INDUS UNIVERSITY
DEPARTMENT OF COMPUTER SCIENCE

Departmental Vision:

The department of Computer Applications aims to generate groomed, technically competent and skilled intellectual professionals to meet the current challenges of the modern computing industry with greater social impact.

Departmental Mission:

The missions of department are:

M1: To offer high-grade, value-based Graduate and Post-graduate program in the field of Computer Applications.

M2: To provide conducive environment so as to achieve excellence in teaching-learning, research and development activities.

M3: To facilitate students to nurture skills and professional competency to meet the ever-changing needs of society and industry.

M4: To provide students with the tools to become productive, participating global citizens and life-long learners.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1. Ability to demonstrate and implement model tools and technology to meets industry requirement.

PSO2. Ability to implement computer science concept and interdisciplinary knowledge into computer application domain.

Program Outcomes (POs)

Computer Application graduates will be able to:

PO1. Computer knowledge: Apply the knowledge of mathematics, science, computer fundamentals and specialization to the solution of complex problems.

PO2. Problem analysis: Identify, formulate, review research literature, and analyze complex computer science problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and computer sciences.

PO3. Design/development of solutions: Design solutions for complex computer science problems and design system components or processes that meet the specified needs with appropriate consideration for cultural, social environment.

PO4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern IT tools including prediction and modeling to complex activities with an understanding of the limitations.

PO6. The digital youth and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional skill-set.

PO7. Environment and sustainability: Understand the impact of the professional computer science solutions in social and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the computer science practice.

PO9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10. Communication: Communicate effectively on complex activities with the computer science community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11. Project management and finance: Demonstrate knowledge and understanding of the computer and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

A.Y.2020-2021

SEMESTER-V

Subject Name: Client Server Architecture (IMCA0503)

Course Outcomes

CO 1: Recognize the structure of client-server architecture. (BT- 1)

CO 2: Classify the components used for client and server both. (BT- 2)

CO 3: Relate and illustrate the categories of client server applications. (BT – 3, 4)

CO 4: Plan client/server application using database middleware component. (BT – 5)

CO 5: Change the existing system by implementing the concept of client-server architecture. (BT-6)

CO 6: Articulate various upcoming technologies relate to client-server applications. (BT – 3)
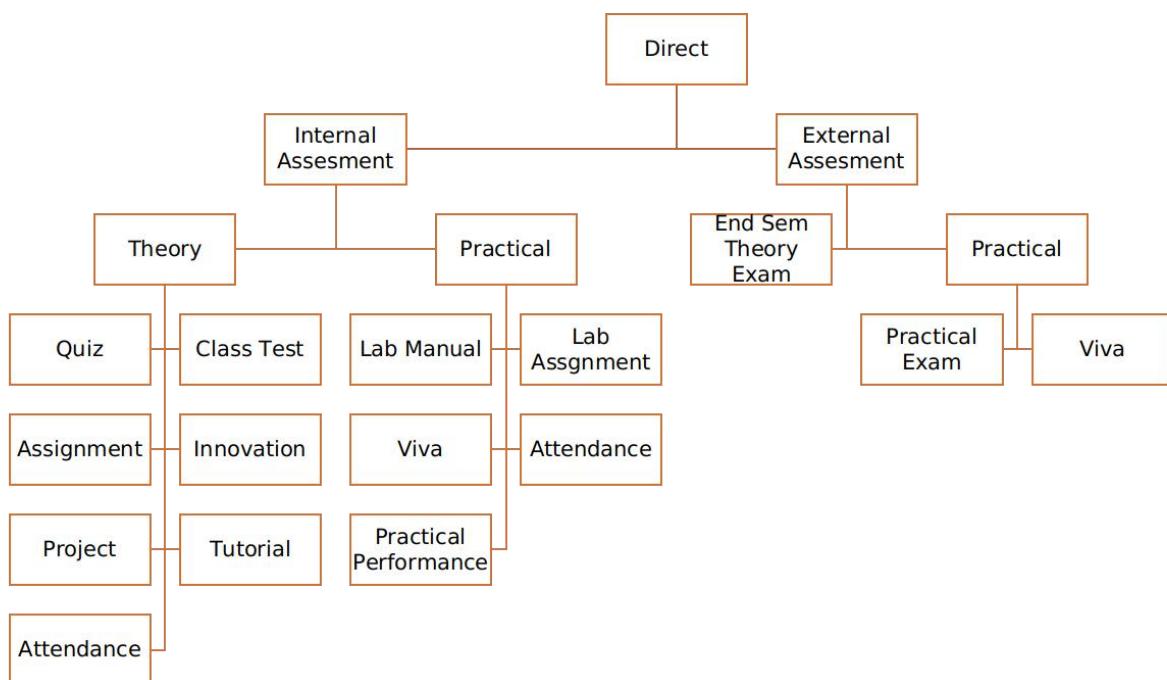
COURSE OUTCOME (CO) and PROGRAM OUTCOME (PO) Matrix

(1–Low, 2- Medium, 3- High)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	-	-	2	-	-	-	-	-	-	-	1
CO2	-	-	-	1	-	-	-	-	-	-	-	1
CO3	2	-	-	3	-	-	-	-	-	-	-	-
CO4	1	2	3	-	-	-	-	-	-	-	1	-
CO5	-	3	2	2	2	-	1	-	-	-	2	2
CO6	2	1	2	2	3	1	-	-	-	-	-	2
IMCA0503	2	2	2.3	2	2.5	1	1	0	0	0	1.5	1.5

COURSE OUTCOME and PRGORAM SPECIFIC OUTCOME Matrix

CO	PSO1	PSO2
CO1	-	1
CO2	-	2
CO3	2	1
CO4	3	-
CO5	3	-
CO6	2	2
IMCA0503	2.5	1.5

Direct
- Internal Assessment
  - Theory
    - Quiz
    - Class Test
    - Assignment
    - Innovation
    - Project
    - Tutorial
    - Attendance
  - Practical
    - Lab Manual
    - Lab Assgnment
    - Viva
    - Attendance
    - Practical Performance
- External Assessment
  - End Sem Theory Exam
  - Practical
    - Practical Exam
    - Viva

Direct Assessment method – The knowledge and skills learnt by the students are assessed directly from their performance through internal assessment and external assessment processes.

External assessment- Performance of student is recorded in university theory exams, laboratory exams and project evaluation.

Internal assessment- Performance of student is recorded through class assignments and tutorials, internal assessment tests, laboratory assignments, seminars and project progress review and evaluation.

Attainment of Course Outcomes (CO's)

For End Semester Theory Exams

1. Attainment Level 1: If < 45% students scoring ≥60% marks

2. Attainment Level 2: If >45-75% students scoring ≥60% marks

3. Attainment Level 3: If >75-100% students scoring ≥60% marks

For Internal Theory Exams

1. Attainment Level 1: If <45% students scoring ≥75% marks

2. Attainment Level 2: If >45-75% students scoring ≥75% marks

3. Attainment Level 3: If >75-100% students scoring ≥75% marks

Weights of Attainments are assigned as per University Evaluation criteria as below

For A.Y. 2020-21

1. For all courses except courses marked with (*)

INDUS University End Semester Examinations: Weightage: 40%

Internal Assessment: Weightage: 60%

2. Courses marked with (*)

INDUS University External Examinations: Weightage: 0%

Internal Assessment: Weightage: 100%

Internal Component with COs mapping

Component 1:   Mid Semester Examination (CO1, CO2, CO3, CO4, CO5, CO6) (40 marks)

Component 2:   Presentation (CO1, CO2, CO3, CO4, CO5, CO6) (05 marks)

Component 3:   Assignment (limited to 2) / Case Study (CO1, CO2, CO3, CO4, CO5, CO6) (20 marks)

Component 4:   Attendance (05 marks to all >80% attendance)

Course Attainment

Academic Year 2020-2021

Course Name with Code	Client Server Architecture – IMCA0503
Class	5th Semester, Integrated MCA
Faculty Name	Kirtankumar Rathod

CO Attainment Internal component	1	2	3	4	Internal assessment component total (1 to 4)
CO 1					
CO 2					
CO 3					
CO 4					
CO 5					
CO 6					

Indirect Attainment from the student's feedback for each Cos
1-Low (L), 2-Medium (M), 3-High (H)

Sr. No.	Course Outcome	L	M	H
CO1	Are you able to recognize the structure of Client-Server Architecture?			
CO2	Can you classify the components used for client and server both?			
CO3	Can you relate and illustrate the categories of client server applications?			
CO4	Can you plan client/server application using database middle-ware component?			
CO5	Are you able to change the existing system by implementing the concept of client-server architecture?			
CO6	Are you able to classify various upcoming			

	technologies relate to client server applications?			

Total Student given feedback: 0 out of 41

Sr. No.	Course Outcome	Value
CO1	Are you able to recognize the structure of Client-Server Architecture?	
CO2	Can you classify the components used for client and server both?	
CO3	Can you relate and illustrate the categories of client server applications?	
CO4	Can you plan client/server application using database middle-ware component?	
CO5	Are you able to change the existing system by implementing the concept of client-server architecture?	
CO6	Are you able to classify various upcoming technologies relate to client server applications?	

% CO Attainment	Internal Exam	Internal Exam *0.6	End sem Exam	End sem Exam *0.4	Direct Attainment (DA)	Indirect Attainment (IA)	Overall = 0.8*DA + 0.2*IA
CO 1							
CO 2							
CO 3							
CO 4							
CO 5							
CO 6							
	Overall Course Attainment						
	Set Target for the course						

	Course Attainment Status(Yes/No)				

Best Performing CO:	
Least Performing CO	

Observations:

1	
2	

Plan of Action:

1	
2	

Kirtankumar Rathod
Faculty Signature