

University of Mumbai



No. UG/ 21 of 2019-20

CIRCULAR:-

Attention of the Principals of the Affiliated Colleges and Directors of the recognized Institutions in Commerce & Management Faculty is invited to this office Circular No. UG/277 of 2006, dated 25th July, 2006, relating to the Certificate, Diploma and Advanced Diploma in Computer Applications as an Add-on course.

They are hereby informed that the recommendations made by the I/c Dean, Faculty of Commerce & Management, have been accepted by the Academic Council at its meeting held on 26th December, 2018 vide item No. 4.14 and that in accordance therewith, the revised syllabus for Add-on-Vocational Certificate, Diploma and Advanced Diploma Course in Computer Application (Sem. I to VI) (intake capacity 25 students), has been brought into force with effect from the academic year 2018-19, accordingly. (The same is available on the University's website www.mu.ac.in).

MUMBAI – 400 032
22nd May, 2019
To

(Dr. Ajay Deshmukh)
REGISTRAR

The Principals of the affiliated Colleges and Directors of the recognized Institutions in Commerce & Management Faculty. (Circular No. UG/334 of 2017-18 dated 9th January, 2018.)

A.C./4.14/26/12/2018

No. UG/ 21 -A of 2019-20

MUMBAI-400 032

22nd May, 2019

Copy forwarded with Compliments for information to:-

- 1) The I/c Dean, Faculty of Commerce & Management,
- 2) The Director, Board of Examinations and Evaluation,
- 3) The Professor-com-Director, Institute of Distance and Open Learning (IDOL),
- 4) The Director, Board of Students Development,
- 5) The Co-ordinator, University Computerization Centre,

(Dr. Ajay Deshmukh)
REGISTRAR

BOS – 14/05/2024 / Item No. 3

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GB – 27/05/2024 / Item No. 4,5



LALA LAJPATRAI COLLEGE OF COMMERCE & ECONOMICS

Lala Lajpatrai Marg, Mahalaxmi, Mumbai - 400 034. Tel.: 2354 8240 / 2354 8241 Fax : 2353 2896
E-mail : llcolcom@mtnl.net.in | principal.llc@gmail.com | Website : www.lalacollege.edu.in

Lala Lajpatrai College of Commerce & Economics (Autonomous)

Mahalaxmi, Mumbai – 400034.

Date: 07.05.2024

NOTICE

This is to inform you that an **Online Meeting of Adhoc Board of Studies in Mathematics, Statistics and Computer Applications under Department of Commerce, Management and Law** is scheduled on **Tuesday, 14th May 2024 at 1.30 p.m. through Zoom platform.**

The link for the same will be sent on your **official E-mail Id and Whatsapp group.**

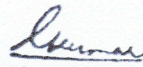
AGENDA

1. To read and confirm the minutes of the meeting scheduled on 23rd April 2024.
2. To frame and confirm the structure and the syllabus of F.Y.B.Com SEM – I and SEM – II under the verticals of (VSC and SEC).
3. To frame and confirm the structure and syllabus for Add-on-Vocational courses.

Programme / Course	Year
1. Certificate Course in Computer Applications. (As per NEP 2020)	First Year
2. Diploma & Advance Diploma in Computer Applications and E-Commerce.	Second and Third Year

4. To invite suggestions from the board if any.
5. Any other matter with the permission of the chair.




I/C Principal

CC:

1. In-charge Principal
2. Chairman Board of Studies (Department of Commerce, Management and Law)
3. Member Board of Studies (Department of Commerce, Management and Law) – List Enclosed
4. Department File

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Lala Lajpatrai College of Commerce & Economics (Autonomous)
Mahalaxmi, Mumbai – 400034.

Date: 15.05.2024

NOTICE

This is to inform you that an Online Academic Council Meeting is scheduled on Saturday, 18th May, 2024 at 11.00 a.m.

For Virtual mode click on the following link:

<https://us06web.zoom.us/j/88105693371?pwd=IU89tajjku9baGU1vagFbbT8WiVah.1>

AGENDA

1. To read and confirm the minutes of AC meeting held on 29th April 2024.
2. To approve the structure & subjects for F.Y.B.Com as per NEP 2020.
3. To approve the syllabus and evaluation pattern of subjects of F.Y.B.Com w.e.f AY 2024-25.
4. To approve the structure, syllabus & evaluation pattern as per NEP 2020 for PG Programs in
M.Com Part I (Advanced Accountancy),
M.Com Part I (Business Management) & structure of M.Com Part II (Advanced Accountancy & Business Management).
5. To approve the subjects, syllabus & evaluation pattern of the following FY, SY & TY Add-on-Vocational Courses:
 - Taxation Procedures & Practices
 - Tourism & Travel Management
 - Computer Applications
 - E-Commerce
 - Principles & Practices of Insurance
6. Any other matter with the permission of the chair.




I/C Principal

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Lala Lajpatrai College of Commerce & Economics (Autonomous)

Mahalaxmi, Mumbai – 400034.

Date: 25.05.2024

NOTICE

This is to inform you that an Online Governing Body Meeting is scheduled on Monday, 27th May, 2024 at 04.00 p.m.

For Virtual mode click on the following link:

<https://us06web.zoom.us/j/81741341595?pwd=OAnjblcZPCYrdVwgcVNgPU73cQl1Zn1>

AGENDA

1. To read and confirm the minutes of Governing Body meeting held on 3rd May 2024.
2. To change the approved intake capacity of BMS (Bachelor in Management Studies) under AICTE from 240 seats to 120 seats and pass resolution for the same.
3. To approve 120 seats for B.Com (Management Studies) as per University Circular No.AAMS_UGS/ICC/2024-25/02 and pass resolution for the same.
4. To approve the structure and subjects for F.Y.B.Com as per NEP 2020 w.e.f A.Y. 2024-25.
5. To approve the syllabus and evaluation pattern of subjects of F.Y.B.Com w.e.f A.Y. 2024-25.
6. To approve the structure, syllabus & evaluation pattern as per NEP 2020 for PG Programs in
M.Com Part I (Advanced Accountancy),
M.Com Part I (Business Management) & structure of M.Com Part II (Advanced Accountancy & Business Management).
7. To approve the subjects, syllabus & evaluation pattern of the following FY, SY & TY Add-on-Vocational Courses:
 - Taxation Procedures & Practices
 - Travel and Tourism Management
 - Computer Applications
 - E-Commerce
 - Business Risk Management
8. Any other matter with the permission of the chair.


I.C Principal

AS PER NEP 2020

**LALA LAJPATRAI COLLEGE OF
COMMERCE AND ECONOMICS
MUMBAI – 400034
(AUTONOMOUS)**



Syllabus for Add-on-Vocational Course

**Certificate Course in Computer Applications
Semester I and II**

**Under the
Faculty of Commerce, Management & Law
(Ad hoc BOS in Mathematics, Statistics & Computer Applications)**

(with effect from the Academic Year 2024-25)

LALA LAJPATRAI COLLEGE OF COMMERCE & ECONOMICS
MAHALAXMI, MUMBAI – 400 034

Nature of Course	Add-on- Vocational Course
Program Title	Certificate Course in Computer Application
Course Title (Sem I)	Fundamentals of Networking
	Introduction to C++
Course Title (Sem II)	Web Authoring
	Principles of Python Programming
Course Credit	4 (Two credits per course)
Level – I (Certificate Course)	First Year B. Com/BAF/BBI/BMS/BScIT/BFMg/BAMMC or any other equivalent UG Programme in any year.
Eligibility	HSC from a recognized Board from Arts, Science or Commerce or any other relevant stream.
Proposed Fees (Sem I & II)	Rs. 6000/- (inclusive of Examination Fees for the successful completion of the Certificate Course only)
Intake Capacity	25
Course Code	
Paper	I & II
Semester and academic year	I – 2024-25
Duration (Hrs.)	60 hours (2 hours per week)
Internship Training/ OJT	Two months spread across the course study of three years

Learning Objectives

- To acquire proficiency in the concepts of Networking and Web Authoring.
- To explore the Knowledge of Programming using C++ and Python Programming Language.

Course Outcomes

- Certificate Course Completion.
- Help initiate a vocation in understanding & assisting professionals in the Computer Programming Field.

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SEMESTER I

FUNDAMENTALS OF NETWORKING
COURSE CONTENT (Two Credits)

Unit	Table of Contents	No. of lectures
1	<u>Operating System</u> • Introduction to Operating Systems. • Services of Operating Systems • Overview of Operating System • Operating System Components • File system in Operating System • File system storage • CPU scheduling • Multitasking • Programming • Timesharing • Buffering • Buffering • Spooling • Memory management • GUI	05 lects
2.	<u>Introduction To Networking</u> • Study of transmission media - wire & wireless media • Network topologies - LAN, MAN & WAN, Network topologies access methods, • Topologies - BUS, RING, STAR, MESH and TOKEN RING • Protocols - Internet protocols • Introduction to connectivity devices - Modem, Hubs, Repeaters, Routers	10 lects + 5 practs

3	<u>Introduction to Network Security</u> • Need of Network Security • Threats Related to Network Security • Authentication in Network Security • Access control, server logs, virus protection, firewalls, intrusion detection systems, VPN, backup and off-site storage. • Physical security, physical threats, implementing physical security.	05 lects
	<u>Data Security & Data Privacy</u> • SSL • Cryptography • Encapsulation • IPSec • L2TP Protocol	05 lects

INTRODUCTION TO C++ (Two Credits)**COURSE CONTENT**

Unit	Table of Contents	No. of lectures
1	❖ <u>Introduction to C++</u> - Keywords, Identifiers, Data types, - User defined data types, Derived data types, - Constants, Type compatibility, - Declaration of Variables	5 lects
2.	❖ <u>Operations In C++</u> - memory management operators - Manipulators - Control Structures - if, if... else, nested if...else, switch, do-while, for	10 lects+ 5 Practs
3	❖ <u>Functions in C++</u> - Pre-Define Functions in C++ - Function Creation in C++ - Functions With Parameters - Return statement in C++	10 lects + 5 Practs

❖ **EVALUATION PATTERN****Question Paper Pattern**

Question No.	Paper Pattern	Marks	Units	Total Marks
1.	Objective Based Questions- Fill in the blanks/Multiple Choice Questions/Match the following/True or False /Answer in one word (Any two variations - 1 mark for every variation with options (Any five out of seven))	10	Unit 1,2,3	50
2.	Answer the following. (A or B)	10	Unit 1	
3.	Answer the following. (A or B)	10	Unit 2	
4.	Answer the following. (A or B)	10	Unit 3	
5	Write short notes on (Any 2/4) /Explain the following terms (Any 5/7) / Code Analysis (Any 2/4)	10	Unit 1,2,3	
	N.B: Ten Mark questions can be further subdivided into two questions of five marks each			

❖ **PRACTICAL EVALUATION PATTERN**

Practical	10 Marks
Journal	5 Marks
Viva	5 Marks

References

- Andrew Tonenbourn - Networking
- Data Communications and Networking by McGraw-Hill Education
- "Let Us C++" by Yashavant Kanetkar
- Object Oriented programming with C++ by E.Balaguruswamy
- Computer Science with C++ by Sushmita Arora.
- C++ complete reference by Tata McGraw Hill

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SEMESTER II

WEB AUTHORIZING

COURSE CONTENT (Two Credits)

Unit	Table of Contents	No. of lectures
1	❖ <u>Basics of Web Authoring</u> • Definition of the Web Authoring • Understanding the Web • The Internet vs. The World Wide Web • Function and role of web browsers	03 lects
2.	❖ <u>Introduction Website Designing with HTML.</u> • Understanding Hyper Text Markup Language • Advantages & disadvantages of HTML • Understand the role of HTML in web development. • What is HTML? Understanding tags, elements, and attributes. • Structure of an HTML document (DOCTYPE, html, head, body). • Basic HTML tags (title, header, paragraph, links, images, lists, table, iframe). • Create a simple HTML page with basic elements like headings, paragraphs, and links.	7 lects + 2 practs
3	❖ <u>Styling with CSS</u> • Learn how CSS enhances the appearance of web pages. • Introduction to CSS: What is CSS and why is it important? • CSS syntax (selectors, properties, values). • Types of CSS (inline, internal, external). • Basic styling properties (colors, fonts, spacing, alignment).	5 lects + 3 practs
4	❖ <u>Introduction to JavaScript</u> • Understand basic programming concepts using JavaScript. • Understanding client and server architecture. • Variables, data types, operators in Java script. • Write simple scripts like alert messages, prompts. • Introduction To XML	10 lects + 5 practs

PRINCIPLES OF PYTHON PROGRAMMING (Two Credits)**COURSE CONTENT**

Unit	Table of Contents	No. of lectures
1	❖ <u>Introduction to Python</u> • Python Programming Language and its types • Overview of Python • Characteristics and its features • Advantages of using Python for programming • Application of Python • Creating your first Python script. • Introduction to Python syntax, Variables and data types • Basic arithmetic operations • Writing and executing simple Python scripts	10 lects + 2 practs
2.	❖ <u>Introduction to control structures</u> • Conditional Programs Using if statements, elif statements, • Using comparison operators and Logical operators • Concept of Loops • Using for loop, while loop • The importance of loop control statements (break, continue)	10 lects + 3 practs
3	❖ <u>Introduction to Collections In Python</u> • lists • Dictionaries • Tuples • Solutions – Lists, Dictionaries, Tuples.	10 Lects + 5 practs

❖ **EVALUATION PATTERN****Question Paper Pattern**

Question No.	Paper Pattern	Marks	Units	Total Marks
1.	Objective Based Questions- Fill in the blanks/Multiple Choice Questions/Match the following/True or False /Answer in one word (Any two variations - 1 mark for every variation with options (Any five out of seven))	10	Unit 1,2,3	50
2.	Answer the following. (A or B)	10	Unit 1	
3.	Answer the following. (A or B)	10	Unit 2	
4.	Answer the following. (A or B)	10	Unit 3	
5	Write short notes on (Any 2/4) /Explain the following terms (Any 5/7) / Code Analysis (Any 2/4)	10	Unit 1,2,3	
	N.B: Ten Mark questions can be further subdivided into two questions of five marks each			

❖ **PRACTICAL EVALUATION PATTERN**

Practical	10 Marks
Journal	5 Marks
Viva	5 Marks

References

- *Web Technologies: HTML, CSS, JavaScript, PHP, Java, JSP, XML and AJAX, Black Book* by Kogent Learning Solutions Inc.
- *Web Designing with HTML, CSS, JavaScript and jQuery Set* by Jon Duckett
- *The Complete Reference HTML & CSS: A Beginner's Guide* by Thomas Powell
- *JavaScript: The Complete Reference* by Thomas Powell and Fritz Schneider
- *"Let Us Python"* by Yashavant Kanetkar
- *"Programming with Python"* by Sumita Arora
- *"Python for Beginners: A Step-by-Step Guide to Learn Python Programming"* by Vishnu P.R.
- *"Python Crash Course"* by Eric Matthes
- *"Python Programming"* by Reema Thareja

Team for Creation of Syllabus

Sr. No.	Name	Association/College Name
1.	Mr. Nimesh Punjani	Assistant Professor – Department of Mathematics & Statistics – Lala Lajpatrai College of Comm. & Eco.
2.	Ms. Hemani More	Assistant Professor – Department of Mathematics & Statistics – Lala Lajpatrai College of Comm. & Eco.
3.	Ms. Nehal Naik	Faculty – BVoc Institute, Visiting Faculty – Dept. of Add-on -Vocational Courses – Lala Lajpatrai College of Comm. & Eco.
4.	Ms. Krishnapriya Chonkar	Freelancer - Faculty – Aditya Birla World Academy, Visiting Faculty – Dept. of Add-on -Vocational Courses. – Lala Lajpatrai College of Comm. & Eco.


 Dr. Rahul Shetty
 Chief Co-ordinator
 Add-on-Vocational Courses


 Prof. Dr. Purnima Sharma
 Chairman – BOS (Commerce)