AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF PROGRAMME OUTCOMES

Name of the Department : Department of Computer Science

Name of the Programme : PGDCA (Post Graduate Diploma in Computer Applications)

P.O. No.	Description of Programme Outcome	Domain as per Bloom's Taxonomy	Level of Bloom Taxonomy
PO-1	Illustrate the key concepts of Information Technology	COGNITIVE	**1**
PO-2	Apply information technology for better organizational performance	COGNITIVE	**1, 2, 3**
PO-3	Evaluate the latest trends in various subjects of computers & information technology.	COGNITIVE	**1, 2, 3, 4, 5, 6**
PO-4	Applying the computing techniques to solve business problems.	AFFECTIVE	**1, 2, 3**
PO-5	Operate proficiently the data and office management.	PSYCHOMOTOR	**1, 2, 3**
PO-6	Practisethe skills to work on multidisciplinary managerial tasks.	PSYCHOMOTOR	**1, 2**
PO-7	Illustrating well by communicating with a wide range of audiences.	COGNITIVE	**1, 2, 3, 4, 5, 6**

PO-8	Identify hardware &software Specification which will be of computer system.	PSYCHOMOTOR	**1, 2, 3, 4, 5, 6**
PO-9	Identify , software engineering, networking, hardware knowledge,	COGNITIVE	**1, 2, 3**
PO-10	Applying the techniques, skills &modern programming tools, software development practice.	PSYCHOMOTOR	**1, 2, 3, 4, 5, 6**
PO-11/ PSO1	Apply appropriate tools of office automation.	COGNITIVE	**1, 2**
PO-12 /PSO2	Identify and use Basic concept, and Programming language.	PSYCHOMOTOR	**1, 2, 3**
PO-13/ PSO3	Demonstrate the technical knowhow in field of IT Applications.	COGNITIVE	**1**
PO-14/ PSO4	Recognize their career opportunities by learning IT skills and in the software development sector in the state.	AFFECTIVE	**1, 2, 3**
PO-15/ PSO5	Appraise students to decide in choosing the options available if the students wishes to go for further studies	COGNITIVE	**1, 2, 3, 4**

*These **six levels** are: (1) knowledge, (2) comprehension, (3) application, (4) analysis, (5) synthesis, and (**6**) evaluation

PO 1-10 GENERIC PO11-15 SPECIFIC or PSO

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE, BELA, ROPAR, PUNJAB.

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEPARTMENT : DEPARTMENT OF COMPUTER SCIENCE

NAME OF THE PROGRAM : PGDCA (1st SEM)

NAME OF THE COURSE : FUNDAMENTAL OF INFORMATION TECHNOLOGY (PGDCA-101)

NAME OF FACULTY : HARPREET KAUR(ASST. PROF.)

CO No.	Description of Course Outcomes	Method/s of Assessment
CO 1	Draw computer block diagram, Describe characteristics, generations and types of computer and computer components	Quizzes/Objective Test/Assignments/Exams

CO 2	Demonstrate Input and Outputs devices with diagram .Explain software and differentiate system software and application system.	Assignments/Rapid Fire Questions
CO 3	Defining Memory and various types of memory and differentiate its types	Class Tests/Exams/Home Assignments
CO 4	Illustrate the basics of computer languages.	Class Tests/Exams/Home Assignments
CO 5	Identify various types of number system in the computer system and practices converting from one number system to another.	Group Discussing/ Problem solving/Quizzes
CO 6	Write the definition and character of data communication and the internet, multimedia.	Viva/Oral Exam/Class Tests

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE, BELA, ROPAR, PUNJAB.

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEPARTMENT : DEPARTMENT OF COMPUTER SCIENCE

NAME OF THE PROGRAM : PGDCA (1stSEM)

NAME OF THE COURSE : OPERATING SYSTEM (PGDCA-102)

NAME OF FACULTY : IQBAL SINGH(ASST. PROF.)

CO No.	Description of Course Outcomes	Method/s of Assessment
CO 1	Discuss the operating system, types and functions of the operating system.	Objective Test/Assignments/ Exams/Class Tests
CO 2	Practise various CPU scheduling algorithms.	Problem Solving/ Class Test/Group Discussion
CO 3	Identify the Deadlock condition in the operating system, Explain various deadlock preventions techniques.	Problem Solving/ Class Test/Group Discussion

CO 4	Define the Windows operating system and its components.	Lab work/Home Assignments
CO 5	Define the Linux operating system and its components.	Lab work/Home Assignments
CO 6	Perform various commands of the Linux operating system.	Viva/Oral Exam/Class Tests

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEPARTMENT : DEPARTMENT OF COMPUTER SCIENCE

NAME OF THE PROGRAM : PGDCA (1st SEM)

NAME OF THE COURSE : PROBLEM SOLVING USING C (PGDCA-103)

NAME OF FACULTY : MANPREETKAUR (ASST. PROF.)

CO No.	Description of Course Outcomes	Method/s of Assessment
CO 1	Recognize the flowchart and design an algorithm for a given problem and to develop IC programs using operators.	Discussion Method
CO 2	Describe conditional and iterative statements to write C programs	Class Test, PPT, Lab
CO 3	Demonstrate user-defined functions to solve real-time problems	Assignment, Lab, MST
CO 4	Differentiate programs involving decision control statements, loop control statements,	Assignment, Discussion Method,

	and case-control structures	
CO 5	Write a program to enter data to the file, declaring and usage of pointer operations are being covered.	Lab Work, Class test
CO 6	Compare the difference between the Designing, Writing, and Compilation and Debugging programs in C Language.	MST, Lab Work

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEPARTMENT : DEPARTMENT OF COMPUTER SCIENCE

NAME OF THE PROGRAM : PGDCA (2nd SEM)

NAME OF THE COURSE : DBMS (PGDCA- 201)

NAME OF FACULTY : HARPREET KAUR (ASST. PROF.)

CO No.	Description of Course Outcomes	Method/s of Assessment
CO 1	Define Database, characteristics, file processing system, use of the database, DBA and its responsibilities.	Discussion Method, Class Test
CO 2	Identify DDL, DCL. DML, different Keys and its uses in the database.	Discussion Method, Class Test, Lab Work
CO 3	Demonstrate the concept of ER Diagrams, weak entity sets, strong entity sets, aggregation, generalization, converting ER	Class Test, MST

	to tables.	
CO 4	Categorize the different relational algebra operations.	Class Test, Assignment
CO 5	Develop basic SQL Query, Creating Table and Views.	Assignment, MST, Lab Work
CO 6	Evaluate the database integrity using different SQL Queries.	MST, Lab Work

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE, BELA, ROPAR, PUNJAB.

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEPARTMENT : DEPARTMENT OF COMPUTER SCIENCE

NAME OF THE PROGRAM : PGDCA (2nd SEM)

NAME OF THE COURSE : COMPUTER NETWORK, INTERNETAND E-COMMERCE(PGDCA- 202)

NAME OF FACULTY : MANDEEP SINGH (ASST. PROF.)

CO No.	Description of Course Outcomes	Method/s of Assessment
CO 1	Explain the Basic elements in networking, network topology, different types of network, Networks connecting devices	Quizzes/Objective Test/Assignments/Exams
CO 2	Describe the function of each layer of the OSI model and TCP/IP model	Quizzes/Objective Test/Home Assignments/Class Test

CO 3	Classify the routing protocol and analyze how to assign the IP addresses for the given networks.	Lab work/Home Assignments/Problem Solving
CO 4	Define and differentiate various types of e-commerce.	Rapid Fire question/Class Test
CO 5	Explain payment System for e-commerce.	Group discussion/Tests/Quizzes/ Rapid fire question
CO 6	Define Idea of SMS, Email and Payment Gateway Integration.	Assignments/Class Test/Exams

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE, BELA, ROPAR, PUNJAB.

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEPARTMENT : DEPARTMENT OF COMPUTER SCIENCE

NAME OF THE PROGRAM : PGDCA (2nd SEM)

NAME OF THE COURSE : OOP USING C++ (PGDCA-203)

NAME OF FACULTY : MANPREET KAUR (ASST. PROF.)

CO No.	Description of Course Outcomes	Method/s of Assessment
CO 1	Define the procedural and object-oriented paradigm with concepts of streams, classes, functions, data, and objects.	Discussion Method, Class Test, Lab
CO 2	Recognize dynamic memory management techniques using pointers, constructors, destructors, etc.	Discussion Method, Class Test
CO 3	Demonstrate the use of various OOPs concepts with the help of programs.	Class Test, MST
CO 4	Categorize inheritance with the understanding of early and late binding,	Class Assignment, Home Assignment

	usage of exception handling, generic programming.	
CO 5	Develop the programs to applythe concept of function overloading, operator overloading, virtual functions and polymorphism.	Assignment, MST
CO 6	Compare the concepts of C and C++.	MST, Lab Work, MST

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE, BELA RUPNAGAR PUNJAB
MAPPING OF PROGRAM OUTCOME VERSUS COURSE OUTCOME
INTERNAL QUALITY ASSURANCE CELL

NAME OF DEPARTMENT ==> DEPARTMENT OF COMPUTER SCIENCE

NAME OF PROGRAMME ==> PGDCA POST GRADUATE DIPLOMA IN COMPUTER APPLICATION

NAME OF COURSES ==> 06

CORRELATION LEVEL:1,2, and 3;1SLIGHT (LOW); 2MODERATE (MEDIUM) 3 HIGH — MENTION GAP ANALYSIS AT THE END

S.NO	Year	Semester	Name of Course/Code		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO1	PO11	PO12	PO13	PO14	PO15
1	1st	1st	Fundamentals of Information Technology	CO1	1	2	4	1	2	1	1	4	2		2	1	1	1	1
				CO2	1	2	2	1	2	1	1	5	2	1	1	1	2	1	2
				CO3	1	1	1					1		1	1	1	2	3	
				CO4	1	2	3		1	1	1	1			1	2	2	2	2
				CO5	1	2	2			1	1		1	1	1	1	2	1	2
				CO6	1	2	3	2	1	1	1	1	1	1	2	1	2	2	2
2			Operating System	CO1	2	2	2	1				3	3	3			1		
				CO2	3	3	2	2					2	2			1	1	
				CO3	2	2		2								1	1	1	
				CO4	3	3	3	3							1			1	
				CO5	2	3	3	3	2			2	2				1	1	
				CO6	1	2	1	3	1	1					1	1	1	1	
3			Problem Solving using C	CO1				2	1	2			1	3		3	1	3	3
				CO2			1	3	2	1		1	1	4		3		3	4
				CO3	1	1	1	2	2	2		2	2	3		3	1	2	3

				CO4		1	1	3	1	2	1	1	1	3		3	1	3	2
				CO5		1	2	2	1	2		1	1	4		3	1	2	1
				CO6			1	3	1	2	1	2	1	3		3	1	3	2
4			**Database Management System**	**CO1**	1	2	2	1	2	1	1	1		1	1	1	1	2	2
				CO2	1	2	2	1	1	1	2	1	1	2	1	2	1	2	3
				CO3	1	2	3	2	1	1	2	2	1	2	2	1	1	2	2
				CO4	1	2	2	2	2	1	1	1		1	2	1	2	2	2
				CO5	1	2	3	3	2	2	2	1		1	1	2	1	2	4
				CO6	1	2	2	2	2	2	1	2	1	1	1	2	1	2	3
5			**Itroduction to Computer Network, Internet and ECommerce**	**CO1**	3	3	2		1	1	1	1	1	1			2		
				CO2	2	2	2										1	1	
				CO3	3	2	2			1		1	1				1	1	
				CO4	2	2	2	2	2	2	1						1	1	
				CO5	1	1	1								1			1	1
				CO6	2	2	2										1	1	1
6			**ObjectOriented Programming using C++**	**CO1**			1	3	1	2	1	3	2	5		3	1	3	3
				CO2			1	3		2	1	2	2	5		3	1	2	3
				CO3		2	2	3		2	2	2	2	5		3	1	2	2
				CO4		1	1	3		2	2	3	1	4		3	1	2	2
				CO5		1	3	2	1	2	1	2	2	5		3	1	3	2
				CO6		2	1	3	1	2	2	1	2	6		3	1	2	2

Attainment of PO by Direct Method

COURSE ATTAINMENT CALCULATION FOR ALL COURSES IN THE SEMESTER

AMAR SHAHEED BABA AJIT SINGH

JUJHAR SINGH MEMORIAL COLLEGE, ROPAR PUNJAB

INTERNAL QUALITY ASSURANCE CELL

PROGRAMME: PGDCA	SEMESTER: 2ND		YEAR: 2018-2019	DATE OF DECLARATION OF RESULT BY UNIVERSITY: 02/09/2019

S. NO.	NAME OF STUDENT	CLASS R.NO.	UNIVERSITY R. NO.	REGISTRATION NO.	Data Base Management System			Intro. to Comp. Network, Internent & E commerce			C++			Software Lab-III			Software Lab-IV			TOTAL SUM	% age/CGPA	ATTAINMENT LEVEL
					Theory	Internal	TOTAL (T+I)	Theory	Internal	TOTAL (T+I)	Theory	Internal	TOTAL (T+I)	Theory	Internal	TOTAL (T+I)	Theory	Internal	TOTAL			
1	Bhupinder Kaur	4101	**3801**	814-18-366	11	26	37	13	26	39	25	20	45	36	55	91	30	48	78	290	58.00	**2**
2	Rajwinder Kaur	4102	**3802**	814-13-441	25	26	51	29	27	56	29	28	57	37	56	93	38	57	95	352	70.40	**3**
3	Gurjeet Kaur	4103	**3803**	811-13-691	30	27	57	31	27	58	35	28	63	37	56	93	38	57	95	366	73.20	**3**
4	Savita Kumari	4104	**3804**	817-13-210	17	25	42	25	26	51	11	20	31	36	55	91	30	35	65	280	56.00	**2**
5	Kamaljeet	4105	**3805**	813-15-211	25	24	49	31	25	56	17	20	37	32	55	87	30	35	65	294	58.80	**2**

	Kaur																					
6	Anjali	4107	**3806**	814-15-304	25	25	50	26	25	51	25	22	47	35	55	90	34	35	69	307	61.40	**3**
7	Harpreet Kaur	4108	**3807**	814-15-314	25	25	50	26	21	47	17	22	39	32	52	84	32	35	67	287	57.40	**2**
8	Kamaljeet Kaur	4109	**3808**	814-14-490	17	26	43	13	21	34	15	25	40	37	51	88	36	52	88	293	58.60	**2**
9	Nazma Begum	4110	**3809**	4120-11-176	35	26	61	28	26	54	33	20	53	35	52	87	35	45	80	335	67.00	**3**
10	Kamaljeet Kaur	4111	**3810**	814-13-406	25	24	49	14	26	40	25	24	49	36	53	89	34	48	82	309	61.80	**2**
11	Manpreet Kaur	4112	**3811**	814-12-340	25	23	48	15	26	41	8	24	32	36	53	89	34	50	84	294	58.80	**2**
12	Rajinder Kaur	4113	**3812**	Z(P) 2014-10590	25	25	50	11	26	37	7	23	30	36	55	91	32	50	82	290	58.00	**2**
13	Amandeep Kaur	4114	**3813**	814-12-226	16	25	41	25	25	50	25	20	45	35	52	87	35	50	85	308	61.60	**2**
14	Mandeep Kaur	4115	**3814**	814-12-334	10	24	34	5	25	30	12	22	34	37	54	91	34	48	82	271	54.20	**2**
15	Rupinder Kaur	4116	**3815**	814-14-187	29	25	54	29	24	53	25	28	53	36	54	90	38	58	96	346	69.20	**3**
16	Devinder Singh	4154	**3817**	811-13-1078	25	26	51	32	26	58	28	28	56	38	56	94	38	58	96	355	71.00	**3**
17	Amandeep Singh	4157	**3820**	814-18-368	28	26	54	39	26	65	32	28	60	38	56	94	38	58	96	369	73.80	**3**
18	Jatinder Singh	4160	**3823**	814-14-141	25	26	51	33	27	60	25	28	53	38	56	94	38	58	96	354	70.80	**3**

19	Jaspreet Singh	4162	**3825**	814-15-133	17	24	41	29	25	54	14	20	34	35	53	88	32	35	67	284	56.80	**2**
20	Bhupinder Singh	4163	**3826**	814-15-152	18	25	43	30	25	55	16	20	36	35	53	88	32	35	67	289	57.80	**2**
21	Hardeep Singh	4166	**3829**	GC(R) 09-376	2	23	25	3	26	29	0	20	20	37	54	91	34	37	71	236	47.20	**1**
22	Amandeep Singh	4171	**3834**	814-18-577	13	25	38	29	23	52	14	20	34	34	55	89	30	35	65	278	55.60	**2**
23	Sukhchain Singh	4172	**3835**	814-18-578	13	25	38	29	23	52	14	20	34	34	55	89	30	34	64	277	55.40	**2**
24	Jaspreet Singh	41	3837	814-15-244	1	24	25	7	23	30	0	20	20	34	51	85	33	35	68	228	45.60	**1**
				AVERAGE			**45.08**			**48.00**			**41.75**			**1.74**			**79.29**			

Average Attainment of PO by direct method is **60.76 %**

Attainment of PO by Indirect Method (Exit Survey)

DEPARTMENT OF COMPUTER SCIENCE
EXIT SURVEY
PROGRAMME: PGDCA SESSION - 2018-19

Pos & PSOs	SCALES					TOTAL RESPONDANTS	TOTAL MARKS FOR SCALES					TOTAL MARKS	%AGE	LEVEL OF ATTAINMENT
	1	2	3	4	5		1	2	3	4	5			
PO1		2	10	16	10	38	0	4	30	64	50	148	92.50	3
PO2		5	10	17	6	38	0	10	30	68	30	138	86.25	3
PO3		1	10	14	13	38	0	2	30	56	65	153	95.63	3
PO4		9	3	17	9	38	0	18	9	68	45	140	87.50	3
PO5		7	17	9	5	38	0	14	51	36	25	126	78.75	3
PO6			9	19	10	38	0	0	27	76	50	153	95.63	3
PO7		1	11	16	10	38	0	2	33	64	50	149	93.13	3
PO8			12	19	7	38	0	0	36	76	35	147	91.88	3
PO9		1	12	10	15	38	0	2	36	40	75	153	95.63	3
PO10		4	10	12	12	38	0	8	30	48	60	146	91.25	3

Average PO attainment by indirect method= **90 %**

Total PO attainment (%) = (weightage: 80 %) X (Average attainment in direct method) + (weightage: 20 %) X (Average attainment in indirect method)

= (80%) X 60.79 + (20%) X 90

= **73.83%**

Level of Attainment = **Level 3**