



ARKA JAIN
University
Jharkhand



[09-05-2025]

END SEM EXAMINATION
School of Engineering & IT

Branch	Computer Science & Engineering		Program	Diploma
Subject Name	Program Elective -III Advance Computer Networks		Session	Even 2024-2025
Semester	VI	Year	May, 2025	
Time: 3 Hour Max. Marks : 70	• Start writing from 2nd page onwards; don't Write on the 1st Page Backside • Answer all Questions of Section A (Compulsory) • Answer Any Four out of Six of Section B • Answer Any Three out of Five of Section C • Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will comes under <u>Unfair Means</u> and will <u>Result in the Cancellation of the Papers.</u>			
	Knowledge Level (KL)	K1 : Remembering	K3 : Applying	K5 : Evaluating
	K2 : Understanding	K4 : Analysing	K6 : Creating	

Section A (Each question Carry 02 Marks from Q1-i to Q1-x) – 20 Marks

Q. N	QUESTIONS	Marks	COs	KL
1				
i	Write proper definition of Gateway and Repeater.	2	CO1	K1
ii	Define virtual LAN.	2	CO2	K1
iii	What are the responsibilities of Network Layer?	2	CO1	K2
iv	State the features of HTTP.	2	CO2	K4
v	Describe data encapsulation.	2	CO4	K1
vi	Write short note on DNS.	2	CO4	K2
vii	Explain FTP.	2	CO3	K3
viii	Write down the responsibilities of Transport Layers?	2	CO4	K1
ix	Discuss Subnetting and Supernetting.	2	CO3	K2
x	Explain the different services provide by data link layer?	2	CO1	K1

Section B (Answer any FOUR out of SIX) – 20 Marks

(Each question 5 Marks)

Q. No.	QUESTIONS	Marks	COs	KL
2	Define switching techniques in details?	5	CO3	K1
3	Explain basic principles of mobile communication.	5	CO3	K2
4	Explain the transmission modes in details?	5	CO1	K3
5	Explain what is a proxy server? Why do we need a proxy server?	5	CO3	K3
6	Explain different type of networks?	5	CO1	K3
7	Define Bridge, HUB, and Router.	5	CO2	K1

Section C (Answer any THREE out of FIVE) – 30 Marks

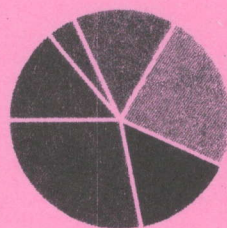
(Each question Carry 10 Marks)

Q. No.	QUESTIONS	Marks	COs	KL
8	Explain the benefits of a firewall? What is a proxy firewall?	10	CO1	K1
9	What is the use of a VPN and write the different types of VPN's? Explain it.	10	CO3	K1
10	Distinguish between LAN and WLAN. What the significance of WLAN is in today's networking?	10	CO2	K2
11	Differentiate between SNMP and R MON.	10	CO4	K2
12	What is the wireless network explain with its example? Write the difference between GSM and CDMA.	10	CO4	K1

CO1	Explain the functions of the different layer of the OSI Protocol.
CO2	Draw the functional block diagram of wide-area networks (WANs), local area networks (LANs) and Wireless LANs (WLANs) describe the function of each block.
CO3	For a given requirement (small scale) of wide-area networks (WANs), local area networks (LANs) and Wireless LANs (WLANs) design it based on the market available component.
CO4	For a given problem related TCP/IP protocol developed the network programming.

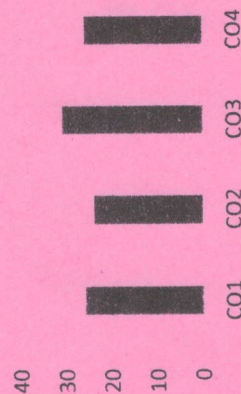
GRAOPHICAL REPRESENTATION

Bloom's Level wise Marks Distribution



■ K1 ■ K2 ■ K3 ■ K4 ■ K5 ■ K6

Course Outcome Wise Marks Distribution



 ARKA JAIN University Jharkhand		NAAC GRADE A ACCREDITED UNIVERSITY		[16-05-2025] END SEM EXAMINATION School of Engineering & IT	
Branch	Computer Science and Engineering			Program	Diploma
Subject Name	Open Elective -III - Cyber Security Laws, Standards and IPR			Session	Even, 2024-2025
Semester	VI			Year	May, 2025
Time: 3 Hour Max. Marks : 70	• Start writing from 2nd page onwards; <u>don't Write on the 1st Page Backside</u> • Answer all Questions of Section A (Compulsory) • Answer Any Four out of Six of Section B • Answer Any Three out of Five of Section C • Possession of Mobile Phone or any kind of <u>Written Material</u>, Arguments with the Invigilator or Discussion with Co-Student will comes under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation of the Paper(s)</u>.				
	Knowledge Level (KL)	K1 : Remembering K2 : Understanding		K3 : Applying K4 : Analysing	

Section A (Each question Carry 02 Marks from Q1-i to x - 20 Marks)					
Q.N	QUESTIONS		Marks	Cos	KL
1					
i	Which is the nodal agency for cyber security in India?		2	CO3	K1
ii	What is digital signature?		2	CO2	K1
iii	Define IPR.		2	CO2	K1
iv	What is Intellectual Property?		2	CO2	K1
v	What do you understand by weak authentication?		2	CO1	K2
vi	What is Intrusion detection system?		2	CO3	K1
vii	What is WSDL in web service?		2	CO3	K1
viii	Define cyber espionage.		2	CO1	K1
ix	List the difference between Authentication and authorization.		2	CO1	K2
x	Differentiate between symmetric and asymmetric key cryptography.		2	CO1	K2

Section B (Answer any FOUR out of SIX) – 20 Marks

(Each question Carry 05 Marks)

Q. No.	QUESTIONS	Marks	COs	KL
2	Describe cyber security vulnerabilities in software.	05	CO1	K2
3	Explain firewalls and its types.	05	CO2	K2
4	Explain the following: a. Access control mechanisms b. IT audit.	05	CO3	K3
5	What is CERT-In and its functions?	05	CO3	K2
6	What is role of international law in cyber space?	05	CO1	K4
7	Describe access control mechanisms.	05	CO3	K2

Section C (Answer any THREE out of FIVE) – 30 Marks

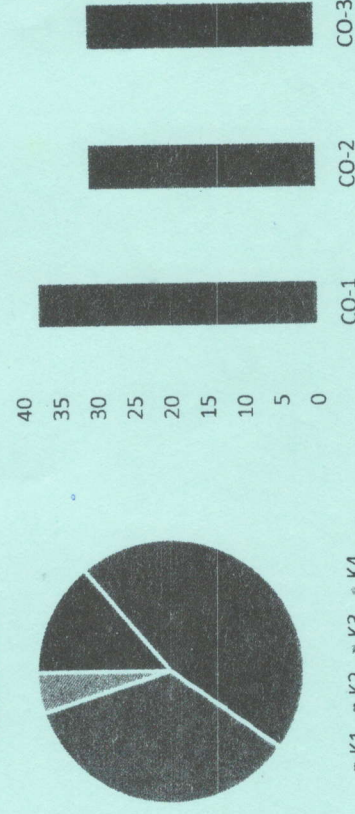
(Each question Carry 10 Marks)

Q. No.	QUESTIONS	Marks	COs	KL
8	Explain the following: a. Cyber Warfare b. Cyber Crime c. Cyber terrorism d. Cyber Espionage	10	CO1	K2
9	Explain some common cyber security safeguards measures.	10	CO2	K3
10	Briefly explain IT Act 2000.	10	CO3	K3
11	Describe various applications of cryptography.	10	CO1	K2
12	Explain web security considerations.	10	CO2	K3

Course Outcomes	CO1	CO2	CO3
Protect data and respond to threats that occur over the internet.			
Design and implement risk analysis, security policies, and damage assessment.			
Plan, implement, and audit operating systems' security in a networked, multi-platform and cross platform environment.			

GRAPHICAL REPRESENTATION

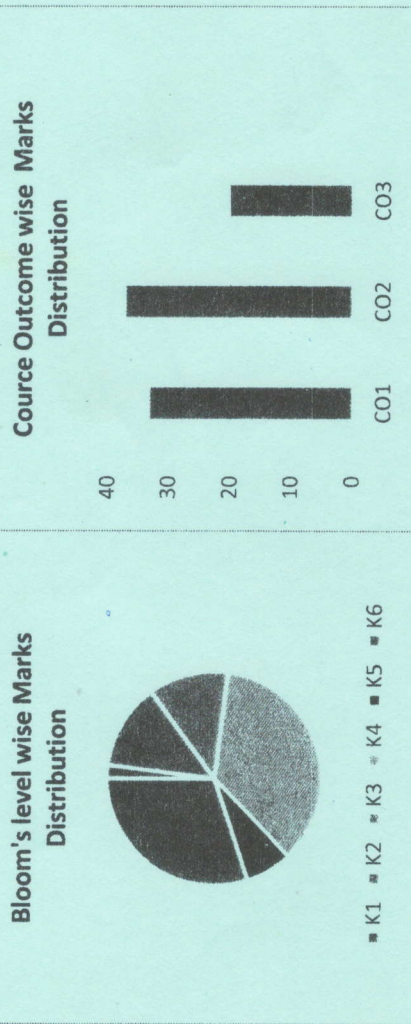
Bloom's level wise Marks Distribution **Course Outcome wise Marks Distribution**



 ARKA JAIN University Jharkhand		[07-05-2025] END SEM EXAMINATION School of Engineering & IT		
Program	Computer Science & Engineering	Branch	Diploma	
Subject Name	Program Elective –IV Software Testing	Session	Even, 2024-2025	
Semester	VI	Year	May, 2025	
Time: 3 Hour Max. Marks : 70	• Start writing from 2nd page onwards; <u>don't Write on the 1st Page Backside</u> • Answer all Questions of Section A (Compulsory) • Answer Any Four out of Six of Section B • Answer Any Three out of Five of Section C • Possession of Mobile Phone or any kind of Written Material, Arguments with the Invigilator or Discussion with Co-Student will come under <u>Unfair Means</u> and will <u>Result in the Cancellation of the Paper(s)</u>.			
	Knowledge Level (KL)	K1 : Remembering K2 : Understanding	K3 : Applying K4 : Analysing	K5 : Evaluating K6 : Creating

Section A (Each question Carry 02 Marks from Q1-i to x - 20 Marks)					
Q.N	QUESTIONS		Marks	COs	KL
i	Differentiate between Fault and Failure.		02	CO1	K1
ii	Mention the objectives of software Testing.		02	CO1	K4
iii	Differentiate between Verification and Validation.		02	CO1	K2
iv	What do you understand by feature defects?		02	CO1	K2
v	Write the two basic testing strategy used to design test cases.		02	CO2	K5
vi	What is JIRA? What is it used for?		02	CO3	K2
vii	What do you understand by unit testing? Who is responsible for unit testing?		02	CO2	K4
viii	Explain test log and who writes the test log and when it is written.		02	CO3	K4
ix	Classify the types of test defect metrics.		02	CO2	K3
x	Mention some bug-tracking tools used in software testing.		02	CO2	K2

Course Outcomes	CO1	Student will develop skills to understand the system
	CO2	Choose suitable testing methods, strategies, tools and technology, execute and report the test.
	CO3	Students will also be able to understand need and usage of test automation and gain expertise in at least 1 automation tool*
GRAPHICAL REPRESENTATION		



Section B (Answer any FOUR out of SIX) – 20 Marks (Each question Carry 05 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
2	Compare the process of testing and debugging	05	CO2	K4
3	What is the role of defect repository? Explain briefly	05	CO2	K2
4	Compare and Explain Manual Testing and Automation Testing.	05	CO3	K4
5	How mutation testing is helpful in testing the software explain?	05	CO2	K5
6	What do you mean by ad-hoc Testing? And mention the situation where the testers use ad-hoc testing.	05	CO2	K4
7	Explain the need for Test plan components.	05	CO2	K4
Section C (Answer any THREE out of FIVE) – 30 Marks (Each question Carry 10 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
8	Create Test- cases for a g-mail application and explain all the steps used.	10	CO3	K6
9	What are the five stages used in a test plan process? Explain briefly all the stages.	10	CO2	K4
10	What are the roles of Reviewer and write a review on G-mail application.	10	CO2	K6
11	Explain Black-Box testing, white-box testing and grey- box testing with its specification.	10	CO1	K3
12	Write and explain all the functional and non-functional testing used in software testing.	10	CO2	K6



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[12-05-2025]

END SEM EXAMINATION
School of Engineering & IT

Program	ME & CSE	Branch	Diploma
Subject Name	Entrepreneurship and Start-ups	Session	Even, 2024-2025
Semester	VI	Year	May, 2025
• Start writing from 2nd page onwards; <u>don't Write on the 1st Page</u>			
<u>Backside</u>			
• Answer all Questions of Section A (Compulsory)			
• Answer Any Four out of Six of Section B			
• Answer Any Three out of Five of Section C			
• Possession of Mobile Phone or any kind of <u>Written Material</u> , <u>Arguments</u> with the Invigilator or <u>Discussion</u> with Co-Student will comes under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation of the</u> <u>Paper(s)</u> .			
Knowledge Level (KL)	K1 : Remembering	K3 : Applying	K5 : Evaluating
	K2 : Understanding	K4 : Analysing	K6 : Creating

Time: 3 Hour
Max. Marks : 70

Section A (Each question Carry 02 Marks from Q1-i to x - 20 Marks)

Q.N	QUESTIONS	Marks	COs	KL	PO
1					
i	What do you mean by Entrepreneurship?	2	CO1	K1	PO1
ii	Define start-up.	2	CO5	K2	PO3
iii	How to identify the target market?	2	CO5	K3	PO5
iv	Define motivation?	2	CO4	K1	PO1
v	Why is competition evaluation is needed?	2	CO1	K4	PO2
vi	List two bankruptcy in Indian economy.	2	CO1	K1	PO1
vii	Highlight the advantages of License for any business.	2	CO1	K4	PO5
viii	Analyse the function of MUDRA project?	2	CO1	K1	PO1
ix	What is a risk analysis?	2	CO1	K3	PO1
x	Write the full form of PMEGP	2	CO1	K2	PO2

Section B (Answer any FOUR out of SIX) – 20 Marks

(Each question Carry 05 Marks)

Q. No.	QUESTIONS	Marks	COs	KL	PO
2	What are the methods and sources of Idea generation?	5	CO4	K3	PO1
3	Explain the organization structure with flow chart.	5	CO2	K1	PO2
4	Explain the Contents and guidelines for report preparation.	5	CO1	K2	PO3
5	Draw a flow chart for any Business Plan. Elaborate briefly.	5	CO3	K1	PO2
6	Discuss the role of online education in economy.	5	CO5	K1	PO5
7	Explain the Classification of Entrepreneurs with example.	5	CO4	K2	PO4

Section C (Answer any THREE out of FIVE) – 30 Marks

(Each question Carry 10 Marks)

Q. No.	QUESTIONS	Marks	COs	KL	PO
8	Differentiate between entrepreneurs and managers.	10	CO1	K3	PO1
9	Identify and apply key entrepreneurial traits to a case study of a well-known entrepreneur (e.g., Elon Musk, Oprah Winfrey, Steve Jobs).	10	CO1	K4	PO1
10	Identify any industrial sickness and explain the various causes.	10	CO2	K5	PO3
11	Analyze the role of market research in discovering and validating a business idea. Give examples.	10	CO2	K5	PO5
12	Choose a real-world business idea and develop a basic activity map outlining its key components.	10	CO2	K1	PO3

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	CO2	CO3	CO4	CO5
Understanding the dynamic role of entrepreneurship and small businesses.					
Organizing and Managing a Small Business					
Financial Planning and Control					
Forms of Ownership for Small Business					
Strategic Marketing Planning					

GRAPHICAL REPRESENTATION					
Bloom's Level Wise Mark Distribution			Course Outcome Wise Mark Distribution		



**ARKA JAIN
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[14-05-2025]
END SEM EXAMINATION
School of Engineering & IT

Program	ME & CSE	Branch	Diploma
Subject Name	Indian Constitution	Session	Even, 2024-2025
Semester	VI	Year	May, 2025
Time: 1.5 Hour Max. Marks : 35	- Start writing from 2nd page onwards; don't Write on the 1st Page Backside - Answer all Questions of Section A (Compulsory) - Answer Any Five out of Six of Section B - Answer Any Two out of Four of Section C - Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will comes under Unfair Means and will Result in the Cancellation of the Papers.		
Knowledge Level (KL)	K1 : Remembering K2 : Understanding	K3 : Applying K4 : Analysing	K5 : Evaluating K6 : Creating

Section A (Each question Carry 01 Marks from Q1-i to v) - 05 Marks

Q. N	QUESTIONS	Marks	COs	KL
1				
i	Who held the position of the first President of the Indian Constituent Assembly?	01	CO1	K2
ii	What are the key aims of the Constitution of India?	01	CO2	K3
iii	Which part of the Constitution deals with Fundamental Rights?	01	CO1	K2
iv	What is the minimum age required to become the Prime Minister of India?	01	CO5	K4
v	Which authority supervises the functioning of Panchayati Raj institutions at the district level?	01	CO4	K3

Section B (Answer any FIVE out of SIX) - 10 Marks
(Each question Carry 02 Marks)

Q. No.	QUESTIONS	Marks	COs	KL
2	How is the role of a Mayor in a Municipal Corporation similar or different from that of a Sarpanch in a village Panchayat system?	02	CO4	K2
3	Which authority is in charge of holding elections for Panchayats and Municipalities in India?	02	CO5	K2
4	How do fundamental duties help in safeguarding the rights of citizens as per the Constitution?	02	CO3	K4

5	What is the structure of the Indian Parliament in terms of its composition?	02	CO3	K1
6	How are the responsibilities of the Lok Sabha different from those of the Rajya Sabha?	02	CO5	K6
7	How is grassroots democracy implemented in village-level governance?	02	CO4	K4

Section C (Answer any TWO out of FOUR) - 20 Marks
(Each question Carry 10 Marks)

Q. No.	QUESTIONS	Marks	COs	KL
8	Explain the role along with challenges of the Drafting Committee while drafting the Indian Constitution	10	CO1	K6
9	Highlight the role and importance of the District Administration head in the overall governance of a district.	10	CO4	K3
10	Describe how Fundamental Rights uphold democratic principles and mention their main categories.	10	CO 3	K5
11	Discuss on the Salient features of Constitution of India and compare with any other worlds constitution.	10	CO 2	K3

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Understand the emergence and evolution of Indian Constitution. Understand and analyse federalism in the Indian context
	CO2	Understand and explain the significance of Indian Constitution as the fundamental law of the land
	CO3	Exercise his fundamental rights in proper sense at the same time identifies his responsibilities in national building.
	CO4	Analyse the Indian political system, the powers and functions of the Union, State and Local Governments in detail
	CO5	Understand Electoral Process, Emergency provisions and Amendment procedure

GRAPHICAL REPRESENTATION

Bloom's level wise Marks Distribution



■ K1 ■ K2 ■ K3 ■ K4 ■ K5 ■ K6

Course Outcome wise Marks Distribution

