



**LUMDING COLLEGE,
LUMDING, HOJAI, ASSAM
(Affiliated to Gauhati University)**

Common Rules and Regulations

Policy Guidelines/Parameters for conducting Certificate Course

The College offers Add-On/Certificate Courses for students, who are pursuing that full time Bachelor's Course in the campus, although it is not mandatory

List of Certificate Courses

1. Certificate course in Fundamentals of Stock Markets, Department of Commerce, (Only for TDC 1st Semester students).
2. Certificate course in Fundamentals of Insurance & Risk Management, Department of Management, (Only for TDC 2nd Semester students).
3. Certificate course in Information Technology in Business, Department of Computer Science, (Only for TDC 3rd Semester students).
4. Certificate course in Fundamentals of E-Filing of Returns, Department of Accountancy, (Only for TDC 4th Semester students).
5. Certificate course in Investment Management, Department of Commerce, (Only for TDC 6th Semester students).
6. Certificate course in Mushroom Culture Technology, Department of Botany, (Only for TDC students).
7. Certificate course in Tourism and Cultural Heritage Study, Department of History, (Only for TDC students).
8. Certificate course in Household Wiring, Department of Physics, (Only for TDC students).

- (a) Any academic department/ Cell of the College can conduct the certificate course with due approval from the Governing Body of the college.
- (b) Announcement of the course should be made at least one month prior to the beginning of the course and most preferably before commencement of new academic session.
- (c) Students can opt for any one Certificate course which is designed by the department at a time. No one is eligible to enroll in more than one Certificate course in one particular semester.
- (d) There should be only one Coordinator of each course from the concerned department/Faculty who introduced the certificate course. To facilitate the accountability and effectiveness, faculties of the department must be entrusted with this job.
- (e) Each course should be held at least once in a year and must be specific for whom the course is designed.
- (f) The maximum number of enrollment in each course is limited upto 50.
- (g) The courses and examination should be held on the weekends (Sunday or holidays). Under no circumstance regular classes should not be hampered.



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**BOARD OF STUDIES MEETING Dated: 13-06-2022
Academic Session: 2022-23**

Agenda:

1. To prepare and accept the syllabus for certificate course designed by various departments which are likely to be introduced during the academic session 2022-23.
2. To prepare and accept the Regulation for certificate course designed by various departments which are likely to be introduced during the academic session 2022-23.
3. Misc.

Resolution:

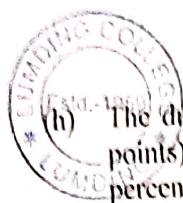
1. Prepare and accepted the syllabus and model question paper for certificate course of the undemoted departments for implementation for that Academic year 2022-23 onwards.
2. Prepare and accepted the Common rules and regulation for certificate course introduced by different departments for implementation for that Academic year 2022-23 onwards.

List of Certificate Courses

1. Department of Commerce, Certificate course in Fundamentals of Stock Markets (Only for TDC 1st Semester students).
2. Department of Management, Certificate course in Fundamentals of Insurance & Risk Management (Only for TDC 2nd Semester students).
3. Department of Computer science, Certificate course in Information Technology in Business (Only for TDC 3rd Semester students).
4. Department of Accountancy, Certificate course in Fundamentals of E-Filing of Returns (Only for TDC 4th Semester students).
5. Department of Commerce, Certificate course in Investment Management (Only for TDC 6th Semester students).
6. Department of Botany, Certificate course in Mushroom Culture Technology (Only for TDC students).
7. Department of History, Certificate course in Tourism and Cultural Heritage Study (Only for TDC students).
8. Department of Physics, Certificate course in Household Wiring (Only for TDC students).

Signature of the Members of BOS, Add-On/ Certificate course, Lumding College

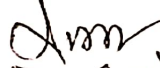
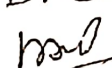
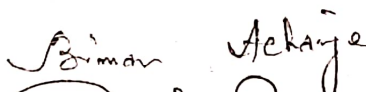
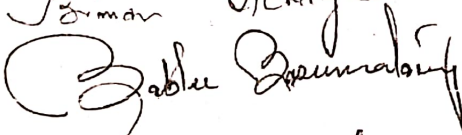
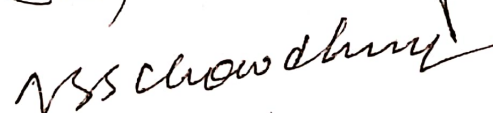
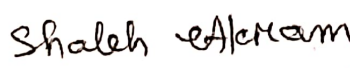
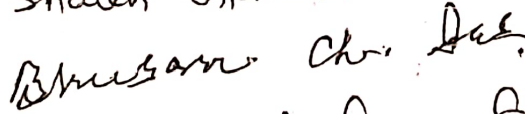
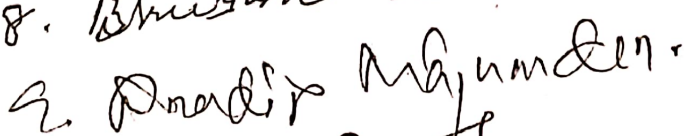
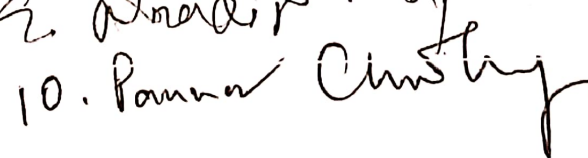
8. Dr. Sanjay Kanti Das	2. Dr. Manushi Maruon
9. Bhuvan Ch. Das	3. Jasbir Upadhyay
10. Ranbir Singh, under	4. Biman Ucharyee
11. Panna Choudhary	5. Bablu Barumalify
	6. Nishu Choudhary



- (h) The duration of the course shall not be less than 45 days (30 hours with 6 credit points). 70 percent of the time should be devoted in class room teaching and 30 percent on hands on training or in case/self- study.
- (i) The enrollment fee would help to meet the cost of the faculty, background materials and also to ensure that the members who are enthusiastic towards the course would only attend the course. The course fee is subject to a maximum of Rupees Three hundred only. One third of the fee what so ever collected needs to be transferred to college fund and rest amount may use for running the course. The college will supply blank answer scripts only for written examination of the certificate course.
- (j) The minimum attendance for the course should be 75%.
- (k) Every department who is organizing the certificate course shall evaluate the participants through the examination process to be conducted by the respective departments.
- (l) Certificate of participation must be issued to the successful candidate by the departments in the standardized format.
- (m) For evaluation of participant's performance both theory and practical marks will be considered and it will be expressed on percentage and later converted into 10 point CGPA. (for example, 55 percentage is equal to 5.8 CGPA, 70 percentage is equal to 7.4 CGPA).

Formulated by the BOS

Signature of the Members of BOS, Add-On/ Certificate course, Lumding College

1. 
Dr. Sanjay Kanti Das
2. 
Dr. Manushi Maibam
3. 
Parashu Upadhyay
4. 
Biman Achary
5. 
Gabor Garmabing
6. 
VSS Chowdhury
7. 
Shaleh Akram
8. 
Bhuvan Ch. Das
9. 
Anandip Majumdar
10. 
Panna Chintan



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DEPARTMENT OF PHYSICS

CERTIFICATE COURSE IN

Household Wiring

Syllabus for Certificate Course

Marks: 100 (50 for Theoretical and 50 for Practical) Credit: 6

Lectures: 45

Theory

UNIT 1: Understanding Electrical Circuits

Lectures 5

Main electric circuit elements and their combination; Rules to analyse DC sourced electrical circuits; Current and voltage drop across the DC circuit elements. Single-phase and three-phase alternating current sources; Rules to analyze AC sourced electrical circuits.

UNIT 2: Electrical Drawing and Symbols

Lectures 15

Various electrical symbols used in domestic and industrial installation and power system as per BIS code. Ladder diagrams. Electrical Schematics. Power circuits, Control circuits. Reading of circuit schematics. Tracking the connections of elements and identify current flow and voltage drop. Wiring diagram of light, fan, bell and alarm circuit, staircase and godown, schematic diagram of lighting system of conference room, theatre, sports stadium etc. Design and drawing of panels, distribution board using MCB, ELCB, main switches and change over switches for domestic, industrial and commercial installations.

Unit 3: Types of Wiring

Lectures 10

Basics of wiring- Star and delta wiring; Batten, casing-capping and conduct wiring, comparison of different types of wiring systems; selection and design of wiring schemes for particular situation (domestic and industrial), rating and current carrying capacity of wires, cables, fuse, switches, socket, MCBs, ELCBs and other electrical accessories.

Unit 4: Earthing

Lectures 10

Concept and purpose of earthing, different types and procedure of earthing, drawing of plate and pipe earthing, test material and costing and estimating.

Unit 5: Estimating and costing Lecture 10

(i) Domestic Installations; Standard practices as IS and IE rules. Planning of circuits, sun circuits and position of different accessories, electrical layouts, preparing estimates including

costs as per schedule rate pattern and actual market rate (single storey and multi storey buildings having similar electrical load)

(ii) Industrial Installations: Standard practices as per IS and IE rules; planning, designing and estimation of installation of single phase motors of different ratings, electrical circuit diagram, starters, preparation of list of materials, estimating and costing on workshop with single phase, 3-phase motor load and the light load.

(iii) Service line connection: Estimate for domestic and industrial load from pole to energy meter.

Laboratory:

1. Safety use in electricity, shock treatment methods, safety precautions.
2. To study and find the specifications of various types of wires and cables.
3. To measure the gauge of a wire the help of wire gauge.
4. To connect the wires with different electrical accessories.
5. Skinning the cable and joint practice on single and multi -strand wire.
6. To measure the power of an electric motor by wattmeter.
7. To make a main switch board for house wiring
8. Installation of common electrical accessories such as switch, holder, plug on board.
9. Installation and wiring connection of ceiling fan, exhaust fan, geyser, water purifier.
10. Preparation of extension board.
11. Demonstrate electrical circuit diagrams related to electrical equipment.
12. Calculate/ interpret electrical power rating of electrical equipment
13. Carry out the earthing of the installed electrical circuit as per standard practice
14. Practice on different types of house wiring installation and testing
15. Designing of light and fan scheme for an institutional or commercial building
16. House wiring circuits using fuse, switches, sockets, ceiling fan etc. in batten or PVC casing-caping.
17. Prepare one estimate of materials required for CTS wiring for small domestic installation of one room and one verandah within 25m^2 with given light, fan & plug points.
18. Prepare one estimate of materials required for conduct wiring for small domestic installation of one room and one verandha within 25m^2 with given light, fan & plug points.
19. Prepare one estimate of materials required for concealed wiring for domestic installation of two rooms and one latrine, bath, kitchen & verandah within 80m^2 with given light, fan & plug points.
20. Prepare one estimate of materials required for erection of conduct wiring to a small workshop installation about 30m^2 .



DEPARTMENT OF PHYSICS

CERTIFICATE COURSE IN

HOUSEHOLD WIRING

INSTRUCTION TO PAPER SETTERS

1. Confidentiality must be strictly maintained.
2. The question papers should be prepared strictly in accordance with the syllabus. Specification and design of the question paper of the department.
3. The question paper should cover the entire syllabus with proper distribution and weightage of marks for each question or a part thereof. The question paper should cover all units so as to discourage selective study and cramming. **No question should be set outside the syllabus.** As far as practicable, repetition of last year questions may be avoided.
4. Maintaining the standard, the language of questions should be simple, direct, and worded clearly and unequivocally so that the candidates may have no difficulty in appreciating the scope and purpose of the questions. The length of the expected answer should be specified as far as possible in the question itself.
5. Particular care should be taken to ensure that the candidates may have reasonable time to think over and to answer all questions within the allotted time, leaving a fair margin for revision work.
6. Question which may offend or hurt the sentiment of the examinee on the ground of religion, community, political belief and social system should be avoided.
7. The manuscripts of question paper should be legibly written or typed by the question setter. Papers should be typed in the format as:
 - Paper size: **A4**; Font style: **Time New Roman**; Font size:12; Line spacing:1.5; Header portion should be in font size 14 with **bold and capital letters**.
 - The print should be sufficiently dark and clear to produce good quality photocopies.
 - Each page must be numbered clearly, (e.g.) page 1 of 2, at the middle bottom of the page.
 - Use only one side of the paper when printing the examination paper.
8. All relevant draft and notes should be effectively destroyed. **No copy of any question paper is to be retained by the question setter.**
9. 'Instruction to the examinee' should be correctly specified on first page of the question paper.
10. Paper setters are requested to record in the margin opposite to each question the maximum number of marks they intend to assign to it.
11. If any of the near-relation of the paper setter is appearing at the examination, it should be intimated prior to undertaking this assignment.
12. Please type '**END OF PAPER**' immediately after the last question.

DEPARTMENT OF PHYSICS

CERTIFICATE COURSE IN

HOUSEHOLD WIRING



Question Paper Pattern

Total Marks for

Theory Examination: 50 Time: 2 hours

Practical Examination: 50 Time: 2 hours

All Units (from unit 1 to Unit 3) of the syllabus carries equals marks.

Question Pattern & Marks Division

- Q.1. Ten short questions carrying 1 mark each. ($1 \times 10 = 10$). There will be only 10 questions and all the ten short questions are compulsory. Alternative choice is not available.

Questions in this category may be of "direct answer" type or they may be of "multiple choice" type or they may be of "filling in the gap" type. It is advisable to mix different categories but the question setter has freedom in this respect.

**** The question setter is required to provide answers to the questions in Q, No.1 in a separate sheet along with the question paper.**

- Q.2. Six short questions will be asked out of which five questions are to be answered. Marking pattern is 2 marks for each. ($2 \times 5 = 10$).
- Q.3. Eight questions will be asked out of which three questions are to be answered. Marking pattern is 10 marks for each. ($10 \times 3 = 30$). The marks allotment for these questions may be accumulated, for example $2+3+5 = 10$, or $5+5=10$ etc.
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VOUCHER

**OFFICE OF THE PRINCIPAL
LUMDING COLLEGE**

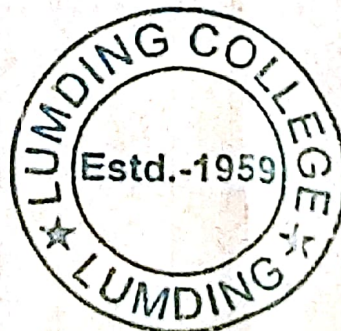


Received from

Being amount paid to Diman Achesje
on account of Add on course fees on Household
Wiring by Phy Sci Dept held on
06-01-23, 07-01-23 & 08-1-23 the sum of Rs. 2000/-
Rupees Two Thousand only.
Vide Cash/Cheque No. Cash Date 24/3/23
as part/full and final settlement.

Prepared by

M. J. J.
24/3/23



R.V.

Date _____

ADD ON COURSE

Topic-Domestic wiring and repairing of household appliances

Department of Physics

Lumding College

Attendance sheet

Date-06/01/2023

Day-1



Sl. No	Name	Semester	Class Roll No	WhatsApp number	Signature
1	Jia Roy	3rd sem	50	9365939002	Jia Roy.
2	Jessica Singha	3 rd sem	32	7663831519	Jessica Singha
3	Arpita Audhikary	3rd sem	90	9395116642	Arpita Audhikary
4	Kusum Mahato	3rd sem	51	7086650959	Kusum Mahato
5	Lijia Ingilipi	5 th Sem	116	6001080636	Lijia Ingilipi
6	Resma Devi Shaxma	5 th Sem	115	6901415733	Resma Devi Shaxma
7	Pratim Debnath	3rd sem	47	7002743767	Pratim Debnath
8	Joy Das	3rd sem	49	7002639249	Joy Das.
9	Kirshan Dey.	3rd sem	17	8812971700	Kirshan Dey.
10	Aman Thapa	3rd Sem	18	9954615871	Aman Thapa.
11	Surhaphish Ghosh	3rd sem	69	6000379346	Surhaphish Ghosh
12	Chandam chauhhan	3rd Sem	24	8471849550	chandam chauhhan
13	Rajdeep Bhowmick	5 th sem	30	9706419665	Rajdeep Bhowmick
14	Rajkumar Roy	5 th Sem	100	7896444894	Rajkumar Roy.
15	Bablu Bhowmick	5 th Sem	26	6002983308	Bablu Bhowmick
16	Deepnaraj ghosh	5 th Sem	47	8135800772	Deepnaraj ghosh
17	Ujjal Das	5 th sem	88	6001800418	Ujjal Das
18	Deep Sarma	2nd sem	43	9366276521	Deep Sarma
19	Dipsikha Dey	3rd Sem	65	9395608801	Dipsikha Dey
20	Pallabi Das	1st sem	64	8474890608	Pallabi Das