



UNIVERSITY OF CALCUTTA

Notification No. CSR/35/2024

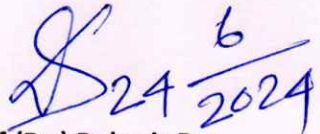
It is notified for information of all concerned that in terms of the provisions of Section 54 of the Calcutta University Act, 1979, (as amended), and, in the exercise of her powers under 9(6) of the said Act, the Vice-Chancellor has, by an order dated 14.06.2024 approved the new amended Examination modalities / Question Pattern of "Digital Empowerment" (for Humanities and Language Discipline & B.Mus) and "Artificial Intelligence"(for Science Discipline), after incorporating some amendments in the CSR/25/2024, dt.29.05.2024, under CCF 2022, under this University, as laid down in the accompanying pamphlet.

The above shall take immediate effect

SENATE HOUSE

Kolkata-700073

24.06.2024


Prof.(Dr.) Debasis Das

Registrar

University of Calcutta

Examination Modalities of the optional SEC paper offered by the University to be Studied in **Semester-2 of Four-year U.G. courses of studies (Honours & Honours with Research)** courses of studies under CCF, 2022 under this University.

Examination Modalities of Theory and Term paper for **Artificial Intelligence (A.I.)** (for science discipline) & **Digital Empowerment** (for humanities and B. Mus.)

S.No	Optional SEC	Credit	Paper type	Full Marks	Modalities	Examination
SEC for Science discipline						
1a	Artificial Intelligence (A.I.) (for science discipline)	2	Theory	50	Multiple Choice Question (MCQ) consisting of a total of 25 questions, each question carrying 2 marks.	Questions to be set/recommended by the University of Calcutta.
1b	Project in Artificial Intelligence (A.I.)	2	Term Paper In lieu of Tutorial paper	50	Students are required to submit a report which can be based on any topic as given in the appendix 1 or as prescribed by the respective faculty/teachers.	To be conducted by the center (home center).
SEC for Humanities & B. Mus. discipline						
2a	Digital Empowerment (for humanities & B. Mus.)	2	Theory	50	Multiple Choice Question (MCQ) consisting of a total of 25 questions, each question carrying 2 marks.	Questions to be set/recommended by the University of Calcutta.
2b	Project in Digital Empowerment.	2	Term Paper In lieu of Tutorial paper	50	Students are required to submit a report which can be based on any topic as given in the appendix 2 or as prescribed by the respective faculty/teachers.	To be conducted by the center (home center).

Appendix – 1

Suggested problems for the reports (Term Paper) on Artificial intelligence (A.I.):

- A comparative study on Human Intelligence and Artificial Intelligence in Man-Made Machines.
- **Chatbot Development** for customer service support and integration of NLP for realistic/human type interactions
- Development of a sentiment analysis tool that can classify and analyze the sentiment (positive, negative, neutral) in social media posts, reviews, or any text data.
- Use of AI in Image Recognition and Classification.
- Application of Linear regression and A.I./Machine learning on house price prediction- Estimating the selling price of a house based on its features, location, and market trends.
- Application of Linear regression and A.I./Machine learning on the data of Climate prediction.
- Application of Linear regression and A.I./Machine learning on the data of Bank related works.
- Application of Linear regression and A.I./Machine learning on Sales Forecasting: Predicting future sales based on historical sales data and trends.
- Application of Linear regression and A.I./Machine learning on Weather Forecasting, predicting future weather conditions by analyzing historical weather data.
- Application of Linear regression and A.I./Machine learning on Forecasting future energy usage based on past consumption patterns and environmental factors.
- Application of Linear regression and A.I./Machine learning on Risk Assessment: Predicting the likelihood of an event occurring, such as loan default or insurance claims, based on historical data and risk factors.
- Application of Linear regression and A.I./Machine learning on Health Outcome Prediction: Estimating patient outcomes or disease progression based on historical medical data and patient characteristics.
- Different types of Machine learning algorithms and its applications.
- Smart home automation solutions.
- Using AI in autonomous ground and Aerial vehicles.
- Application of AI in healthcare industry, Industrial automation, Smart farming and Internet of Things (IoT).
- Use of AI and its impact in future of education.
- Application of AI in Robotics and Computer Vision.

Note: The topics listed here are merely examples. Students are encouraged to write a term paper in the form of a report on subjects not limited to these topics; additional suggestions can be provided by teachers, faculty members, or the department.

Appendix – 2

Suggested problems for the reports (Term Paper) on Digital Empowerment:

- Utilizing digital technology and literacy programs to empower senior citizens.
- Engaging tech-savvy youth to teach digital literacy skills to their peers and the community, thereby reducing the digital divide in society.
- Equipping farmers with digital tools and knowledge to enhance agricultural practices and improve market access.
- Establishing digital hubs to enhance digital empowerment for underserved communities.
- Empowering women with digital skills to improve their personal and professional lives.
- Ensuring digital literacy and accessibility for individuals with disabilities, focusing on assistive technologies, accessible digital tools, developing accessible digital content and resources, training educators and caregivers on digital accessibility, and advocating for inclusive digital policies and practices.
- Educating the community about safe and responsible online behavior, emphasizing knowledge about online threats, creating strong passwords, safe browsing, cyber security best practices, and reporting and resolving cyber security issues.
- Using digital empowerment techniques to help small business owners grow their businesses.
- Encouraging children to learn coding and STEM (Science, Technology, Engineering, and Mathematics) concepts.
- Promoting digital storytelling using video, audio, and multimedia tools, content creation, editing, and publishing, and creating a community platform for sharing digital stories.

Note: The topics listed here are merely examples. Students are encouraged to write a term paper in the form of a report on subjects not limited to these topics; additional suggestions can be provided by teachers, faculty members, or the department.