and recent debates related to field of public administration.
	Perspectives on International Relations and World History	POL HC 3036	To make students understand the key theoretical approaches in International relations, To familiarize students with the evolution of International state systems and its importance. To make students aware of the key theoretical debates in International relations To enable students to have an overall understanding of International relations in relation to twentieth century IR history.
4th	Political Processes and	POL HC 4016	To understand, comprehend and analyse the complex nature and functioning of the

	Institutions in a Comparative Perspective		political systems, political institutions and corresponding issues to these both in a country specific case of India and cross-country perspectives.
			To demonstrate critical thinking about key issues of political system of different forms, political process and public policy.
			To use the contents and sub-units of the course as yardsticks for comparing these political systems and processes.
	Public Policy and Administration in India	POL HC 4026	Be familiarised with and gain knowledge about the processes of public policy making in India and their significance in administering the state.
			Develop the ability to assess the functioning of the government and the administration in ensuring a citizen centric welfare administration in India.
	Global Politics	POL HC 4036	To enable students to understand how to approach a wide range of important global political and economic policy problems and participate in public policy debates on the crucial issues facing the world today.
			To have knowledge of the essential theoretical assumptions underlying globalisation's conceptual frameworks and their relationships to policy interventions.
			To demonstrate elementary knowledge of major issues and subject-matters surrounding globalisation that decides the international relations- political, economic and security relations- among the nations.
5th	Classical	POL HC	To interpret ideas underlying traditions in

	Political Philosophy	5016	classical political philosophy
			To analyze the debates and arguments of leading political philosophers belonging to different traditions of the period
			To appraise the relevance of classical political philosophy in understanding contemporary politics
	Indian Political Thought-I	POL HC 5026	To underline themes and issues in political traditions of pre-colonial India.
			To compare and contrast positions of different political traditions those were present in pre-colonial India.
			To evaluate the relevance of political thought of pre-colonial India for contemporary politics.
	Human Rights	POL HE 5016	To describe the basic concepts of human rights
			To comprehend different approaches regarding human rights
			To familiarise the role of UNO in the growth and development of human rights
			To describe different measures taken for the protection of human rights
	Select Constitutions-I	POL HE 5046	Students will be able to understand the importance of constitutions
			This paper is an integral part of public services examinations
			Students will be introduced to the various types of constitutions and the forms of governments from different parts of the world.
6th	Modern Political Philosophy	POL HC 6016	To interpret ideas underlying traditions in modern political philosophy
			To analyze the debates and arguments of leading political philosophers of different philosophical

			traditions
			To appraise the relevance of modern political philosophy in understanding contemporary politics
	Indian Political Thought-II	POL HC 6026	To underline themes and issues in political thought of modern India.
			To compare and contrast positions of leading political thinkers in India on issues
			those are constitutive of modern India.
			To assess the relevance of political thought of modern India in understanding
			contemporary politics.
	Human Rights in India	POL HE 6016	To describe origin and development of human rights in India
			To comprehend different measures adopted by India for the protection and development of human rights
			To familiarise the emerging issues related to human rights
	Select Constitutions-II	POL HE 6046	Students will be able to understand the importance of constitutions;
			This paper is an integral part of public services examinations.
			Students will be introduced to the various types of constitutions and the forms of governments from different parts of the world.

Course Outcome (B.A/B.Sc/B.Com CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	Introduction to Political Theory	POL-HG/RC-1016	To introduce the key concepts in political theory To make students understand the aspects of conceptual analysis To engage in application of concepts and limitations
2nd	Indian Government and Politics	POL-HG/RC-2016	To appreciate the approaches to the study of Indian politics and the changing nature of the state To understand the basic features of the Indian constitution and its institutional functioning To examine the changing role of caste, class and patriarchy and their impact on politics To understand the dynamics of social movements in India.
3rd	Comparative Government and Politics	POL-HG/RC-3016	To make students have a basic understanding of comparative political analysis, To make students learn the classification of political systems from a comparative politics framework. To make students learn the classification of governments and the political behaviour of institutions and the changes in the nature of the nation-state.
4th	Introduction to International	POL-HG/RC-	To demonstrate basic understanding of scientific methods of inquiry in international

	Relations	4016	relations. To understand how international relations influence societies. To demonstrate a basic understanding of the foundational theories and concepts in international relations. To analyse the current world events and their implications on the Indian Foreign policy decision making process by applying prominent theories of international relations and generate substantial research question on the topics.
5th	Public Administration - I	POL RE/RG 5016	Students will be able to understand the basics of public administration; This paper is an integral part of public services examinations. Students will be well versed with ideas of administration.
6th	Public Administration - II	POL RE/RG 6016	This course will acquaint students with the different layers and structures of public administration and also to know how public administration contributes towards development. One will also be in a position to know about the principles and processes of budgeting etc.

Name of the Department: SANSKRIT
Course Outcome (B.A/B.Sc/B.Com CBCS Honours)

Semester	Paper Name	Paper Code	Course Outcome
1st	Classical Sanskrit Literature (Poetry)	SKT-HC-1016	Aims to get students acquainted with Classical Sanskrit Literature, understanding the literature and appreciate the development of Sanskrit literature and seeks to help students to negotiate texts independently.
	Critical Survey Of Sanskrit Literature	SKT-HC-1026	Intends to give an outline of different traditions of Sanskrit Literature from the Vedic to the Puranas and Shastras.
2nd	Classical Sanskrit Literature (Prose)	SKT-HC-2016	Deals with the origin and development of Sanskrit Prose Literature like Banabhatta's Sukonasopodesa, Fables and seeks to help students to understand the logical meaning of the texts.
	Self Management In The Gita	SKT-HC-2026	Describes the cognitive and emotional apparatus as mentioned in the Gita, and helps students by explaining the controlling of mind and self-management through devotion.
3rd	Classical Sanskrit Literature (Drama)	SKT-HC-3016	This course aims to acquaint student with three most famous dramas of Sanskrit literature which represent three stages in the growth of Sanskrit drama.
	Poetics And Literary Criticism	SKT-HC-3026	The study of Sanskrit poetics embraces all poeticarts and include concepts like Alankara, rasa ,riti, bakrokti, Dhvani, Auchitya etc.
	Indian Social Institutions And Polity	SKT-HC-3036	Deals with various aspects of social institutions and Indian polity as propounded in the ancient Sanskrit texts like Samhitas, Mahabharata, Purana, Kautilya's Arthasastra

			etc. which gives thorough knowledge about the structure of society and value of life.
4th	Indian Epigraphy, Palaeograpgy And Chronology	SKT-HC-4016	Aims to acquaint the students with the epigraphical journey in Sanskrit, the only source which directly reflects the society , politics, geography and economy of the time and also help students to know the different styles of Sanskrit writings.
	Modern Sanskrit Literature	SKT-HC-4026	The purpose of this course is to expose students to rich and profound traditional knowledge and also of modern creative writing in Sanskrit.
	Sanskrit And World Literature	SKT-HC-4036	This course aims to provide informations to students about the spread and influence of Sanskrit literature and culture through the ages in various parts of the world in medieval and modern times. Such as translation of the Gita in European languages and its impact on the religious philosophical thoughts of the west, translation of Panchatantra in Eastern and Western languages.
5th	Vedic Literature	SKT-HC-5016	This course on Vedic literature aims to introduce various types of vedic texts.
	Sanskrit Grammar	SKT-HC-5026	This course aims to acquaint students with general Sanskrit grammar.
	Theatre And Dramaturgy	SKT-HE-5026	The history of theatre can be traced in the hymns (samvada sukta) of the Rigveda. The dramaturgy was later developed by the Bharatmuni. The objectives of the curriculum are to introduce classical aspects of development of Indian theatre among the students and which is considered to be the

Semester	Paper Name	Paper Code	Course Outcome
			best form of all arts.
	Project	SKT-HE-5046	
6th	Indian Ontology And Epistemology	SKT-HC-6016	This course deals with the cardinal principles of the Nyaya Vaisesika Philosophy through the Tarkasangraha . It also intends to give them an understanding of essential aspects of Indian philosophy.
	Sanskrit Composition And Communication	SKT-HC-6026	This paper aims to teaching composition and other related informations based on Laghu Siddhanta Kaumudi and Vibhaktyartha Prakarana
	Fundamentals Of Ayurveda	SKT-HE-6016	The major objective is to understand the basic principles and concepts of preventive medicine and health maintenance, diet and nutrition, usage of commonly used spices and herbs and outline of Ayurvedic therapeutic procedures in Ayurveda in day-to-day life.
	Environmental Awareness In Sanskrit	SKT-HE-6026	Deals with the Environmental awareness mentioned in vedic and classical Sanskrit literature.

Course Outcome (B.A/B.Sc/B.Com CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	Basic Sanskrit	SKT-HG-1016	This is an elementary grammar course in Sanskrit language designed for students who wish to learn Sanskrit from the very beginning
2nd	Indian Culture And Social Issues	SKT-HG-2016	This paper is designed to introduce about Indian culture to students and to show how cultural traditions have evolved

Semester	Paper Name	Paper Code	Course Outcome
3rd	Basic Principal Of Indian Medicine System (Ayurveda)	SKT-HG-3016	Ayurveda is a traditional Indian system of healthcare that has been traced back to as early as 5,000 BC. This course will introduce students to understand the basic principles and concepts of preventive medicine and health care, diet and nutrition etc.
4th	Fundamentals Of Indian Philosophy	SKT-HG-4016	This course aims to get the students acquainted with the basic approach to study Indian philosophy and to enable students to grasp knowledge from the original Sanskrit text only.

Course Outcome (B.A/B.Sc/B.Com CBCS (SEC)

Semester	Paper Name	Paper Code	Course Outcome
3rd	Acting And Script Writing	SKT-SE-3014	In this course is to make the students acquainted with the Acting and script writing. It aims at sharpening the dramatic talent of the students
4th	Sanskrit Meters And Music	SKT-SE-4014	From this course students will get the complete information regarding selected Vedic and Classical metres with lyrical techniques.

Name of the Department: ANTHROPOLOGY

Course Outcome (B.A/B.Sc/B.Com CBCS Honours)

Semester	Paper Name	Paper Code	Course Outcome
1st	Introduction To Biological Anthropology	ANT-HC-1016	Students will learn about the genesis and development of biological anthropology. Students will gain knowledge about the aspects from which evolution and variation is studied.
	Introduction To Sociocultural Anthropology	ANT-HC-1026	The basic theoretical knowledge about Social and Cultural Anthropology can be achieved. The knowledge of first-hand field data collection and analysis can be gained.
2nd	Archaeological Anthropology	ANT-HC-2016	Student will be acquainted with archaeometrical background of prehistoric, protohistoric and historical evolution of human culture. Students will have practical understanding of prehistoric culture through tool technology and pottery technology
	Fundamentals Of Human Origin And Evolution	ANT-HC-2026	Students will learn about the stages of human evolutionary development. They will know about the fossil finds on the basis of which the evolutionary stages are identified.
3rd	Tribes And Peasants In India	ANT-HC-3016	The anthropological knowledge and approach to study of tribes, villages and peasantry can be gained. The problems, prospects, development,

			and government policies for tribes, villages and peasants can be achieved
	Human Ecology: Biological And Cultural Dimensions	ANT-HC-3026	The knowledge on human adaptation in ecology will be gained. The knowledge on urbanization and industrialization in human societies will be achieved by students.
	Biological Diversity In Human Population	ANT-HC-3036	The students will learn about markers for understanding biological diversity, Classical markers use for classifying races and classification of Indian population.
4th	Theories Of Culture And Society	ANT-HC-4016	The knowledge of the basic theories of culture in Anthropology can be gained. The knowledge of the basic theories of society in Anthropology can be gained.
	Human Growth And Development	ANT-HC-4026	Students will learn about concepts related with growth and stages of growth. Students will learn bio-cultural factors that influence growth and development. Students will learn human body composition.
	Research Method	ANT-HC-4036	The knowledge on formulation of research design, application of methods and techniques in data collection will be obtained. The ethics of research will be understood for an effective research study.
5th	Human Population Genetics	ANT-HC-5016	Students will learn about mechanisms which create variation in gene frequencies. Students will learn the

			method of assessing gene frequency variation. Students will learn how ecological factors which help maintain gene frequencies.
	Anthropology In Practice	ANT-HC-5026	The knowledge of Applied Anthropology, Action Anthropology and Role of Anthropology in Development. Student will gain knowledge of recent trend of Anthropology.
	Indian Archaeology	ANT-HE-5016	The students will be familiar with the rich prehistoric past of the country. The students will understand the prehistoric foundation on which the later course of history in the country developed
	Anthropology Of Religion, Politics & Economy	ANT-HE-5026	The knowledge on the anthropological theories of religion, economies and political institutions will be gained. The knowledge on the interrelationship between religion, economies and political institutions will be achieved.
6th	Forensic Anthropology	ANT-HC-6016	Students will learn about distinguishing human from non-human skeletal remains. Students will learn about the techniques of making personal identification.
	Anthropology Of India	ANT-HC-6026	The students will learn about racial linguistic and ethnic dimension of Indian society. The students will be familiar with the anthropological

			situation of the country
	Dissertation	ANT-HE 6016	The knowledge of conducting fieldwork by applying anthropological methods will be gained. The knowledge of data analysis and writing based on the collected data will be learned.
	Demographic Anthropology	ANTH-HE 6036	The students will learn about the structure and function human genome. The students will learn how genomic variation is studied. The students will learn about the genomic diversity and human evolution.

Course Outcome (B.A/B.Sc/B.Com CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	Introduction To Biological Anthropology	ANT-RC-1016	Students will learn about the genesis and development of biological anthropology. Students will gain knowledge about the aspects from which evolution and variation is studied.
2nd	Introduction To Socio-Cultural Anthropology	ANT-RC-2016	The basic theoretical knowledge about Social and Cultural Anthropology can be achieved. The knowledge of first-hand field data collection and analysis can be gained.
3rd	Archaeological Anthropology	ANT-RC-3016	Student will be acquainted with archaeometrical background of prehistoric, protohistoric and

			historical evolution of human culture. Students will have practical understanding of prehistoric culture through tool technology and pottery technology
4th	Anthropology In Practice	ANT-RC-4016	The knowledge of Applied Anthropology, Action Anthropology and Role of Anthropology in Development. Student will gain knowledge of recent trend of Anthropology.
5th	Anthropology Of Religion, Politics And Economy Credit	ANT-RE-5016	The knowledge on the anthropological theories of religion, economies and political institutions will be gained. The knowledge on the interrelationship between religion, economies and political institutions will be achieved
	Fundamentals Of Human Origin & Evolution	ANT-GE-5026	Students will learn about the stages of human evolutionary development. Will know about the fossil finds on the basis of which the evolutionary stages are identified.
6th	Human Ecology: Biological And Cultural Dimensions	ANT-GE-6016	The knowledge on human adaptation in ecology will be gained. The knowledge on urbanization and industrialization in human societies will be achieved.

Name of the Department: BOTANY
Course Outcome B.Sc. (Honours) CBCS

Semester	Paper Name	Paper Code	Course Outcome
1st	Phycology and Microbiology	BOT-HC-1016	Microbiology explores microorganisms, while phycology studies algae, informing biotechnology, medicine, and environmental management, contributing to diverse scientific advancements.
	Biomolecule and Cell Biology	BOT-HC-1026	Biomolecule and cell biology discoveries advance medicine, biotechnology, and our understanding of life processes, shaping diverse fields for societal benefit.
2nd	Mycology and Phyto pathology	BOT-HC-2016	Phytopathology studies plant diseases, enhancing crop protection, food security, and sustainable agriculture by developing strategies to manage and control pathogens.
	Archegoniates	BOT-HC-2026	Archegoniates are non-vascular plants with archegonia. Outcome involves diverse plant forms, contributing to ecosystems, demonstrating evolutionary transitions in plants.
3rd	Morphology and Anatomy of Angiosperms	BOT-HC- 3016	Study of angiosperm morphology and anatomy informs plant classification, evolution, and breeding, aiding agriculture, ecology, and biodiversity conservation.
	Economic Botany	BOT-HC- 3026	Economic botany explores plant use for human needs, impacting agriculture, medicine, industry, and environmental sustainability, fostering economic development globally.
	Genetics	BOT-HC- 3036	Genetics yields insights into heredity, disease, and evolution, advancing medicine, agriculture, and biotechnology, shaping diverse fields for

			societal benefit.
4th	Molecular Biology	BOT-HC- 4016	Molecular biology unravels genetic mechanisms, facilitating advances in medicine, biotechnology, and understanding life processes at the molecular level, driving innovation and discovery.
	Plant Ecology and Phytogeography	BOT-HC- 4026	Plant ecology and phytogeography enhance understanding of plant distribution, interactions, and ecosystems, informing conservation, land use, and biodiversity management globally.
	Plant Systematics	BOT-HC- 4036	Plant systematics classifies and names plants, providing insights into evolutionary relationships, aiding conservation, breeding, and understanding biodiversity patterns globally.
5th	Reproductive biology of Angiosperm	BOT-HC-5016	Reproductive biology of angiosperms explores flower structure, pollination, and seed development, contributing to agriculture, biodiversity, and ecosystem functioning understanding.
	Plant Physiology	BOT-HC-5026	Plant physiology studies plant functions, such as photosynthesis and nutrient uptake, informing agriculture, environmental management, and biotechnological advancements for sustainability and productivity.
	Natural Resource Management	BOT-HE-5016	Natural Resource Management optimizes resource use for sustainability, balancing ecological integrity, economic development, and societal well-being, ensuring long-term environmental health and resilience
	Horticultural Practices and PostHarvest Technology	BOT-HE-5026	Horticultural practices and post-harvest technology enhance crop yield, quality, and shelf life, ensuring efficient food production,

			storage, and distribution.
6th	Plant Metabolism	BOT-HC-6016	Plant metabolism elucidates biochemical processes, like photosynthesis and respiration, critical for growth, development, and stress responses, advancing agriculture and biotechnology.
	Plant Biotechnology	BOT-HC-6026	Plant biotechnology revolutionizes agriculture, enabling genetic modifications for improved crop traits, disease resistance, and sustainable food production, ensuring global food security.
	Industrial and Environmental Microbiology	BOT-HE-6016	Industrial and environmental microbiology harnesses microorganisms for biotechnology, waste treatment, and pollution control, contributing to sustainable practices and cleaner environments.
	Project / Dissertation	BOT-HE-6036	Successful projects or dissertations demonstrate research skills, critical thinking, and contribute valuable insights, enhancing knowledge in the respective field.

Course Outcome B.Sc/ CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	Biodiversity(Microbes, Algae, Fungi and Archegoniate)	BOT-HG-1016	Microbes, algae, fungi, bryophytes, and pteridophytes contribute to ecosystem stability, nutrient cycling, and human well-being, preserving biodiversity and ecosystems.
2nd	Plant Ecology and Taxonomy	BOT-HG-2016	Plant ecology explores interactions in plant communities, aiding conservation. Taxonomy classifies plants, informing

			biodiversity studies, aiding conservation, and ecosystem management.
3rd	Plant Physiology and Metabolism	BOT-HG-3016	Plant physiology studies how plants function. Metabolism explores chemical processes. Insights aid agriculture, biotechnology, and environmental
4th	Plant Anatomy and Embryology	BOT-HG-3026	Plant anatomy and embryology study plant structure and development. Insights aid agriculture, breeding, and understanding plant growth for diverse applications.
5th	Economic Botany and Plant Biotechnology	BOT-HG-4016	Economic botany studies plant uses. Plant biotechnology develops applications, improving crop yields, disease resistance, and medicinal compounds, benefiting agriculture and industries.
6th	Analytical Techniques in Plant Science / Project/ Dissertation	BOT-HG-4026	Analytical techniques in plant science refine research, enabling precise analysis of plant compounds, aiding breeding, medicine, and environmental monitoring for sustainable applications

Name of the Department: CHEMISTRY

Course Outcome (B.A/B.Sc/B.Com CBCS Honours)

Sem	Paper Name	Paper Code	Course Outcome
1st	INORGANIC CHEMISTRY-I	CHE-HC-1016	This course aims at giving students theoretical understanding about the basic constituents of matter – atoms, ions and molecules in terms of their electronic structure and reactivity. Structure and bonding in/of these are to be dealt with basic quantum chemistry treatment. Reactivity of chemical species based on their electron transfer affinity is introduced. Further, periodic classification of elements in the periodic table and changes in properties along the periods and groups to be studied in detail. Accompanying laboratory course is designed for students to have hands-on experience of basic quantitative analytical techniques related to volumetric titrations.
	PHYSICAL CHEMISTRY I	CHE-HC-1026	In gaseous state unit the students will learn the kinetic theory of gases, ideal gas and real gases. In liquid state unit, the students are expected to learn the qualitative treatment of the structure of liquid along with the physical properties of liquid, viz, vapour pressure, surface tension and viscosity. In the molecular and crystal symmetry unit they will be introduced to the elementary idea of symmetry which will be useful to understand solid state chemistry and group theory in some higher courses. In solid state unit the students will learn the basic solid state chemistry application of x-ray crystallography for the determination of some very simple crystal structures. The students will also learn another important topic "ionic equilibria" in this course.
2nd	ORGANIC CHEMISTRY I	CHE-HC-2016	This course is inducted to apprise students with introduction to organic compounds, electron displacement, type of reagents and reaction intermediates. The chemistry of aliphatic and

			aromatic hydrocarbon, conformational analysis of cycloalkanes and basic stereochemical phenomena are included. Students are expected to learn different classes learn, explain, describe and analyze different classes of organic compounds, their reactivities and mechanisms along with stereochemical considerations.
	PHYSICAL CHEMISTRY II	CHE-HC-2026	In this course the students are expected to learn laws of thermodynamics, thermochemistry, thermodynamic functions, relations between thermodynamic properties, Gibbs Helmholtz equation, Maxwell relations etc. Moreover the students are expected to learn partial molar quantities, chemical equilibrium, solutions and colligative properties. After completion of this course, the students will be able to understand the chemical systems from thermodynamic point of view.
3rd	INORGANIC CHEMISTRY-II	CHE-HC-3016	This course starts with the basic principles of metallurgy so as to acquaint the students with the application of the redox chemistry they have learnt in the earlier course on inorganic chemistry. Concepts of protonic and non-protonic acids and bases are introduced for students to appreciate different types of chemical reactions. Periodic behavior of s and p block elements related to their electronic structure and their reactivity is included to acquaint students with the principles governing their reactivity. This course further intend to apprise students about the variety of compounds of the main group elements including oxides, hydrides, nitrides, interhalogens, noble gases and inorganic polymers. As part of the accompanying lab course, experiments involving iodo- and iodi-metric titrations are included for the students to explore other varieties of redox titration. Preparation of simple inorganic compounds is introduced to give hands-on experience of inorganic synthesis.

	Course	Code	Description
	ORGANIC CHEMISTRY-II	CHE-HC-3026	This course is intended to apprise students about different classes of organic compounds, including halogenated hydrocarbons, alcohols, phenols, epoxides, carbonyl compounds and carboxylic and sulfonic acids. Students are expected to learn and differentiate between various organic functional groups; explain, analyze and design transformations between different functional groups.
	PHYSICAL CHEMISTRY-III	CHE-HC-3036	The aim of this course is to teach students four important topics of physical chemistry- phase equilibria, chemical kinetics, surface chemistry and catalysis. Phase equilibria and chemical kinetics will be discussed in detail but surface chemistry and catalysis will be introduced to the students.
	IT SKILLS FOR CHEMISTS	CHE-SE-3024	The objectives of the proposed course are: 1) To provide the basic knowledge of mathematics which are needed to pursue chemistry as major subject. 2) To provide the necessary training for the basic programming knowledge. 3) The course provides information technology literacy and basic skills training for learners with limited experience. 4) To familiarize with the Introductory writing activities and Handling numeric data.
4th	INORGANIC CHEMISTRY-III	CHE-HC-4016	This course introduces students to coordination chemistry. Various aspects like nomenclature, structure, bonding, variety and reactivity of the coordination compounds are included for the students to appreciate. Bioinorganic chemistry is included in this course to acquaint students on the useful and harmful aspects of metals in biological systems. Through the accompanying lab course, experiments related to gravimetric analysis, synthesis of coordination compounds and separation of metal ions using chromatography is included. This will broaden the experimental skills of the students where students will learn about various aspects of experiment design

			depending upon the requirements like synthesis, estimation or separation.
	ORGANIC CHEMISTRY-III	CHE-HC-4026	The course intrudes students to different classes of N-based compounds, including alkaloids and terpenoids and their potential application. Students are expected to learn about different classes of N-based compounds; their structures, synthesis and reactivity.
	PHYSICAL CHEMISTRY-IV	CHE-HC-4036	The aim of this course is to introduce students with primarily two areas of physical chemistry- electrochemistry and electrical and magnetic properties of atoms and molecules. It contains three units- conductance, electrochemistry and electrical & magnetic properties of atoms and molecules.
5th	ORGANIC CHEMISTRY-IV	CHE-HC-5016	This course introduces students to nucleic acids, amino acids and pharmaceutical compounds. Students will be familiarized with the importance of nucleic acids, amino acids and develop basic understanding of enzymes, bioenergetics and pharmaceutical compounds.
	PHYSICAL CHEMISTRY V	CHE-HC-5026	The aim of this course is to introduce the students with three important areas- quantum chemistry, molecular spectroscopy and photochemistry. In quantum chemistry unit the students will be taught the postulates of quantum mechanics and the application of quantum mechanical ideas in some simple systems such as particle in a box, rigid rotor, simple harmonic oscillator etc. In spectroscopy unit, rotational, vibrational, Raman, electronic, spin resonance, and electronic spectroscopy will be introduced.
	ANALYTICAL METHODS IN CHEMISTRY	CHE-HE-5026	This is an elective course designed to complement the needs of students who wish to learn more about the qualitative/quantitative characterization and separation techniques. The content of this course aims to cover some of the widely used instrumental techniques for characterization of samples. Experiments included aim at giving students hands on

			experience using different instrumental techniques and chemical analysis.
6th	INORGANIC CHEMISTRY-IV	CHE-HC-6016	The unit on reaction mechanism is included for the students to get acquainted with the kinetic and thermodynamic factors governing the reaction path and stability of inorganic compounds. Organometallic compounds are introduced so as to apprise students about the importance of metal carbon bond to form complexes and their application as catalysts. Students are expected to learn factors leading to stability of organometallic compounds, their synthesis, reactivity and uses. Qualitative inorganic analysis is included to give students an idea and hands on experience of application of inorganic chemistry. Students should learn how differential reactivity under different conditions of pH can be used to identify variety of ions in a complex mixture. Experiments related to synthesis and characterization of coordination compounds are included to supplement their theoretical knowledge.
	ORGANIC CHEMISTRY-V	CHE-HC-6026	This is a basic course in organic spectroscopy and provides introduction to carbohydrate chemistry, dyes and polymers. Students are expected to learn about the different spectroscopic techniques and their applications in organic chemistry. Students shall be apprised with carbohydrate chemistry, dyes and polymers and their structure, reactivity and chemical properties.
	INDUSTRIAL CHEMICALS AND ENVIRONMENT	CHE-HE-6026	This course provides an introduction to the various industrial gases and inorganic chemicals, their manufacturing processes, applications, storage and the hazards of handling them. Contribution of these industrial chemicals towards air and water pollution and their effects on living organisms and the environment has also been covered. Students are also expected to learn about metallurgy, energy generation industry and the pollution threat they pose. This course also discusses about

			management of the different kinds of wastes, their safe disposal and the importance of practicing green chemistry in chemical industry.
	DISSERTATION	CHE-HE-6056	Student will complete a project work and then prepare a report on that.

Course Outcome (B.A/B.Sc/B.Com CBCS Generic)

Semester	Paper Name	Paper Code	Course Outcome
1st	Chemistry1 Atomic Structure, Bonding, General Organic Chemistry & Aliphatic Hydrocarbons	CHE-RC/HG-1016	This course may be divided into two broad parts-inorganic and organic chemistry. In inorganic chemistry part the students will be taught atomic structure, chemical bonding and molecular structure. The organic chemistry part contains fundamentals of organic chemistry, stereochemistry and aliphatic hydrocarbons. This paper attempts to provide the knowledge of the physical world. It not only includes the understanding of the subject of physical geography as a whole, but also specifically focuses on the study of the atmosphere, lithosphere and hydrosphere.
2nd	Chemistry2 S- And P-Block Elements, Transition Elements, Coordination Chemistry States Of Matter & Chemical Kinetics	CHE-RC/HG-2016	This course may be divided into two broad parts-inorganic and physical chemistry. Three units-main group elements, transition elements and co-ordination chemistry will be taught in the inorganic chemistry part. The physical chemistry part contains states of matter and chemical kinetics.

3rd	Chemistry 3 Chemical Energetics, Equilibria & Functional Organic Chemistry-I	CHE-RC/HG-3016	This course contains two broad parts- physical and and organic chemistry. In physical chemistry part the students will be taught chemical energetics, chemical equilibrium and ionic equilibrium. In organic chemistry part, the students will be introduced to different classes of organic compounds.
4th	Chemistry4 Solutions, Phase Equilibrium, Conductance, Electrochemistry & Functional Group Organic Chemistry	CHE-RC/HG-4016	This course may be divided into two broad parts- physical and organic chemistry. In 1st part of this course students will be introduced to solutions, phase equilibrium and electrochemistry. The 2nd part contains carboxylic acid and derivatives, amines and diazonium salt and biochemistry.

Name of the Department: GEOGRAPHY

Course Outcome (B.A/B.Sc/B.Com CBCS Honours)

Sem	Paper Name	Paper Code	Course Outcome
1st	Geomorphology	GGY-HC- 1016	This paper aims to provide an in-depth knowledge about the physical characteristics of the earth. Through this paper students will gain knowledge about the various aspects of the earth, especially the lithosphere. Focus is also given on the creation, evolution and also destruction of various landforms of the earth.
	Cartographic Techniques	GGY-HC-1026	This paper will help the students understand the importance of various cartographic techniques in geographical study. It also helps the students acquaint themselves with different cartographic techniques for representation of various facets of physical and human geographic data of any area.
2nd	Human Geography	GGY-HC-2016	This paper provides the students with the knowledge about the human aspects of geography which form the other aspects of the subject. Through this paper students are made well versed with the relationship between human beings and the natural world, i.e. the physical environment. The various philosophical contents of the paper attempt to provide the students with the philosophical background of the subject.
	Climatology and Biogeography	GGY-HC-2026	This paper will be useful for students in developing ideas on climate related aspects of geographical analysis. This paper will provide theoretical insights and perspectives to students if they wish to pursue a research programme in future.
3rd	Economic Geography	GGY-HC-3016	This paper intends to provide the students with the knowledge of how various economic activities are related with geography. The workings of the various economic sectors like primary, secondary and tertiary are specifically focused upon so that a better understanding of the relationship between geography

			and economics can be provided.
	Geography of India with special reference to N.E. India	GGY-HC-3026	This paper intends to provide the students with the knowledge about the diversity of India giving special focus on the geographical diversity of North-East India.
	Quantitative Methods in Geography	GGY-HC-3036	This paper aims to equip the students with an in-depth theoretical knowledge about the quantitative methods that are often used in the study of geography.
	Thematic Cartography	GGY – SE-3054	Through this paper students can learn about the importance of various techniques of preparation of maps in geographical study. They will also gain a general understanding of preparation of different types of plans and maps. Further they are also trained with different cartographic techniques for representation of various facets of earth's surface
4th	Environmental Geography and Disaster management	GGY-HC-4016	The paper will be useful for students in developing ideas on environmental issues that the geographers usually encounter. This paper will develop new insight among students in the importance of environmental studies from a spatial perspective.
	Population and Settlement Geography	GGY-HC-4026	This paper aims to impart the students with the knowledge of population and human settlements. Since human geography is another branch of geography, students can learn about the various aspects of human life. In addition to this, students are also taught theories related to population growth and distribution. Students therefore can learn about the various factors that influence the distribution and growth of population and settlement around the world.
	Remote sensing GIS and GPS	GGY-HC-4036	This paper aims to teach students about modern technological applications in geography. Students can gain in-depth theoretical and practical knowledge about the use of remote sensing, GIS and GPS, in the study of geography and in the conduct of geographic researches.

5th	Social and political Geography	GGY-HC-5016	This paper will help the students comprehend various social and political aspects of phenomena and their interface within the realm of geography.
	Field Techniques in Geography	GGY-HC-5026	This course will assist students in addressing a research problem by guiding them through the necessary steps, the tools, and the craft required for conducting quality research. They can also perceive fieldwork as beneficial to their learning because, through it, they experience geographical reality and gain a deeper understanding of the subject.
	Regional Development and Planning	GGY-HE-5026	This paper will be useful for students in developing ideas on disparities within and between countries and their fall out. The paper will provide theoretical insight and perspectives to students, if they wish to pursue a higher studies or research in future. Students will also be able to learn different statistical techniques to analyze geographical aspects.
	Agricultural Geography	GGY-HE-5046	This paper will be useful for students in developing ideas about agricultural practices and their distribution and characteristics. This paper will also help the students in understanding the world agricultural systems and location of agricultural activities and associated contemporary problems and challenges.
6th	Geographical Thought	GGY-HC-6016	This paper will develop a comprehensive understanding of the discipline. This course will also help the students to apply the historic and contemporary perspective to explain and approach the actual geographic problems.
	Research Methods and Project Work	GGY-HC-6026	This course will assist students in navigating a research problem, guiding them through the steps they should adopt and introducing the tools and skills necessary for conducting quality research.
	Geography of Health	GGY-HE-6016	This paper will help the students in understanding the concept of human health and health care from the perspective of geography. This paper will also help the students acquire

	Geography of Tourism	GGY-HE-6036	This paper will be valuable for students as it explores how geographical factors intersect with tourism activities. It delves into how geographers address issues related to development and carrying capacities in diverse environments.
			knowledge about factors influencing human health and occurrence of diseases in varying ecological settings.

Course Outcome (B.A/B.Sc/B.Com CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	Physical Geography	GGY-HG/RC-1016	This paper attempts to provide the knowledge of the physical world. It not only includes the understanding of the subject of physical geography as a whole, but also specifically focuses on the study of the atmosphere, lithosphere and hydrosphere.
2nd	Human geography	GGY-HG/RC 2016	This paper provides the students with the knowledge about the human aspects of geography which form the other aspect of the subject. Through this paper students are made well versed with the relationship between human beings and the natural world, i.e. the physical environment. The various philosophical contents of the paper attempt to provide the students about the philosophical background of the subject.
3rd	Economic Geography	GGY-HG/RC-3016	This paper intends in developing the understanding of the students on how geographical factors organize economic space, and to acquire knowledge about spatial patterns of various economic activities on the earth.
4th	Geography of India with Reference N.E. India	GGY-HG/RC-4016	This paper will be useful for students in developing understanding on Indian geography and its various dimensions.

5th	Cartographic and Quantitative Techniques	GGY-RE-5026	Students will learn the importance of various statistical and cartographic techniques in geographical studies and general understanding of geographical data, map type, map scale and map content.
	Population and Settlement Geography	GGY-GE-5016	The paper will be useful for students in developing ideas about spatio-temporal changes in the characteristics of population and settlement and the factors associated with them.
	Geography of Tourism	GGY-SE-5024	This paper will be valuable for students as it explores how geographical factors intersect with tourism activities and how geographers address issues of development and carrying capacities in various environments. Additionally, it aims to build skills for students interested in enrolling in a research program.
6th	Social and Political Geography	GGY-RE-6016	This course will help the students comprehend various social and political aspects of phenomena and their interface within the realm of geography.
	Geography of Health	GGY-GE-6016	This paper will help the students in understanding of the concept of human health and health care from the perspective of geography. This paper will also provide knowledge about factors influencing human health and occurrence of diseases in varying ecological settings.
	Environmental Impact Assessment	GGY-SE-6024	This paper will be useful for students in developing ideas on environmental impact assessment. This paper will also be useful for the students who wish to work in environmental organizations, NGOs, environmental policy making etc.

Name of the Department: GEOLOGY

Course Outcome (B.A/B.Sc/B.Com CBCS Honours)

Semester	Paper Name	Paper Code	Course Outcome
1st	Earth System Science	GLG-HC-1016	Understand about the mechanism of dynamic earth system through Astronomy, Meteorology, and Oceanography together with earth's magnetic field. Acquire knowledge about different branches of geology and its multidisciplinary approach. Understand about the earth's origin and evolution in the solar system with various planets. Understand Plate Tectonic Theory, formation of major structural features of earth and their significances. Study different activities, effects and theories relating to Hydrosphere and Atmosphere; element behavior with cosmic abundance of elements. Study Soil Geology, principles and theories of Stratigraphy. Interpret and study of major geomorphic features, soil profile, major ocean currents, major dams of India, seismic profiles of an area.
	Mineral Science	GLG-HC-1026	Study of crystallography with its various practical implementation. Study mineralogy with its various aspects like scope, classification, properties (physical, optical, atomic structures & chemical structures), with some group minerals. Recognize minerals in hand specimen using laboratory techniques. Recognize minerals under microscope and determine optic sign of minerals.
2nd	Elements Of Geochemistry	GLG-HC-2016	Study chemical bodings and geochemical classification of elements. Study the principles governing the distribution of elements and isotopes in earth material to understand the condition of

			formation. Understand about the geochemical behavior of earth with meteorites.
			Acquire basic knowledge to Analyze, interpret and plot of geochemical data and study of variation diagrams.
	Structural Geology	GLG-HC-2026	Acquire knowledge to analyze structural features on topographic and structural maps. Basic concept of stress and strain, deformational processes. Concept of Foliation, Lineation, Folding and Faulting. Analyze topographic features with various scales. Interprets and analyze Geologic maps and megascopic structures. Carryout 3-point problems, stereographic projections.
3rd	Igneous Petrology	GLG-HC-3016	Theory Knowledge of the geothermal gradients through time, origin and nature of magma, classification of Igneous rocks, learn texture and structures of Igneous rocks, study of mode of occurrence of Igneous rocks, application of the principles of phase equilibrium, study of Magmatism in different tectonic settings, knowledge on Petrogenesis of different Igneous rocks Practical Study of important Igneous rocks in hand specimen and thin section, Identification of Igneous textures in hand specimens and thin section
	Sedimentary Petrology	GLG-HC-3026	Theory Study origin of sediments, Understand sediment granulometry, knowledge of sedimentary textures, structures and environment, study of different types

			of sedimentary rocks, understand the concept of diagenesis Practical Identification of Sedimentary Structures, Understand Particle size distribution and statistical treatment, Knowledge of Paleocurrent analysis, Identification of clastic and non-clastic rocks through hand specimens and thin sections.
	Paleontology	GLG-HC-3036	Theory Understand the fossilization process and modes of preservation, knowledge of Paleobotany and Ichnology, study of species concept , learn the theory of organic evolution interpreted from fossil record, study of important invertebrate groups and their bio-stratigraphic significance, study of the significance of ammonites in Mesozoic biostratigraphy and their implications, understand the origin of Vertebrates and major steps in vertebrate evolution, study of Mesozoic reptiles , evolution of Horse and evolution of Human, knowledge of application of fossils in Stratigraphy Practical Study of fossils showing various modes of preservation, Identification of diagnostic morphological characters, stratigraphic position and age of various invertebrate, vertebrate and plant fossils.
	Basic Field Training	GLG-SE-3014	Orientation of Topographic sheet in field, Concepts of map reading, Identification of rock types in field Learn structures and texture of rocks, Knowledge of

			basic field measurement techniques, Study of contours and topography.
	Geological Mapping	GLG-SE-3024	Preparation of Geological map, Study of Primary and secondary structures, Measurement of trend, plunge , Rake/Pitch, Learn stereoplots of linear and planar structures.
	Economic Geology Field Work	GLG-SE-3034	Module- I Visit to any mineral deposit, Study of ore host rock interrelation, Knowledge of different ore formation process, Understand basic techniques of surveying Module- II Visit to underground or open cast mine, Learn different mining methods, knowledge of Underground mapping/ Bench mapping, knowledge of Isopach and Isochore maps
	Himalayan Geology Field Work	GLG-SE-3044	Identification and characterization of major structural boundaries in Himalaya Identification of Himalayan and pre- Himalayan elements
4th	Metamorphic Petrology	GLG-HC-4016	Theory Study of factors and different types of metamorphism, knowledge of metamorphic facies and grades, learn mineralogical phase rule of closed and open system, study of structure and texture of metamorphic rocks, understand the relationship between metamorphism and deformation, concept of metamorphic mineral reactions, knowledge of metasomatism and role of fluids in metamorphism, study of different types of metamorphic rocks Practical Megascopic and microscopic Study of different

			metamorphic rocks
			Knowledge of graphic plots for petrochemistry and interpretation of assemblages
	Stratigraphic Principles And Indian Stratigraphy	GLG-HC-4026	Theory
			Knowledge of lithostratigraphy, biostratigraphy, and chronostratigraphy
			Concepts of dynamic stratigraphy
			Learn International Stratigraphic Code
			Understand the concepts of Stratotypes
			Knowledge of physiographic and tectonic subdivision of India
			Study of Indian Shield and Proterozoic basins of India
			Learn Phanerozoic Stratigraphy of India
			Knowledge of volcanic provinces of India
			Concept of Stratigraphic boundaries
			Practical
			Study of geological map of India and Identification of major stratigraphic units
			Knowledge of Indian stratigraphic rocks
			Preparation of paleogeographic maps of Precambrian time
			Knowledge of different Proterozoic supercontinent reconstructions
	Hydrogeology	GLG-HC-4036	Theory
			Knowledge of Hydrologic cycle
			Learn Darcy's law and its validity
			Study of laminar and turbulent groundwater flow
			Concepts of well hydraulics and groundwater exploration
			Study of physical and chemical properties of water

			and water quality
			Basic concept of water balance studies
			Knowledge of Rainwater harvesting and artificial recharge of groundwater
			Practical
			Preparation and interpretation of water level contour maps and depth to water level maps
			Study water potential zones of India
			Knowledge of graphical representation of chemical quality data and water classification
			Learn simple numerical problems related to determination of permeability in field and laboratory, Groundwater flow, Well hydraulics etc.
	Precambrian Geology Field Work	GLG-SE-4014	Study of craton ensemble including basic intrusive suites
			Knowledge of Precambrian sedimentary basin.
	Visit To Engineering Project Sites	GLG-SE-4024	Preparation of geological map of a project site
			Identification of geotechnical problems of a project site and remedial measures to be taken
			Study of environmental problems of a project site and remedial measures to be taken
			Computation of rock mass properties in field
			Identification of probable sites of Natural Disaster and suggestions about preventive measures
	Stratigraphy And Paleontology Field Work	GLG-SE-4034	Field training along Phanerozoic basin of India
			Documentation of stratigraphic details in thefield
			Collection of sedimentological, stratigraphic and paleontological data
			Understanding of facies concept and its spatio-temporal relation
			Knowledge of fossil sampling techniques and their

			descriptions
	Project Work	GLG-SE-4044	Preparation of a Geological Project Work
5th	Economic Geology	GLG-HC-5016	Introduction to economically important minerals and their ores and their origin

Mineral occurrence, mineral deposit, ore deposit and classical concept related to their genesis.

Geological mapping of mineral deposit at different scales, drilling, borehole logs and transverse sections and their exploration and exploitation techniques

Study of structure and texture of ore deposits and endogenetic and exogenetic process of formation of ore deposits   .

Definition of metallogenic provinces and epochs.

Study of important deposits of India

Introduction to gemstones.

Practical

Megascopic and microscopic identification of ore minerals

Preparation of maps showing distribution of important ores and other economic minerals in India and assessment of grade of ore and reserve estimation |
| | Geomorphology | GLG-HC-5026 | **Theory**

Introduction to Geomorphology and study of large scale topography-- Ocean basins, Plate tectonics overview, Large scale mountain ranges with emphasis on Himalaya.

Study of surficial processes and associated landforms and associated with igneous activities

Study of endogenic- exogenic interactions and |

			tectonics related to landform development
			An overview of Indian Geomorphology
			Practical
			Preparation of a topographic profile, calculating Stream length gradient index
			Preparation of geomorphic map and calculating of different morphometric parameters
	Exploration Geology	GLG-HE-5016	**Theory**
			Classification of mineral deposits with respect to processes of formation in relation to exploration strategies.
			Perspectives of Mineral resources in industries
			Study of principles and methodology of Prospecting and Exploration of mineral deposits
			Practicals
			Evaluation of sampling data
			Planning of bore holes and location of boreholes on ground
			Study of Principles of reserve estimation, density and bulk density
			Reserve estimation based on geometrical models
			Study of Geological cross-section
	Earth And Climate	GLG-HE-5026	**Theory**
			Components of the climate system
			Controlling factors of climate
			Earth's heat budget. Interactions amongst various sources of earth's heat
			Atmospheric circulation, interaction of atmosphere and ocean and its effect on climate
			Study of Global oceanic conveyor belt and its control on earth's climate

			Study of sea ice and glacial ice
			Archives of climate change, future perspectives and archive based climate change data from the Indian continent
			Study of Milankovitch cycles and variability in the climate, Glacial-interglacial stages and Marine isotope stages
			Understanding the mechanism of monsoon and study of factors associated with monsoonal intensity, monsoonal variation through time and its effects
			Practicals
			Study of distribution of major climatic regimes of India on map
			Preparation of paleogeographic maps (distribution of land and sea) of India during specific geological time intervals.
6th	Engineering Geology	GLG-HC-6136	**Theory**
			Role of Engineering geologists in planning, design and construction of major man-made structural features
			Geological, Geotechnical and Environmental characterization for Dams and Reservoirs, Tunnels
			Properties of rock their significance as construction material
			Study of causes, factors and preventive measures of Landslides and Earthquakes
			Practical
			Computation of reservoir area, catchment area, reservoir capacity and reservoir life.
	Remote Sensing AndGis	GLG-HC-6146	**Theory**
			Interpretation of aerial photograph and identification of sedimentary, igneous and metamorphic rocks and

			various aeolian, glacial, fluvial and marine landforms
			Concept of remote sensing and study of Raster and Vector Data formats
			Digital Image Processing and GIS integration and Case studies with Indian Examples
			Study of spatial data models and data editing in GIS and concept of DEM analysis
			Integrating GPS data with GIS and applications in earth system sciences
			Practicals Introduction to DIP and GIS softwares and Digital Image Processing exercises including analysis of satellite data in different bands and interpretation of various objects on the basis of their spectral signatures. Practical knowledge on DEM analysis and generating slope map, aspect map and drainage network map and its applications
	Fuel Geology	GLG-HE-6036	**Theory** Fundamentals of Coal Petrology and origin and basic classification of coal
			Coal liquefaction, underground coal gasification and global and Indian scenario of CBM (Coal Bed Methane)
			Chemical composition, physical properties of crudes in nature and origin of petroleum
			Study of maturation of kerogen; Biogenic and Thermal effect
			Study of petroleum Reservoir rocks and their Classification

			Classification of Hydrocarbon traps, time of trap formation and time of hydrocarbon accumulation.
			Concept of Plate tectonics and global distribution of hydrocarbon reserves
			Study of gas hydrates and nuclear fuels
			Practicals Study of coal in hand specimens and reserve estimation of coal
			Section correlation and identification of hydrocarbon prospect
	Introduction To Geophysics	GLG-HE-6046	**Theory** Use of integrated geological and geophysical data in explaining geodynamical features of the earth.
			Study of different types of geophysical methods their principles and applications
			Concept of geophysical field operation, study of different types of surveys and presentation of geophysical data
			Concept of regional geophysics, oil and gas geophysics, ore geophysics, groundwater geophysics, engineering geophysics
			Study of geophysical anomaly and their controlling factors
			Application of integrated geophysical methods and execution of geophysical surveys **Practicals**
			Study of seismic reflector geometry and problems on gravity anomaly.

Course Outcome (B.A/B.Sc/B.Com CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	General And Structural Geology	GLG-RC-1016	Acquire knowledge about different branches of Geology and its multidisciplinary approach. Study of Earth, its relation to Solar system as well as earth's major structural features. Study of different endogenic and exogenic activities, their types, effects. Basic knowledge of structural geology, deformational and formational mechanism of different structural features. Analyze contour patterns, topographic maps & geomorphic features through models. Carry out profile sections of topographic maps and solution of various structural problems with stereographic net. Experience Geological Field activities and prepare Field Report
2nd	Crystallography And Mineralogy	GLG-RC-2026	Study crystallography with its different aspects. Knowledge of normal classes of all systems. Study of physical, optical properties and chemical composition of various minerals. Acquire knowledge of practical of crystallography, physical and optical mineralogy.
3rd	Petrology	GLG-HG-3036	Knowledge of Magma: composition, origin and types Study of crystallization of magma Understanding of mode of occurrence and classification of Igneous rocks Petrographic study of differentrock types Understanding of processes of formation of Sedimentary rocks Study of textures and structures of Sedimentary rocks Knowledge of Metamorphic rocks : definition ,factors,

			grades and zones of metamorphic rocks
			study of structures of metamorphic rocks
			Practical
			Identification of different Igneous, Sedimentary and Metamorphic rocks in hand specimen
			Study of different Igneous, Sedimentary and Metamorphic rocks in thin sections
4th	Stratigraphy And Palaeontology	GLG-HG-4046	Theory Concept of stratigraphy, Principles of Stratigraphy Knowledge of Standard Geological time scale Study of the Precambrian Stratigraphy of India Understanding of Phanerozoic succession of India Knowledge of Palaeontology, definition and kinds of fossils Study of morphological characters and geological distribution of different Phyla/ Classes Knowledge of Evolutionary history of Horse Study of plant fossils of Gondwana flora Practical Preparation of Lithostratigraphic maps of India showing distribution of important geological formation Identification of different genera of fossils by their external morphological characters and study of their stratigraphic ranges
5th	Discipline Specific Elective (Dse 1)	GLG-RE-5016	**Theory** Introduction to economic geology, metallic and non metallic ore minerals and their genesis Study of mineralogy, mode of occurrence, origin and uses of Indian economic mineral deposits. Origin and occurrence of coal and petroleum in India Introduction to hydrological parameters, hydrological cycle

			and origin of ground water
			Study of water bearing properties of rocks and surface and sub-surface geophysical and geological methods of groundwater exploration
			Overview of ground water provinces of India
			Practicals Identification of the following economic minerals in hand specimens
			Preparation of map showing distribution of important metallic minerals, non metallic minerals and important oil and coal fields of India.
			Study of hydrogeological models, estimation of porosity and permeability from the given data. Preparation and interpretation of water table maps
	Geochemistry	GLG-SE-5032	Basic knowledge of Geochemistry, crystal chemistry and elementary idea of periodic table.
			Concept of cosmic abundance of elements; composition of the planets and meteorites and geochemical evolution of the earth.
			Distribution of major, minor and trace elements in igneous, metamorphic and sedimentary rocks.
			Concept of elements of geochemical thermodynamics and isotope geology

6th	Elements Of Applied Geology	GLG-RE-6026	**Theory** Processes of soil formation, engineering properties of rocks and soil and different Soil types of India. Types of dam and geological and environmental considerations of dams Geological considerations for construction of tunnels Classification of landslide its causes and mitigation. Concept of mineral prospecting and exploration Concept of Mining, types of mining, impact of mining on environment. **Practicals** Practical knowledge of surveying by plane table/ prismatic compass/ theodolite. Preparation of engineering geological maps, engineering properties and identification of building stones. Identification of various types of landslide and dams in representative models/ figures/ photographs. Study of soil profiles.
	Skill Enhancement Course (SEC) Photogeology And Remote Sensing	GLG-SE-6042	Concept of Remote Sensing, energy sources for Remote Sensing; Sensor & platform; Introduction photo-geology, aerial photographs and satellite images and factors effecting aerial photographs and photographic scale. Application of Remote Sensing in Geo- sciences and geomorphological studies. Concept of Digital image processing and fundamental steps in image processing Types of Indian and Foreign Remote Sensing Satellites. Components of GIS, tools for map analysis and integration of GIS with remote sensing.

Name of the Department: MATHEMATICS
Course Outcome (B.A/B.Sc. CBCS Honours)

Semester	Paper Name	Paper Code	Course Outcome
1st	Calculus	MAT-HC-1016	i) Learn first and second derivative tests for relative extremum and apply the knowledge in problems in business, economics and life sciences. ii) Sketch curves in a plane using its mathematical properties in different coordinate systems. iii) Compute area of surfaces of revolution and the volume of solids by integrating over cross-sectional areas. iv) Understand the calculus of vector functions and its use to develop the basic principles of planetary motion.
	Algebra	MAT-HC-1026	i) Employ De Moivre's theorem in a number of applications to solve numerical problems. ii) Learn about equivalent classes and cardinality of a set. iii) Use modular arithmetic and basic properties of congruences. iv) Recognize consistent and inconsistent systems of linear equations by the row echelon form of the augmented matrix. v) Learn about the solution sets of linear systems using matrix method and Cramer's rule
2nd	Real Analysis	MAT-HC-2016	i) Understand many properties of the real line R, including completeness and Archimedean properties. ii) Learn to define sequences in terms of functions from N to a subset of R. iii) Recognize bounded, convergent, divergent,

			Cauchy and monotonic sequences and to calculate their limit superior, limit inferior, and the limit of a bounded sequence. iv) Apply the ratio, root, alternating series and limit comparison tests for convergence and absolute convergence of an infinite series of real numbers.
	Differential Equations	MAT-HC-2026	i) Learn basics of differential equations and mathematical modeling. ii) Formulate differential equations for various mathematical models. iii) Solve first order non-linear differential equations and linear differential equations of higher order using various techniques. iv) Apply these techniques to solve and analyze various mathematical models.
3rd	Theory of Real Functions	MAT-HC-3016	i) Have a rigorous understanding of the concept of limit of a function. ii) Learn about continuity and uniform continuity of functions defined on intervals. iii) Understand geometrical properties of continuous functions on closed and bounded intervals. iv) Learn extensively about the concept of differentiability using limits, leading to a better understanding for applications. v) Know about applications of mean value theorems and Taylor's theorem
	Group Theory - I	MAT-HC-3026	i) Recognize the mathematical objects that are groups, and classify them as abelian, cyclic and permutation groups, etc. ii) Link the fundamental concepts of groups and symmetrical figures.

			iii) Analyze the subgroups of cyclic groups and classify subgroups of cyclic groups.
			iv) Explain the significance of the notion of cosets, normal subgroups and factor groups.
			v) Learn about Lagrange's theorem and Fermat's Little theorem.
			vi) Know about group homomorphisms and group isomorphisms
	Analytical Geometry	MAT-HC-3036	i) Learn conic sections and transform co-ordinate systems
			ii) Learn polar equation of a conic, tangent, normal and properties
			iii) Have a rigorous understanding of the concept of three dimensional coordinates systems
SEC-1	Computer Algebra Systems and Related Software	MAT-SE-3014	i) Use ofsoftwares; Mathematica/ MATLAB/ Maxima/ Maple etc. as a calculator, for plotting functions and animations
			ii) Use of CAS for various applications of matrices such as solving system of equations and finding eigenvalues and eigenvectors.
	Combinatorics and Graph Theory	MAT-SE-3024	i) Learn about the counting principles, permutations and combinations, Pigeonhole principle
			ii) Understand the basics of graph theory and learn about social networks, Eulerian and Hamiltonian graphs, diagram tracing puzzles and Knight's tour problem.
4th	Multivariate Calculus	MAT-HC-4016	i) Learn the conceptual variations when advancing in calculus from one variable to multivariable discussion.
			ii) Understand the maximization and minimization of

			multivariable functions subject to the given constraints
			iii) Learn about inter-relationship amongst the line integral, double and triple integral formulations.
			iv) Familiarize with Green's, Stokes' and Gauss divergence theorems
	Numerical Methods	MAT-HC-4026	i) Learn some numerical methods to find the zeroes of nonlinear functions of a single variable and solution of a system of linear equations, up to a certain given level of precision.
			ii) Know about methods to solve system of linear equations, such as False position method, Fixed point iteration method, Newton's method, Secant method and LU decomposition.
			iii) Interpolation techniques to compute the values for a tabulated function at points not in the table.
			iv) Applications of numerical differentiation and integration to convert differential equations into difference equations for numerical solutions.
	Ring Theory	MAT-HC-4036	i) Appreciate the significance of unique factorization in rings and integral domains.
			ii) Learn about the fundamental concept of rings, integral domains and fields.
			iii) Know about ring homomorphism and isomorphism theorems of rings.
			iv) Learn about the polynomial rings over commutative rings, integral domains, Euclidean domains, and UFD
SEC-2	R Programming	MAT-SE-4014	i) Become familiar with R syntax and to use R as a calculator.
			ii) Understand the concepts of objects, vectors and data types.

			iii) Know about summary commands and summary table in R.
			iv) Visualize distribution of data in R and learn about normality test.
			v) Plot various graphs and charts using R.
	LaTeX and HTML	MAT-SE-4024	i) Create and typeset a LaTeX document.
			ii) Typeset a mathematical document using LaTex.
			iii) Learn about pictures and graphics in LaTex.
			iv) Create beamer presentations.
			v) Create web page using HTML.
	Boolean Algebra	MAT-SE-4034	i) Learn about the order isomorphism, Hasse diagrams, building new ordered set.
			ii) Learn about the algebraic structure lattices, properties of modular and distributive lattices.
			iii) Get ideas about the Boolean algebra, Switching circuits and applications of switching circuits.
			iv) Appreciate the theory of automata and its applications
5th	Complex Analysis	MAT-HC-5016	i) Learn the significance of differentiability of complex functions leading to the understanding of Cauchy−Riemann equations.
			ii) Learn some elementary functions and can evaluate the contour integrals.
			iii) Understand the role of Cauchy−Goursat theorem and the Cauchy integral formula.
	Linear Algebra	MAT-HC-5026	i) Learn about the concept of linear independence of vectors over a field, and the dimension of a vector space.
			ii) Basic concepts of linear transformations, dimension theorem, matrix representation of a linear transformation, and the change of coordinate matrix.

			iii) Compute the characteristic polynomial, eigenvalues, eigenvectors, and eigenspaces, as well as the geometric and the algebraic multiplicities of an eigenvalue and apply the basic diagonalization result. iv) Compute inner products and determine orthogonality on vector spaces, including Gram−Schmidt orthogonalization to obtain orthonormal basis. v) Find the adjoint, normal, unitary and orthogonal operators.
	Number Theory	MAT-HE-5016	i) Learn about some fascinating discoveries related to the properties of prime numbers, and some of the open problems in number theory, viz., Goldbach conjecture etc. ii) Know about number theoretic functions and modular arithmetic. iii) Solve linear, quadratic and system of linear congruence equations.
	Mechanics	MAT-HE-5026	i) Know about the concepts in statics such as moments, couples, equilibrium in both two and three dimensions. ii) Understand the theory behind friction and center of gravity. iii) Know about conservation of mechanical energy and work-energy equations. iv) Learn about translational and rotational motion of rigid bodies.
	Probability and Statistics	MAT-HE-5036	i) Learn about probability density and moment generating functions. ii) Know about various univariate distributions such as Bernoulli, Binomial, Poisson, gamma and

			exponential distributions.
			iii) Learn about distributions to study the joint behavior of two random variables.
			iv) Measure the scale of association between two variables, and to establish a formulation helping to predict one variable in terms of the other, i.e., correlation and linear regression.
			v) Understand central limit theorem, which helps to understand the remarkable fact that: the empirical frequencies of so many natural populations, exhibit a bell-shaped curve, i.e., a normal distribution
	Linear Programming	MAT-HE-5046	i) Learn about the graphical solution of linear programming problem with two variables.
			ii) Learn about the relation between basic feasible solutions and extreme points.
			iii) Understand the theory of the simplex method used to solve linear programming problems.
			iv) Learn about two-phase and big-M methods to deal with problems involving artificial variables.
			v) Learn about the relationships between the primal and dual problems.
			vi) Solve transportation and assignment problems.
			vii) Apply linear programming method to solve two-person zero-sum game problems.
	Spherical Trigonometry and Astronomy	MAT-HE-5056	i) Learn about the properties of spherical and polar triangles.
			ii) know about fundamental formulae of spherical triangles.
			iii) learn about the celestial sphere, circumpolar star, rate of change of zenith distance and azimuth.
			iv) learn about Keplar's law of planetary motion,

			Cassini's hypothesis, differential equation for fraction.
	Programming in C	MAT-HE-5066	i) Understand and apply the programming concepts of C which is important to mathematical investigation and problem solving.
			ii) Learn about structured data-types in C and learn about applications in factorization of an integer and understanding Cartesian geometry and Pythagorean triples.
			iii) Use of containers and templates in various applications in algebra.
			iv) Use mathematical libraries for computational objectives.
			v) Represent the outputs of programs visually in terms of well formatted text and plots.
6th	Rieman Integration and Metric Spaces	MAT-HC-6016	i) Learn about some of the classes and properties of Riemann integrable functions, and the applications of the Fundamental theorems of integration.
			ii) Know about improper integrals including, beta and gamma functions.
			iii) Learn various natural and abstract formulations of distance on the sets of usual or unusual entities. Become aware one such formulations leading to metric spaces.
			iv) Analyse how a theory advances from a particular frame to a general frame.
			v) Appreciate the mathematical understanding of various geometrical concepts, viz. Balls or connected sets etc. in an abstract setting.
			vi) Know about Banach fixed point theorem, whose far-reaching consequences have resulted

			into an independent branch of study in analysis, known as fixed point theory. vii) Learn about the two important topological properties, namely connectedness and compactness of metric spaces.
	Partial Differential Equations	MAT-HC-6026	i) Formulate, classify and transform first order PDEs into canonical form. ii) Learn about method of characteristics and separation of variables to solve first order PDE's. iii) Classify and solve second order linear PDEs. iv) Learn about Cauchy problem for second order PDE and homogeneous as well as nonhomogeneous wave equations. v) Apply the method of separation of variables for solving second order PDEs.
	Boolean Algebra and Automata Theory	MAT-HE-6016	i) Learn about the order isomorphism, Hasse diagrams, building new ordered set. ii) Learn about the algebraic structure lattices, properties of modular and distributive lattices. iii) Get ideas about the Boolean algebra, Switching circuits and applications of switching circuits. iv) Appreciate the theory of automata and its applications
	Bio-Mathematics	MAT-HE-6026	i) Learn the development, analysis and interpretation of bio mathematical models such as population growth, cell division, and predator-prey models. ii) Learn about the mathematics behind heartbeat model and nerve impulse transmission model. iii) Appreciate the theory of bifurcation and chaos. iv) Learn to apply the basic concepts of probability to molecular evolution and genetics.

	Mathematical Modelling	MAT-HE-6036	i) Know about power series solution of a differential equation and learn about Legendre's and Bessel's equations. ii) Use of Laplace transform and inverse transform for solving initial value problems. iii) Learn about various models such as Monte Carlo simulation models, queuing models, and linear programming models.
	Hydromechanics	MAT-HE-6046	i) Know about Pressure equation, rotating fluids. ii) Learn about Fluid pressure on plane surfaces, resultant pressure on curved surfaces, Gas law, mixture of gases iii) Learn about the Eulerian and Lagrangian method. iv) Learn about equation of continuity, examples, acceleration of a fluid at a point
	Rigid Dynamics	MAT-HE-6056	i) Know how to find the moments and products of inertia. ii) Learn about the motion of the centre of inertia iii) Learn about the D'Alembert's principle and Lagrange's equations iv) Learn about motion of a body in two dimension
	Group Theory II	MAT-HE-6066	i) Learn about automorphisms for constructing new groups from the given group. ii) Learn about the fact that external direct product applies to data security and electric circuits. iii) Understand fundamental theorem of finite abelian groups. iv) Be familiar with group actions and conjugacy in Sn. v) Understand Sylow theorems and their applications in checking non-simplicity
	Mathematical	MAT-HE-	i) Know the basics of financial markets and

	Finance	6076	derivatives including options and futures.
			ii) Learn about pricing and hedging of options, as well as interest rate swaps.
			iii) Learn about no-arbitrage pricing concept and types of options.
			iv) Learn stochastic analysis (Ito formula, Ito integration) and the Black–Scholes model.
			v) Understand the concepts of trading strategies and valuation of currency swaps.

Course Outcome (B.A/B.Sc. CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	Calculus	MAT-HG-1016/ MAT-RC-1016	i) Understand continuity and differentiability in terms of limits. ii) Describe asymptotic behavior in terms of limits involving infinity. iii) Use derivatives to explore the behavior of a given function, locating and classifying its extrema, and graphing the function. iv) Understand the importance of mean value theorems.
	Analytic Geometry	MAT-HG-1026	i) Transform coordinate systems, conic sections ii) Learn polar equation of a conic, tangent, normal and related properties iii) Have a rigorous understanding of the concept of three dimensional coordinate systems iv) Understand geometrical properties of dot product, cross product of vectors
2nd	Algebra	MAT-HG-2016/MAT-RC-2016	i) Learn how to solve the cubic and biquadratic equations, also learn about symmetric functions of the roots for cubic and biquadratic

			ii) Employ De Moivre's theorem in a number of applications to solve numerical problems.
			iii) Recognize consistent and inconsistent systems of linear equations by the row echelon form of the augmented matrix. Finding inverse of a matrix with the help of Cayley-Hamilton theorem
			iv) Recognize the mathematical objects that are groups, and classify them as abelian, cyclic and permutation groups, ring etc.
			v) Learn about the concept of linear independence of vectors over a field, and the dimension of a vector space
	Discrete Mathematics	MAT-HG-2026	i) Understand the notion of ordered sets and maps between ordered sets.
			ii) Learn about lattices, modular and distributive lattices, sublattices and homomorphisms between lattices.
			iii) Become familiar with Boolean algebra, Boolean homomorphism, Karnaugh diagrams, switching circuits and their applications
3rd	Differential Equations	MAT-HG-3016/MAT-RC-3016	i) Learn basics of differential equations and mathematical modelling.
			ii) Solve first order non-linear differential equations and linear differential equations of higher order using various techniques.
	Linear Programming	MAT-HG-3026	i) Learn about the graphical solution of linear programming problem with two variables.
			ii) Learn about the relation between basic feasible solutions and extreme points.
			iii) Understand the theory of the simplex method used to solve linear programming problems.
			iv) Learn about two-phase and big-M methods to deal with problems involving artificial variables.
			v) Learn about the relationships between the primal and

			dual problems.
			vi) Solve transportation and assignment problems.
			vii) Apply linear programming method to solve two-person zero-sum game problems.
	Computer Algebra Systems and Related Software	MAT-SE-3014 (Regular)	i) Use ofsoftwares; Mathematica/ MATLAB/ Maxima/ Maple etc. as a calculator, for plotting functions and animations
			ii) Use of CAS for various applications of matrices such as solving system of equations and finding eigenvalues and eigenvectors.
4th	Real Analysis	MAT-HG-4016/ MAT-RC-4016	i) Understand many properties of the real line R, including completeness and Archimedean properties.
			ii) Learn to define sequences in terms of functions from R to a subset of R.
			iii) Recognize bounded, convergent, divergent, Cauchy and monotonic sequences and to calculate their limit superior, limit inferior, and the limit of a bounded sequence.
			iv) Apply the ratio, root, alternating series and limit comparison tests for convergence and absolute convergence of an infinite series of real numbers.
	Numerical Analysis	MAT-HG-4026	i) Learn some numerical methods to find the zeroes of nonlinear functions of a single variable and solution of a system of linear equations, up to a certain given level of precision.
			ii) Know about iterative and non-iterative methods to solve system of linear equations.
			iii) Know interpolation techniques to compute the values for a tabulated function at points not in the table.
			iv) Integrate a definite integral that cannot be done analytically.
			v) Find numerical differentiation of functional values.

			vi) Solve differential equations that cannot be solved by analytical methods.
	SEC-2 R-Programming	MAT-SE-4014 (Regular)	i) Become familiar with R syntax and to use R as a calculator. ii) Understand the concepts of objects, vectors and data types. iii) Know about summary commands and summary table in R. iv) Visualize distribution of data in R and learn about normality test. v) Plot various graphs and charts using R.
5th	SEC-3 Combinatorics and Graph Theory	MAT-SE-5014	i) Learn about the counting principles, permutations and combinations, Pigeonhole principle. ii) Understand the basics of graph theory and learn about social networks, Eulerian and Hamiltonian graphs, diagram tracing puzzles and Knight's tour problem.
	Number Theory	MAT-RE-5016	i) Learn about some fascinating discoveries related to the properties of prime numbers, and some of the open problems in number theory, viz., Goldbach conjecture etc. ii) Know about number theoretic functions and modular arithmetic. iii) Solve linear, quadratic and system of linear congruence equations.
	Discrete Mathematics	MAT-RE-5026	i) Understand the notion of ordered sets and maps between ordered sets. ii) Learn about lattices, modular and distributive lattices, sublattices and homomorphisms between lattices. iii) Become familiar with Boolean algebra, Boolean homomorphism, Karnaugh diagrams, switching circuits and their applications

6th	SEC-4 LaTeX and HTML	MAT-SE-6014	i) Create and typeset a LaTeX document. ii) Typeset a mathematical document using LaTeX. iii) Learn about pictures and graphics in LaTeX. iv) Create beamer presentations. v) Create web page using HTML.
	Numerical Analysis	MAT-RE-6016	i) Learn some numerical methods to find the zeroes of nonlinear functions of a single variable and solution of a system of linear equations, up to a certain given level of precision. ii) Know about iterative and non-iterative methods to solve system of linear equations. iii) Know interpolation techniques to compute the values for a tabulated function at points not in the table. iv) Integrate a definite integral that cannot be done analytically. v) Find numerical differentiation of functional values. vi) Solve differential equations that cannot be solved by analytical methods.
	Programming in C	MAT-RE-6026	i) Understand and apply the programming concepts of C which is important to mathematical investigation and problem solving. ii) Learn about structured data-types in C and learn about applications in factorization of an integer and understanding Cartesian geometry and Pythagorean triples. iii) Use of containers and templates in various applications in algebra. iv) Use mathematical libraries for computational objectives. v) Represent the outputs of programs visually in terms of well formatted text and plots

Generic Elective (GE) Courses Offered To B.A,/B.Com. Programme
(Students who are not having Mathematics as a discipline Subject can opt for such courses)

Semester	Paper Name	Paper Code	Course Outcome
5th	General Mathematics-I	MAT-RG-5016	i) Learn about some fascinating discoveries related to the properties of prime numbers, and some of the open problems in number theory, viz., Goldbach conjecture etc. ii) Know about number theoretic functions and modular arithmetic. iii) Solve linear, quadratic and system of linear congruence equations. iv) Know solve simultaneous algebraic equations with matrix theory.
6th	General Mathematics – II	MAT-RG-6016	i) Learn about some fascinating problems concerning numbers. ii) Learn about life and works of ancient Indian and Foreign scientists in mathematical science. iii) Learn the symmetrical behavior of numbers. iv) Know solve simultaneous algebraic equations with matrix theory

Name of the Department: PHYSICS
Course Outcome (B.Sc. CBCS Honours)

Semester	Paper Name	Paper Code	Course Outcome
1st	Mathematical Physics I	PHY-HC-1016	Successful students should be able to understand vector and its applications in various fields, differential equations and its applications, different coordinate systems, concept of probability and error
	Mechanics	PHY-HC-1026	On successful completion of the course students should be able understand Inertial and non-inertial reference frames, Newtonian motion, Galilean transformations, projectile motion, work and energy, Elastic and inelastic collisions, motion under central force, simple harmonic oscillations, special theory of relativity.
2nd	Electricity & Magnetism	PHY-HC-2016	After successful completion of this course, students will be able to Understand electric and magnetic fields in matter, Dilectric properties of matter magnetic properties of matter, electro-magnetic induction, applications of Kirchhofff's law in different circuits, applications of network theorem in circuits.
	Waves & Optics	PHY-HC-2026	After successful completion of this course, students will be able to understand superposition of harmonic oscillations, different types of wave motions, superposition of harmonic waves, interference and interferometer, diffraction, holography.
3rd	Mathematical Physics II	PHY-HC-3016	After successful completion of the course, students will be able to solve differential equation using power series solution method, solve differential equation using separation of variables method, special integrals, different properties of matrix, Fourier series.
	Thermal Physics	PHY-HC-3026	Upon successful completion, students will have the knowledge and skills to identify and describe the

			statistical nature of concepts and laws in thermodynamics, in particular: entropy, temperature, Thermodynamics potentials, Free energies, Maxwell's relations in thermodynamics, behaviour of real gases.
	Digital Systems & Applications	PHY-HC-3036	After successful completion of the course student will be able to understand the working principle of CRO, develop a digital logic and apply it to solve real life problems, Analyze, design and implement combinational logic circuits, Classify different semiconductor memories, Analyze, design and implement sequential logic circuits, Analyze digital system design using PLD, Simulate and implement combinational and sequential circuits.
4th	Mathematical Physics III	PHY-HC-4016	On successful completion of the course students will able to solve complex integrals using residue theorem, apply Fourier and Laplace transforms in solving differential equations, understand properties of Tensor like Transformation of coordinates, contravariant and co-variant tensors, indices rules for combining tensors.
	Elements of Modern Physics	PHY-HC-4026	On completion of the course students will be able to understand modern development in Physics, Starting from Planck's law, it development of the idea of probability interpretation and the formulation of Schrodinger equation. Students will also get preliminary idea of structure of nucleus, radioactivity Fission and Fusion and Laser
	Analog Systems & Applications	PHY-HC-4036	On successful completion of the course students will be able to understand about the physics of semiconductor p-n junction and devices such as rectifier diodes, zener diode, photodiode etc. and bipolar junction transistors, transistor biasing and stabilization circuits,

			the concept of feedback in amplifiers and the oscillator circuits, students will also have an understanding of operational amplifiers and their applications.
5th	Quantum Mechanics & Applications	PHY-HC-5016	On successful completion of the course students will be able to understand the principles in quantum mechanics, such as the Schrödinger equation, the wave function, the uncertainty principle, stationary and non-stationary states, time evolution of solutions, as well as the relation between quantum mechanics and linear algebra. Students will be able to solve the Schrödinger equation for hydrogen atom. Students will have the concepts of angular momentum and spin, as well as the rules for quantization and addition of these, spin-orbit coupling and Zeeman Effect.
	Solid State Physics	PHY-HC-5026	On successful completion of the course students should be able to explain the main features of crystal lattices and phonons, understand the elementary lattice dynamics and its influence on the properties of materials, describe the main features of the physics of electrons in solids; explain the dielectric ferroelectric and magnetic properties of solids and understand the basic concept in superconductivity.
	Physics of Devices and Instruments	PHY-HE-5046	Upon completion of this course, students will be able to gain knowledge on advanced electronics devices such as UJT, JFET, MOSFET, CMOS etc., detailed process of IC fabrication, Digital Data serial and parallel Communication Standards along with the understanding of communication systems.
	Nuclear and Particle Physics	PHY-HE-5056	Upon completion of this course, students will have the understanding of the sub atomic particles and their properties. They will gain knowledge about the

			different nuclear techniques and their applications in different branches of Physics and societal application. The course will develop problem based skills and the acquire knowledge can be applied in the areas of nuclear, medical, archeology, geology and other interdisciplinary fields of Physics and Chemistry.
6th	Electromagnetic Theory	PHY-HC-6016	On successful completion of the course students will acquire the concepts of Maxwell's equations, propagation of electromagnetic (EM) waves in different homogeneous-isotropic as well as anisotropic unbounded and bounded media, production and detection of different types of polarized EM waves, general information as waveguides and fibre optics.
	Statistical Mechanics	PHY-HC-6026	On successful completion of the course students will be learn the techniques of Statistical Mechanics to apply in various fields including Astrophysics, Semiconductors, Plasma Physics, Bio-Physics, Chemistry and in many other directions.
	Communication Electronics	PHY-HE-6016	Upon completion of this course, students will have the concepts of electronics in communication, details of communication techniques based on Analog Modulation, Analog and digital Pulse Modulation including PAM, PWM, PPM, ASK, PSK, FSK, overview of communication and Navigation systems such as GPS and mobile telephony system.
	Astronomy and Astrophysics	PHY-HE-6046	Upon completion of this course, students will be able to understanding the origin and evolution of the Universe. The course will give a comprehensive introduction on the measurement of basic astronomical parameters such as astronomical scales, luminosity and astronomical quantities. It will give an overview on key developments in observational astrophysics.

			Students will have the idea of the instruments implemented for astronomical observation, the formation of planetary system and its evolution with time, the physical properties of Sun and the components of the solar system; and stellar and interstellar components of our Milky Way galaxy. Students will have the understanding of the origin and evolution of galaxies, presence of dark matter and large scale structures of the Universe.

Course Outcome (B.Sc. CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	Mechanics	PHY-RC-1016 (PHY-HG-1016)	Upon completion of this course, students are expected to understand the role of vectors and coordinate systems in Physics, solve Ordinary Differential Equations, laws of motion and their application to various dynamical situations, Inertial reference frames their transformations, concept of conservation of energy, momentum, angular momentum and apply them to basic problems, phenomenon of simple harmonic motion, motion under central force, concept of time dilation, Length contraction using special teory of relativity. In the laboratory course, after acquiring knowledge of how to handle measuring instruments (like screw gauge, Vernier calipers, travelling microscope) student shall embark on verifying various principles and associated measurable parameters.
2nd	Electricity & Magnetism	PHY-RC-2016 (PHY-HG-	Upon completion of this course, students are expected to apply Gauss's law of electrostatics to solve a variety of problems, calculate the magnetic forces that act on

		2016)	moving charges and the magnetic fields due to currents, have brief idea of magnetic materials, understand the concepts of induction, and apply them to solve variety of problems. In the Lab course, students will be able to measure resistance (high and low), Voltage, Current, self and mutual inductance, capacitor, strength of magnetic field and its variation, study different circuits RC, LCR etc.
3rd	Thermal Physics & Statistical Mechanics	PHY-RC-3016 (PHY-HG-3016)	Upon completion of this course, students are expected learn the basic concepts of thermodynamics, the first and the second law of thermodynamics, the concept of entropy and the associated theorems, the thermodynamic potentials and their physical interpretations, Maxwell's thermodynamic relations, fundamentals of the kinetic theory of gases, Maxwell-Boltzman distribution law, equipartition of energies, mean free path of molecular collisions, viscosity, thermal conductivity, diffusion and Brownian motion, black body radiations, Stefan-Boltzmann's law, Rayleigh-Jean's law and Planck's law and their significances, quantum statistical distributions, viz., the Bose-Einstein statistics and the Fermi-Dirac statistics. In the laboratory course, the students will be able to Measure of Planck's constant using black body radiation, determine Stefan's Constant, coefficient of thermal conductivity of a bad conductor and a good conductor, determine the temperature coefficient of resistance, study variation of thermoemf across two junctions of a thermocouple with temperature etc.
4th	Waves & Optics	PHY-RC-4016 (PHY-HG-	Upon completion of this course, students are expected to understand Simple harmonic oscillation and superposition principle, importance of classical wave equation in

		4016)	transverse and longitudinal waves and solving a range of physical systems on its basis, concept of normal modes in transverse and longitudinal waves: their frequencies and configurations, interference as superposition of waves from coherent sources derived from same parent source, Demonstrate understanding of Interference and diffraction experiments, Polarization. In the laboratory course, student will gain hands-on experience of using various optical instruments and making finer measurements of wavelength of light using Newton Rings experiment, Fresnel Biprism etc. Resolving power of optical equipment, the motion of coupled oscillators, study of Lissajous figures and behaviour of transverse, longitudinal waves.
5th	Physics of Devices and Instruments	PHY-HE-5046	Upon completion of this course, students will be able to gain knowledge on advanced electronics devices such as UJT, JFET, MOSFET, CMOS etc., detailed process of IC fabrication, Digital Data serial and parallel Communication Standards along with the understanding of communication systems.
6th	Communication Electronics	PHY-HE-6016	Upon completion of this course, students will have the concepts of electronics in communication, details of communication techniques based on Analog Modulation, Analog and digital Pulse Modulation including PAM, PWM, PPM, ASK, PSK, FSK, overview of communication and Navigation systems such as GPS and mobile telephony system.

Name of the Department: STATISTICS

Course Outcome (B.A/B.Sc/B.Com CBCS Honours)

Semester	Paper Name	Paper Code	Course Outcome
1st	Descriptive Statistics	STA - HC-1016	After completing this course, students should have developed clear understanding of: The fundamental concepts of statistics. Concept of population and sample. Different scales of measurement. Consistency and independence of attributes Handling various types of data and their graphical representation. Measures of location and dispersion. Bivariate data. Concept of coefficients of correlation. Fitting of linear and non linear curve, concept of linear regression. Students are expected to use these concepts to solve real life problems.
	Calculus	STA -HC-1026	On completing this course students are expected to develop concepts of Differential calculus, Integral calculus, Differential equations and partial Differential equations These topics will help them to utilize this knowledge while solving various problems of Calculus.
2nd	Probability and Probability distributions	STA-HC-2016	After completing this course, students should have developed a clear understanding of: The fundamental concepts of probability. Basic concept of random variable and its types. Introduction to pmf, pdf and cdf. Properties of random variables like expectation, moment generating function, cumulative generating

			function etc.
			Marginal and conditional probability distributions.
			Independence of variates.
			Transformation in univariate and bivariate distributions.
			Various discrete and continuous probability distributions like Binomial, Poisson, Geometric, Negative Binomial, Hypergeometric, Normal, Uniform, Exponential, Beta and Gamma distributions.
	Algebra	STA-HC-2026	On completing this course, students are expected to develop concepts of
			Matrix algebra including Determinants,
			Theory of equations, vector spaces, subspaces.
			Characteristic roots and characteristic vectors, Quadratic forms
			These concepts will help them while solving various problems of Algebra.
3rd	Sampling Distributions	STA-HC-3016	After completing this course, students will possess skills concerning:
			Parameter, statistic, standard error, sampling distribution of a statistic, Hypothesis testing,
			Sampling distributions of chi-square, t and F and their applications.
			These concepts will help students in solving problems related to estimation and testing of hypothesis.
	Survey Sampling and Indian Official Statistics	STA-HC-3026	After completing this course, students have a clear understanding of:
			The basic concept of sample survey and its uses.
			Simple random sampling, Stratified random sampling.
			Systematic sampling, Ratio and Regression method of estimation, Cluster sampling, two-stage sampling.
			Present official statistical system in India
			Functions of C.S.O. and N.S.S.O.

	Mathematical Analysis	STA-HC-3036	This course is expected to provide concepts of Real analysis, Infinite series Limit, Continuity and Differentiability. Finite differences, interpolation and numerical integration, Solution of difference equation
	Statistical Data Analysis Using Software Packages	STA-SE-3014	It is expected that this course will help in understanding the basic workings of SPSS and perform basic statistical analyses. To perform descriptive statistics and graphics, and basic inferential statistics for Comparisons and correlations using SPSS Importing data, Code editing in SPSS. This course will help students to perform statistical analysis using SPSS.
4th	Statistical Inference	STA-HC-4016	After completing this course, students will possess skills concerning: Parameter, statistic, Characteristics of a good estimator, different methods of estimation. Idea of hypothesis testing, MP, UMP tests.
	Linear Models	STA-HC-4026	Students would be able to grasp the fundamental concepts of Econometrics, Specification of the model. Simple and Multiple Linear Regression. Analysis of Variance, Different types of models, Estimation of parameters, Gauss-Markov theorem, Blue Concepts of Multi co-linearity, Heteroscedasticity and Autocorrelation.
	Statistical Quality Control	STA-HC-4036	After completing this course, students would develop a clear understanding of: Statistical process control tools- Control charts for variables, attributes Statistical product control tools- Sampling inspection plans

	Statistical Data Analysis Using R.	STA-SE-4014	It is expected that this course will help in understanding the basic workings of R, and perform basic statistical analyses. To perform descriptive statistics and graphics, and basic inferential statistics for Comparisons and correlations using R. Importing data, Code editing in R. This course will review topics in probability and statistics studied in core for data analysis. Introduction to R for statistical computing, analysis and graphical interpretation would be done using software skills.
5th	Stochastic Processes and Queuing Theory	STA-HC-5016	This course imparts knowledge to students regarding: Basic Idea of Stochastic Process. Markov Chain, Poisson Process . Queuing System.
	Statistical Computing using C-Programming	STA-HC-5026	To inculcate knowledge on the following concepts: Basics of C-Programming Operators and Expressions in C Decision Making and Arrays. These concepts would help students in writing programming in C-language
	Operations Research	STA-HE-5016	This course imparts knowledge to students regarding Idea of Operations Research, Transportation Problem, Game Theory Inventory Management
	Time Series Analysis	STA-HE-5026	It is expected that students will be able to have some idea on Basic knowledge on Time series Analysis. It also puts emphasis on methods on determining the trend and seasonal indices. Forecasting and Smoothing to Time series.
6th	Design of Experiment	STA-HC-6016	Students will be able to deal with various Designs of Experiments, Missing Plot Technique, Factorial

	Multivariate analysis and Non-Parametric Methods	STA-HC-6026	After completing the course, students are expected to have some knowledge on Bi-variate and Multi-variate Distributions, Multivariate Normal Distribution, Non-Parametric test
	Demography and Vital Statistics	STA-HE-6026	Its aim is to provide some idea on some applied statistical techniques such as Population Theory, Measurement of Mortality, Life Table, Measurement of Fertility and reproduction rates
	Project Work	STA-HE-6046	Students will be required to go for data collection on some topics under the supervision of a teacher. On the basis of this data collection exercise, each student will be required to submit a project report. The aim of the project work is to acquire practical knowledge on the implementation of perceptions studied through the entire course structure.

Course Outcome (B.A/B.Sc/B.Com CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	Statistical Methods	STA-HG-1016	After completing this course students should have developed a clear understanding of various concepts such as Concept of Statistical Data, Descriptive Statistics, Calculus of Finite Difference, Bivariate Data
2nd	Introductory Probability	STA-HG-2016	After completing this course students are expected to developed a clear understanding of Probability theory, Random Variables and Mathematical Expectation, Convergence in Probability, Standard Probability Distributions
3rd	Basics of Statistical	STA-HG-3016	After completing this course students will be able to develop a clear understanding of :

Semester	Paper Name	Paper Code	Course Outcome
	Inference		Concept of Estimation, different methods like MLE, Minimum Chi-Square, Tests of Hypothesis, Categorical Data Analysis
4th	Applied Statistics	STA-HG-4016	After completing this course students should be able to develop a clear understanding of : Concept of Time Series Analysis, Index Number, Basics of Demography and vital statistics and also Demand Analysis

Name of the Department: ZOOLOGY

Course Outcome B.Sc (CBCS Honours)

Semester	Paper Name	Paper Code	Course Outcome
1st	Non chordates I : Protista to Pseudocoelomates	ZOO-HC-1016	Studying non-chordates offers a broad range of outcomes, from a deepened understanding of biodiversity and evolution to practical skills and potential contributions to scientific research and conservation efforts.
	Principles of Ecology	ZOO-HC-1026	By studying the principles of ecology, students can develop a holistic understanding of the natural world and acquire skills that are applicable to various scientific, environmental, and conservation-related careers. Additionally, the knowledge gained in ecology courses is crucial for addressing pressing global challenges related to environmental sustainability and biodiversity conservation.
2nd	Non Chordates II : Coelomates	ZOO-HC-2016	Studying coelomates provides a rich foundation for understanding the biology, evolution, and

			ecological significance of a diverse group of animals. It also offers insights into broader biological principles and their applications across different organisms and ecosystems.
	Cell Biology	ZOO-HC-2026	Studying cell biology is foundational for various scientific disciplines, including medicine, biotechnology, genetics, and molecular biology. It provides essential knowledge for understanding life processes at the cellular level and forms the basis for advancements in medical research and technology.
3rd	Diversity of Chordates	ZOO-HC-3016	Studying the diversity of chordates provides a comprehensive understanding of the evolutionary and ecological processes that have shaped this phylum. It also lays the foundation for further exploration in fields such as zoology, paleontology, ecology, and evolutionary biology.
	Physiology : Controlling and Co-ordinating systems	ZOO-HC-3026	Studying the physiology of controlling and coordinating systems is foundational for careers in medicine, biology, pharmacology, and related fields. It provides a comprehensive understanding of how organisms regulate and respond to their internal and external environments.
	Fundamentals of Biochemistry	ZOO-HC-3036	Studying the fundamentals of biochemistry is essential for students pursuing careers in biochemistry, molecular biology, medicine, pharmacology, and related fields. It provides a solid foundation for understanding the molecular basis of life and the intricacies of cellular processes.
4th	Comparative	ZOO-	Studying the comparative anatomy of vertebrates

	anatomy of Vertebrates	HC-4016	provides a holistic view of vertebrate evolution and adaptations. It is essential for understanding the diversity of life within this group and has applications in fields such as paleontology, ecology, evolutionary biology, and zoology.
	Physiology : Life sustaining	ZOO-HC-4026	Studying the physiology of life-sustaining systems is essential for understanding the mechanisms that underlie the maintenance of life and health in organisms. It is foundational for careers in medicine, physiology, pharmacology, and related fields.
	Biochemistry of Metabolic process	ZOO-HC-4036	Studying the biochemistry of metabolic processes is crucial for understanding the molecular basis of life, cellular energy dynamics, and the physiological adaptations of organisms to their environment. It is foundational for careers in biochemistry, molecular biology, medicine, and related fields.
5th	Molecular Biology	ZOO-HC-5016	Studying molecular biology provides a solid foundation for careers in research, medicine, biotechnology, and various other fields. It contributes to advancements in our understanding of life at the molecular level and facilitates the development of innovative technologies and therapies.
	Principles of Genetics	ZOO-HC-5026	Studying the principles of genetics is essential for a wide range of fields, including biology, medicine, agriculture, and biotechnology. It provides the foundation for understanding the hereditary basis of traits, the mechanisms of genetic inheritance, and the applications of genetic knowledge in various aspects of life.

	Computational Biology and Biostatistics	ZOO - HE - 5016	Studying computational biology and biostatistics equips individuals with the skills needed to analyze and interpret biological data, make meaningful contributions to research, and inform decision-making in fields such as genomics, drug discovery, epidemiology, and personalized medicine.
	Endocrinology	ZOO - HE - 5036	Studying endocrinology is essential for understanding the intricate regulatory mechanisms that maintain physiological balance in the body. It is foundational for careers in medicine, research, clinical practice, and related fields.
6th	Developmental Biology	ZOO-HC-6016	Studying developmental biology is crucial for understanding the fundamental processes that shape life, from the formation of a single cell to the development of complex multicellular organisms. It has broad applications in medicine, agriculture, and biotechnology and contributes to our understanding of evolution and diversity in the living world.
	Evolutionary Biology	ZOO-HC-6026	Studying evolutionary biology provides a foundational understanding of the processes that have shaped the diversity of life on Earth. It has broad applications in various fields, including biology, ecology, medicine, agriculture, and conservation.
	Fish and Fisheries	ZOO-HE-6026	Studying fish and fisheries provides a foundation for careers in fisheries management, conservation, aquaculture, research, and environmental consulting. It contributes to the sustainable use and conservation of aquatic

| | Wildlife Conservation and Management | ZOO-HE-6046 | resources, addressing critical issues in the face of environmental changes and human activities. |
| | | | Studying wildlife conservation and management provides a foundation for careers in conservation biology, wildlife management, environmental consulting, and research. It equips individuals with the knowledge and skills needed to address the complex challenges facing wildlife and contribute to the sustainable management of natural resources. |

Course Outcome (B.Sc CBCS Generic/Regular)

Semester	Paper Name	Paper Code	Course Outcome
1st	Animal Diversity	ZOO-HG-1016	Studying animal diversity is fundamental to understanding the complexity and richness of the natural world. It provides a basis for careers in biology, ecology, conservation, and research, contributing to efforts aimed at preserving biodiversity and understanding the evolutionary history of life on Earth.
2nd	Comparative Biology and Developmental Biology of Vertebrates	ZOO-HG-2016	Studying comparative and developmental biology of vertebrates provides a deep understanding of the evolutionary processes that have shaped the diversity of vertebrate life and the intricate mechanisms governing their development. It has broad applications in fields such as biology, medicine, and evolutionary research.
3rd	Physiology and Biochemistry	ZOO-HG-3016	Studying physiology and biochemistry provides a strong foundation for understanding the molecular and systemic aspects of life processes. It is essential for

Semester	Paper Name	Paper Code	Course Outcome
			careers in medicine, research, pharmaceuticals, and various fields of biology.
4th	Genetics and Evolutionary Biology	ZOO-HG-4016	Studying genetics and evolutionary biology provides a foundational understanding of the processes that shape the diversity of life and the mechanisms by which species evolve over time. It is essential for careers in genetics, evolutionary research, medicine, conservation biology, and various fields of biology.
5th	Applied Zoology	ZOO-RE-5026	Studying applied zoology prepares individuals for careers in wildlife conservation, animal management, research, education, and environmental consulting. It equips students with the knowledge and skills needed to address practical challenges in the field of zoology and contribute to the sustainable use and conservation of biodiversity.
6th	Insect, Vectors and Diseases	ZOO-RE-6026	Studying insect vectors and diseases provides a foundation for careers in public health, epidemiology, entomology, and disease control. It equips individuals with the knowledge and skills needed to contribute to the prevention and management of vector-borne diseases that have significant impacts on global health.

Course Outcome : SEC

Semester	Paper Name	Paper Code	Course Outcome
3rd SEC	Ornamental Fish & Fisheries	ZOO-SE-3014	Studying ornamental fish and fisheries provides a foundation for careers in aquaculture, fisheries management, conservation, public education, and the ornamental fish industry. It equips individuals with the knowledge and skills needed to

Semester	Paper Name	Paper Code	Course Outcome
4th SEC	Apiculture	ZOO-SE-4014	contribute to the sustainable management of ornamental fish populations and their ecosystems.
			Studying apiculture provides a foundation for careers in beekeeping, agriculture, environmental conservation, and research. It equips individuals with the knowledge and skills needed to contribute to the sustainable management of honeybee populations and the promotion of pollination services.

Name of the Department: COMMERCE

Course Outcome (B.Com CBCS Honours course)

Semester	Paper Name	Paper Code	Course Outcome
1st	Financial Accounting	COM-HC-1016	To equip B.Com students with a comprehensive understanding of financial accounting principles, practices, and standards, enabling them to proficiently prepare and interpret financial statements, adhere to Generally Accepted Accounting Principles (GAAP) or International Financial Reporting Standards (IFRS), and analyze the financial health of organizations.
	Business Law	COM-HC-1026	To foster a profound comprehension of business law among B.Com students, enabling them to apply legal principles in commercial scenarios, analyze contractual agreements, navigate regulatory frameworks, and make

			informed ethical decisions within the business context.
2nd	Corporate Accounting	COM-HC-2016	To cultivate a comprehensive understanding of corporate accounting among B.Com students, enabling them to proficiently handle complex financial transactions, prepare consolidated financial statements, interpret financial data for strategic decision-making, and comply with relevant accounting standards and regulations in a corporate setting.
	Corporate Laws	COM-HC-2026	To instill a thorough understanding of corporate laws in B.Com students, facilitating their ability to navigate legal frameworks governing corporate entities, comprehend the intricacies of corporate governance, mergers, acquisitions, and compliance obligations, and apply legal principles to address corporate challenges ethically and effectively.
3rd	Computer Applications In Business	COM-HC-3016	To empower B.Com students with practical skills in Computer Applications in Business, enabling them to proficiently utilize software tools for financial analysis, data management, and business decision-making. The course aims to cultivate digital literacy, equipping students with the ability to integrate technology effectively in various business processes.
	Income-Tax Law And Practice	COM-HC-3026	To develop a comprehensive understanding of Income Tax Law and Practice among B.Com students, enabling them to interpret tax regulations, compute individual and business tax liabilities, and navigate the complexities of

			tax planning. The course aims to equip students with practical skills to ensure compliance and make informed financial decisions in the context of income taxation.
	Managememt Principles And Applications	COM-HC-3036	To impart a foundational knowledge of Management Principles and Applications to B.Com students, fostering their ability to comprehend and apply key managerial concepts. The course aims to cultivate critical thinking, decision-making skills, and an understanding of organizational dynamics to prepare students for effective participation in diverse business environments.
4th	Cost Accounting	COM-HC-4016	To provide B.Com students with a comprehensive understanding of Cost Accounting, enabling them to analyze and control costs in various business scenarios. The course aims to equip students with the skills to implement cost-effective strategies, make informed managerial decisions, and contribute to the efficient allocation of resources within an organization.
	Business Mathematics	COM-HC-4026	To equip B.Com students with a solid foundation in Business Mathematics, enabling them to apply mathematical principles and techniques to solve real-world business problems. The course aims to enhance quantitative skills, critical reasoning, and the ability to make data-driven decisions in diverse business contexts.

	Human Resource Management	COM-HC-4036	To develop a nuanced understanding of Human Resource Management (HRM) among B.Com students, fostering the knowledge and skills necessary to effectively manage personnel within organizations. The course aims to impart expertise in recruitment, employee relations, performance management, and strategic HR planning, preparing students for roles in personnel management and organizational development.
5th	Principles Of Marketing	COM-HC-5016	To provide B.Com students with a foundational understanding of Principles of Marketing, equipping them with knowledge in market dynamics, consumer behavior, product development, pricing strategies, and promotional activities. The course aims to cultivate skills for crafting effective marketing plans and strategies, enabling students to contribute to successful marketing initiatives in various business settings.
	Fundamentals Of Financial Management	COM-HC-5026	To impart a fundamental understanding of Financial Management to B.Com students, enabling them to analyze and make strategic financial decisions within an organizational context. The course aims to develop proficiency in financial planning, risk assessment, capital budgeting, and resource allocation, preparing students for roles that require sound financial management practices in diverse business environments.
6th	Auditing And Corporate	COM-HC-6016	The course aims to equip students with the skills to assess and enhance corporate

	Governance		governance structures, ensuring transparency, accountability, and compliance with regulatory standards in organizational operations.
	Indirect Tax Laws	COM-HC-6026	To provide B.Com students with an in-depth understanding of Indirect Tax Laws, focusing on the principles and regulations governing taxes such as Goods and Services Tax (GST). The course aims to enable students to navigate the complexities of indirect taxation, interpret relevant laws, and apply practical knowledge in compliance and strategic tax planning within a business context.

Course Outcome (B.Com CBCS Generic/Regular course)

Semester	Paper Name	Paper Code	Course Outcome
1st	Micro Economics/Investing In Stock Markets	COM-HG-1016/COM-HG-1026	**Micro Economics -** To foster a comprehensive understanding of Microeconomics, the course aims to equip students with the foundational principles governing individual economic agents' behavior. Students will delve into the study of supply and demand, market structures, consumer choice, and resource allocation, developing analytical skills to comprehend and analyze economic decision-making at the micro level. **Investing in stock markets -** To provide students with a comprehensive understanding of Investing in Stock Markets, this course offers insights into fundamental principles, investment strategies, and the dynamic nature of stock

			markets. Students will gain practical knowledge in analyzing stocks, managing risks, and optimizing portfolios, empowering them to make informed and strategic investment decisions with confidence and proficiency.
2nd	Macro economics/ insurance and risk management	COM-GE-2016(A)/COM-GE-2026(B)	**Macro-economics:** To explore Macroeconomics is to delve into the broader canvas of economies. In this course, students will focus on national and global economic trends such as unemployment, inflation, and government policies. Through the journey, students will develop analytical skills to understand and interpret these larger economic dynamics, gaining valuable insights into the forces shaping our economic world. **Insurance and risk management -** To provide students with a comprehensive understanding of Insurance and Risk Management, this course is designed to delve into the principles and practices of safeguarding against uncertainties. Students will explore the dynamics of insurance, risk assessment, and mitigation strategies. By the end of the course, students will be equipped to analyze and manage risks effectively, making informed decisions in the complex landscape of insurance and risk management.
3rd	Business Statistics	COM-HG-3016	To equip students with practical analytical skills, the Business Statistics course focuses on data interpretation, statistical methods, and their application in making informed business decisions. Students will gain proficiency in

			analyzing and drawing meaningful insights from quantitative data.
4th	Indian Economy/ Micro Finance	COM-HG-4016/COM-HG-4026	**Indian economy -** To understand the intricacies of the Indian economy, this course provides students with insights into economic policies, market dynamics, and socio-economic factors shaping India's financial landscape. Students will explore key facets such as GDP growth, inflation, and government interventions, gaining a holistic view of the Indian economic context. **Micro finance -** To delve into Microfinance, this course aims to familiarize students with the principles and practices of providing financial services to individuals in underserved communities. Students will explore the role of microfinance in poverty alleviation, financial inclusion, and sustainable development, gaining insights into the transformative impact of small-scale financial initiatives.

Course Outcome (B.Com CBCS Ability Enhancement Course)

Semester	Paper name	Paper code	Course outcome
1st	Business Communication (English)/ Business Communication (Assamese)	BCME-AE-1014/BCMA-AE-1014	To enhance students' communication proficiency, the Business Communication course focuses on developing effective written and oral communication skills essential for professional success. Students will learn to craft clear messages, engage in persuasive communication, and navigate diverse communication channels in the business

			context.
2nd	Environmental Studies	ENV-AE-2014	To cultivate environmental awareness and responsibility, the Environmental Studies course engages students in exploring ecological principles, environmental challenges, and sustainable solutions. Students will gain a holistic understanding of the interdependence between humans and the environment, fostering a sense of environmental stewardship and informed decision-making.

Course Outcome (B.Com CBCS Skill Enhancement Course)

SEMESTER	PAPER NAME	PAPER CODE	COURSE OUTCOME
3rd	Entrepreneurship	COM-SE-3014	To nurture an entrepreneurial mindset, the Entrepreneurship course guides students through the process of ideation, business planning, and venture creation. Students will acquire practical skills in risk assessment, innovation, and resource management, empowering them to embark on entrepreneurial endeavors with confidence and strategic acumen.
4th	E-Commerce/E-Filing Of Returns	COM-SEC-4014/COM-SEC-4024	This course provides students with a comprehensive exploration of online business models, digital marketing strategies, and the technological infrastructure underpinning electronic transactions. Students will gain practical insights into the evolving landscape

| | | | of online commerce, preparing them to navigate and contribute to the dynamic realm of E-Commerce. |

Course Outcome (B.Com CBCS Discipline Specific Elective Course)

Semester	Paper name	Paper code	Course outcome
5th	Indian Financial System	COM-HE-5066	To comprehend the intricacies of the Indian Financial System, this course offers students an in-depth exploration of the country's banking, financial markets, and regulatory frameworks. Students will gain insights into the functioning of institutions like the Reserve Bank of India, understand financial instruments, and analyze the dynamics that shape India's economic and financial landscape.
5th	Advertising/ Advanced Financial Accounting	COM-HE-5036/COM-HE-5026	**Advertising -** This course equips students with a thorough understanding of advertising principles, creative strategies, and media planning. Students will explore the dynamics of consumer behavior, branding, and communication channels, developing the skills to create impactful and persuasive advertising campaigns in diverse business contexts. **Advanced Financial Accounting -** This course aims to deepen students' understanding of complex accounting concepts, consolidation techniques, and international accounting standards. Students will explore intricate financial reporting issues, fostering the ability to analyze and interpret advanced financial statements. The course prepares students for nuanced accounting challenges in a global business

			environment.
6th	Advanced Corporate Accounting/Industrial Relations And Labour Laws	COM-HE-6036/COM-HE-6056	**ACA-** This course is designed to immerse students in sophisticated accounting practices, including mergers, acquisitions, and complex financial structures. Students will delve into intricate aspects of corporate financial reporting, consolidations, and accounting for diverse business transactions, gaining expertise in addressing advanced accounting challenges faced by corporations. **IRLL -** This course provides students with insights into the dynamics of employer-employee relationships and the legal frameworks governing the workplace. Students will explore topics such as collective bargaining, dispute resolution, and the regulatory landscape, gaining a comprehensive understanding of the intersection between labor, management, and the law.
6th	Fundamentals Of Investment	COM-HE-6016	This course aims to equip students with foundational knowledge in investment principles, risk assessment, and portfolio management. Students will explore various investment instruments, learn valuation techniques, and develop the skills to make informed investment decisions, laying the groundwork for a solid understanding of the dynamic field of investment.