DEPARTMENT OF GEOGRAPHY
PROGRAMME NAME: THREE YEARS [CBCS] B.A. PROGRAMME COURSE
COURSE SPECIFIC OUTCOMES

COURSE CODE	COURSE NAME	COURSE OTCOME
SEMESTER - 1 **GEGRDSC1**	**PHYSICAL GEOGRAPHY**	**KNOWLEDGE GAINED**: 1] Study landforms and the related processes from the traditional concept to the contemporary development in Geomorphology 2] Gain in-depth knowledge on the influence of various types of rocks on the development and evolution of the landforms; hydrologic characteristics of an open channel flow that produce erosional and depositional landforms; form- process interaction in the landform development and some modern methods of geomorphic analysis of the landforms through the concept of geomorphic threshold, geochronological methods and extreme events and equilibrium **PRACTICAL** 1] Develop an idea about different type of scale. 2] Knowledge gain about different map projection.
SEMESTER- 11 **GEGRDSC2**	**HUMAN GEOGRAPHY**	**KNOWLEDGE GAINED:** **1] knowledge about major themes of human geography and idea about space and society.** **2]Build an idea about population growth and distribution of population.** **PRACTICAL-** **1] Know about data representation line, bar and circle** **2] Develop an idea about thematic mapping.**

SEMESTER- 111 **GEGRDSC3**	**REGIONAL DEVELOPMENT**	**KNOWLEDGE GAINED** 1] understanding and identifying regions as an important component of geography. 2] identify the various components of development and regional disparities in order to establish balanced development measures.. PRACTICAL- 1] Understand abou Indian Topographcial map of plain and plateau region. 2] knowledge gain about geological maps both folded and uniclinal structure.
GEGRPSEC1	**REMOTE SENSING** **OR** **RURAL DEVELOPMENT**	**KNOWLEDGE GAINED**: 1] Gain knowledge of remote sensing principles, and image reflecting. 2] Knowledge gain about satellite image and application of remote sensing. OR 1] Knowledge gain about concept, basic elements, and measures of level of rural development. 2] Knowledge gain about major rural development programme.

SEMESTER –IV **GEGRDSC4**	**SPATIAL INFORMATION TECHNOLOGY**	**KNOWLEDGE GAINED:** **1] Undestand about concept and torical development.** **2] Knowledge about web data sources, data structures, data interpolation and modeling.** **PRACTICAL-** **1] Identification of physical and cultural features of aerial photography and uses of pocket stereoscope.** **2] Practices about statistical techniques.**

DSE-1	**PAPER2** **Industrial and Environmental Microbiology**	**Theory-** ➢ Students will acquire extensive knowledge of microbial applications in the industrial sector, gaining theoretical insights intovarious industrial processes such as bioreactor design, medium formulation, and sterilization techniques,as well as different types of fermentation processes. ➢ They will also gain understanding of microbial production processes for industrial products including amylase, lipase, organic acids (e.g., citric or glutamic acid), ethanol, and antibiotics like penicillin, crucial for human welfare. ➢ Through the course, students will develop a comprehensive understanding of the occurrence, abundance, and distribution ofmicroorganisms in the environment, as well as theirenvironmental roles. ➢ They will understand the basic principles of environment microbiology and application of the same in solving environmental problems like wastewater treatment and bioremediation of the contaminated soils. ➢ The course will spark interest and curiosity amongstudents, potentially inspiring them to pursue careers in industrial microbiology. **Practicals-** ➢ Students will discover the intersection of science and society, understanding how to apply their knowledge to contribute to overall societal development, potentially fostering entrepreneurship in the microbiology field. ➢ Theywillacquireproficiencyin isolating, maintaining, and handlingcrucialmicrobialcultures,alongsidegaining fundamental practical skillsin laboratory instrument operation.

SEMESTER-III/V		
CourseCode	**CourseName**	**CourseOutcomes**
Skill Enhancement Course (SEC1/2)	**PAPER1 Biofertilizers**	➢ Through the skill enhancement course on "Biofertilizer," students will grasp the significance of microbes in agriculture as growth enhancers, promoting crop development akin to chemical fertilizers but without any harmful chemicals. ➢ Through thorough study of isolating and multiplying microbes like*Rhizobium*,*Azotobacter*,andVAM foruseas biofertilizers, studentscan learn to produce biofertilizers on a large scale for widespread agricultural application. ➢ Exploring organic farming practices such as green manuring, organic fertilizers, and recycling of biodegradable municipal,agricultural,and industrialwastes, including methods like biocompost and vermicomposting, willinspirestudents,especiallythosefromruralareas,to implementthesetechniquesinagriculture.

SEMESTER-IV/VI		
CourseCode	**CourseName**	**CourseOutcomes**
SEC1/2	**PAPER2 Mushroom Culture Technology**	➢ Mushrooms, valued for their social, economic, nutritional, andmedicinal benefits, have captured global attention dueto their immense potential. ➢ Exploring various edible mushroom types, cultivation techniques, factors influencing cultivation, storagemethods, compostingtechnology,and foodpreparationwill deepen students' understanding of the market potential of mushrooms in India and abroad. ➢ Studying this field within the SEC curriculum will undoubtedly inspire students to consider mushroom cultivationasa viable livelihoodoption, potentiallyleading to a prosperousfuture.