

Vivekanand College, Kolhapur (Autonomous)

Dept. of Computer Science

Continuous Internal Evaluation from 2021-22

Class	Examination	Subject Code	Internal Marks	Distribution	Marks
B.Sc. I	March 2022	Problem Solving using Computers DSE-1006A		Test-I	10
				Test-II	20
				Online Test	10
				Home Assignment	50
B.Sc.III	March 2021	Software Engineering		Assignment I	1
				Assignment II	1
				Assignment III	1
				Home Assi	1
				Test I	1
				Test II	1
B.Sc. III	November'2021	Internet Technologies -I		Test 1	5
				Test 2	5
				Test 3	5
	March'2022	Internet Technologies -II		Practical Examination -I	50
				Practical Examination-II	50
	June, 2022	Data Science		CIE Data Science	20

VIVEKANAND COLLEGE, KOLHAPUR(Autonomous)

Dept. of Computer Science

B.Sc. I Internal Marks Mar 2022

Sr.No	Roll No	Name of Student	Test I	Test II	Test III Online	Home Assignment	Internal out of 15 Python	DBMS	Total
1	7095	ATTAR MUSAEB	10	19		29	11	10	21
2	7097	BIRJE RUTUJA	10	19	10	39	15	12	27
3	7098	BIRNALE SANKET	10	16	10	36	14	12	26
4	7099	CHINDAGE VAISHNAVI	10	4	10	24	9	9	18
5	7100	GAIKWAD DIVYA	10		10	20	8	13	21
6	7101	JADHAV PRACHI	10		10	20	8	12	20
7	7102	KAMBLE ARPITA	10	20	10	40	15	10	25
8	7103	KAMBLE PAYAL	10			10	4		4
9	7104	KHOPADE VAISHNAVI	10	16	10	36	14	13	27
10	7105	KONERI PRIYA	10	20	10	40	15	14	29
11	7106	KORGAONKAR SAKSHI		20	10	30	11	6	17
12	7107	KUMBHAR SUPRIYA	10	20	10	40	15	11	26
13	7108	MALI PRADNYA	10	16	10	36	14	12	26
14	7109	NANDUDKAR PRADNYA	10	20	10	40	15	11	26
15	7110	NIKAM HARSHAVARDHAN	10	20	10	40	15	12	27
16	7111	PATIL MRUNALI	10	20	10	40	15	11	26
17	7112	PATIL SHIVAM	10	20	10	40	15	11	26
18	7113	PATIL SHRUTI	10	20	10	40	15	15	30
19	7114	PATIL TRUPTI	10	20	10	40	15	3	18
20	7115	SATHE SAMIKSHA	10		10	20	7.5	12	20
21	7116	SHINDE SHLOKA		18	10	28	11	10	21
22	7117	SUTAR SUSHANT				0	0		0
23	7118	TANUGADE GAURI	10	15	10	35	13	13	26
24	7119	BERAD ROHIT	10	16		26	10	9	19
25	7120	BHAPKAR SAI	10	19		29	11	10	21
26	7121	BHOSAKE ADITYA	10	15	10	35	13	13	26
27	7122	BHOSALE ASLESHIYA	10	20	10	40	15	12	27

28	7123	CHOUGULE SIDDHESH	10	20	10	40	15	12	27
29	7124	JADHAV RAJDEEP	10	20	10	40	15	11	26
30	7125	JADHAV RUTUJA	10		10	20	7.5	7	15
31	7126	KADAM PREM	10	20	10	40	15	9	24
32	7127	KAGUDE DARSHAN	10	19	10	39	15	11	26
33	7128	KAMBLE PARAG	10		10	20	8	3	11
35	7130	KHODBALE HARSHADA	10			10	4	9	13
36	7131	MANER MOHAMMED	10	8	10	28	11	10	21
37	7132	MODAK MUSSADDIQUE	10	16	10	36	14	11	25
38	7133	NADAF PINJARI SANA	10			10	4	0	4
39	7134	PANHALKAR SANKET	10	10	10	30	11	7	18
40	7135	PATIL AKSHATA	10	16	10	36	14	9	23
41	7136	PATIL ATHRAV	10	20	10	40	15	6	21
42	7137	PATIL OMKAR	10		10	20	8	5	13
43	7138	PATIL PARTH	10	8		18	7	9	16
44	7139	PATIL PRATIK	10	20	10	40	15	12	27
45	7140	PATIL SAKSHI	10	17	10	37	14	15	29
46	7141	PATIL SANIKA		20	10	30	11	10	21
47	7142	PATIL SAYALI	10	20	10	40	15	13	28
48	7143	PATIL SHAKTI	10	18	10	38	14	8	22
49	7144	PATIL SHUBHAM	10	18		28	11	10	21
50	7145	PATIL VAISHNAVI				0	0		0
51	7146	PATIL VAISHNAVI	10			10	4	6	10
52	7147	PATIL VIPUL	10			10	4		4
53	7148	PAWAR VAISHNAVI	10	20	10	40	15	9	24
54	7149	RATHOD SNEHAL	10	14	10	34	13	10	23
55	7150	SAVARATKAR ONKAR	10	20	10	40	15	12	27
56	7151	SHINDE AARY	10	19	10	39	15	7	22
57	7153	SUTAR SHRADDHA	10	20	10	40	15	13	28
58	7154	UPADHYE SUYASH	10	9	10	29	11	9	20

59	7155	VADAR KIRAN	10		10	20	8	7	15
60	7156	WAWARE SHIVANJALI	10	20	10	40	15	11	26

Shri Swami Vivekanand Shikshan Sanstha`s		
VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)		
Department of Computer Science		
CONTINUOUS INTERNAL EVALUATION (CIE)		
B.Sc.- I Sem-I Subject: DBMS 15/02/2022		
Last name	First name	Grade/10
Patil	Sayali	8
Sathe	Samiksha	8
Savaratkar	Onkar	10
Patil	Shubham	6
PATIL	Sanika	9
Tanugade	Gauri	7
Patil	Parth	5
Waware	Shivanjali	9
Berad	Rohit	7
Kumbhar	Supriya	9
Khopade	Vaishnavi	8
Koneri	Priya	9
Gaikwad	Divya	8
Patil	Shruti	10
Patil	Akshata	6

Bhapkar	Sai	6
Birnale	Sanket	9
Mali	Pradnya	8
Chindage	Vaishnavi	7
Attar	Musaeb	5
Upadhye	Suyash	3
Kagude	Darshan	7
Birje	Rutuja	6
Pawar	Vaishnavi	6
Bhosale	Asleshiya	8
Patil	Mrunali	6
Nikam	Harshavardhan	10
Nandudkar	Pradnya	6
shinde	Shloka	7
Sutar	Shraddha	8
Patil	Sakshi	9
VADAR	KIRAN	8
Kamble	Arpita	7
Rathod	Snehal	8
Jadhav	Prachi	7
Jadhav	Rajdeep	8
Chougule	Siddhesh	6
Kadam	Prem	6

Patil	Atharv	4
Bhosake	Aditya	5
Maner	Mohammad Taque	5
Modak	Mussaddique	8
Khodbale	Harshada	7
Shinde	Aary	5
PATIL	SHIVAM	10
Panhalkar	Sanket	8
Patil	Pratik	8
Jadhav	Rutuja	7
Overall average		7

Shri Swami Vivekanand Shikshan Sanstha`s		
VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)		
Department of Computer Science		
CONTINUOUS INTERNAL EVALUATION (CIE)		
B.Sc.- I Sem-II Subject: DBMS 03/072022		
Surname	First name	Grade/20
Savaratkar	Onkar	15
Kagude	Darshan	15
PATIL	SHIVAM	14
Jadhav	Rutuja	12
Patil	Sayali	13
Bhosale	Asleshiya	14
Patil	Parth	10
Upadhye	Suyash	16
Kadam	Prem	12
Modak	Mussaddique	12
Patil	Akshata	10
Bhapkar	Sai	14
Khopade	Vaishnavi	12
PATIL	Sanika	8
Jadhav	Rajdeep	16
Jadhav	Prachi	10
Koneri	Priya	14
Sutar	Shraddha	6
Patil	Trupti	10
Patil	Mrunali	9
Birje	Rutuja	8

Patil	Vipul	12
Nandudkar	Pradnya	8
Gaikwad	Divya	14
Birnale	Sanket	8
Sathe	Samiksha	8
Rathod	Snehal	9
Shinde	Aary	9
Chindage	Vaishnavi	13
Patil	Atharv	12
Mali	Pradnya	14
Nikam	Harshavardhan	18
Patil	Shubham	12
Patil	Pratik	7
Patil	Shakti	10
Panhalkar	Sanket	4
Bhosake	Aditya	7
Kumbhar	Supriya	14
Korgaonkar	Sakshi	11
shinde	Shloka	2
Kamble	Arpita	4
Pawar	Vaishnavi	4
Patil	Vaishnavi	10
Chougule	Siddhesh	1
Maner	Mohammad Taqee	2
Kamble	Parag	4

Shri Swami Vivekanand Shikshan Sanstha`s
VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)
Department of Computer Science
CONTINUOUS INTERNAL EVALUATION (CIE)
Subject: COMPUTER SCIENCE

B.Sc. III SEM VI Software Engineering 2021-22

Roll No.	Name	Assignment 1	Assignment 2	Assignment 3	Home Assignment 1	Class Test 1	Class Test 2	Internal	Attendance	Final CIE
7966	ARADE SAMADHAN ANIL	1	1	1	1	1	1	2	2	10
7967	CHAVAN AISHWARYA SUNIL	1	1	1	1	1	1	2	2	10
7968	CHAVAN PRATIK PRADIP	1	1	1	1	0	1	2	2	10
7969	CHOUGALE KETAN KRISHNAT	1	1	1	1	1	1	2	2	10
7970	DABADE AMRUTA SHAHAJI	1	1	1	1	1	1	2	2	10
7971	DINDE RUTUJA AMAR	1	1	1	1	1	1	2	2	10
7972	EKAL SANKET SARJERAO	1	1	1	1	1	1	2	2	10
7973	GARADI SANIYA HARUN	1	1	1	1	1	1	2	2	10
7974	GIRI POONAM SANJAY	1	1	1	1	1	1	2	2	10
797	JADHAV SAYALI VIJAY	1	1	1	1	1	1	2	2	10

5										
797 6	JADHAV VAISHNAVI RAVASO	1	1	1	1	1	1	1	1	8
797 7	JAMADAR TASMIYA KASIM	1	1	1	1	1	1	2	2	10
797 8	KADWALE ANANYA BALWANT	1	1	1	1	1	1	2	2	10
797 9	KATIYAR KAJAL LAKHMICHAND	1	1	1	1	1	1	2	2	10
798 0	KATYAR PREETI MANOHAR	1	1	1	1	1	1	2	2	10
798 1	KHANDARE PANKAJ VISHNU	1	1	1	1	1	1	2	2	10
798 2	KHURANDLE VAISHNAVI RAJENDRA	1	0	1	1	0	0	1	1	5
798 3	KORDE SHREYA RAHUL	1	1	1	1	0	1	2	2	10
798 4	KUGAJI BHARGAVI RAMLING	1	1	1	1	0	1	2	2	10
798 5	MAGDUM RAJVARDHAN SATAPPA	1	1	1	1	1	1	2	1	9
798 6	MAHADIK AKSHATA SUHAS	1	1	1	1	0	1	1	1	7
798 7	MALI KARISHMA	1	1	1	1	1	1	2	2	10
798 8	MANE VISHAL SHIVAJI	1	1	1	1	0	1	2	2	10
798 9	MULLA ASHRAFALLI AKHTARHUSEN	1	1	1	1	0	1	2	2	10
799 0	MUTHANE VAISHNAVI PRAVIN	1	1	1	1	0	1	2	2	10
799 1	NIRMALE SNEHAL SUDHAKAR	1	1	1	1	0	1	2	1	9
799	PATIL AADESH SATISH	1	1	1	1	0	1	2	2	10

2										
799 3	PATIL ABHISHEK AJIT	1	1	1	1	1	1	2	1	9
799 4	PATIL NIKITA SUBHASH	1	1	1	1	1	1	2	2	10
799 5	PATIL ROHAN ASHOK	1	1	1	1	0	1	2	2	10
799 6	PATIL SAKSHI PRAMOD	1	1	1	1	1	1	2	2	10
799 7	PATIL SAMMED RAJGONDA	1	1	1	1	1	1	2	2	10
799 8	PATIL SANTOSH SUBHASH	1	1	1	1	0	1	2	2	10
799 9	PATIL SHRITEJ SUBHASH	1	1	1	1	1	1	2	1	9
800 0	PATIL SIDDHARTH SUBHASH	1	1	1	1	0	1	2	2	10
800 1	PATIL SNEHAL SANJAY	1	1	1	1	1	1	2	2	10
800 2	PATIL SUJIT SUNIL	1	1	1	1	1	1	2	2	10
800 3	PATIL SUNIL SURESH	1	1	1	1	1	1	2	2	10
800 4	POWAR PRASHANT VISHAL	1	1	1	1	0	0	1	1	6
800 5	POWAR SARASWATI AJIT	1	1	1	1	0	1	2	2	10
800 6										
800 7	PUSALKAR TANAY DHAVAL	1	1	1	1	0	1	2	2	10
800 8	SAGAONKAR TEJASHREE SARANG	1	1	1	1	0	1	2	2	10
800	SANKPAL PRAJAKTA	1	1	1	1	1	1	2	2	10

9	PANDURANG									
801 0	SHINDE KRITI PRAVIN	1	1	1	1	1	1	2	2	10
801 1	SHINTRE PRANJAL PRAKASH	1	1	1	1	0	1	2	2	10
801 2	SHIVANE ASHUTOSH DHANAJI	1	1	1	1	1	1	2	2	10
801 3	SUTAR HARSHADA SANJAY	1	1	1	1	1	1	2	2	10
801 4	SUTAR VAISHNAVI SURESH	1	1	1	1	1	1	2	1	9
801 5	SUTAR VISHWAJEET GANESH	1	1	1	1	0	1	2	2	10

VIVEKANAND COLLEGE, KOLHAPUR(Autonomous)

Dept. of Computer Science

Internal Marks November 2021 B.Sc. III SEMESTER-V

Sr. No.	Roll No.		Name	Online Test 1	Online Test 2	Online Test 3	Internal Avg Python	Internal Average DBMS	Total
1	7966		ARADE SAMADHAN ANIL	5	5	5	10	7	17
2	7967	*	CHAVAN AISHWARYA SUNIL	5	5	5	10	8	18
3	7968		CHAVAN PRATIK PRADIP	5	5	5	10	7	17
4	7969		CHOUGALE KETAN KRISHNAT	5	5	5	10	9	19
5	7970	*	DABADE AMRUTA SHAHAJI	5	5	5	10	8	18
6	7971	*	DINDE RUTUJA AMAR	5	5	5	10	8	18
7	7972		EKAL SANKET SARJERAO	5	5	5	10	7	17
8	7973	*	GARADI SANIYA HARUN		5	5	7	7	14
9	7974	*	GIRI POONAM SANJAY	5	5	5	10	6	16
10	7975	*	JADHAV SAYALI VIJAY	5	5	5	10	10	20
11	7976	*	JADHAV VAISHNAVI RAVASO	5	5	5	10	10	20
12	7977	*	JAMADAR TASMIYA KASIM	5	5	5	10	8	18
13	7978		KADWALE ANANYA BALWANT	5	5	5	10	7	17
14	7979	*	KATIYAR KAJAL LAKHMICHAND	5	5	5	10	10	20
15	7980	*	KATYAR PREETI MANOHAR	5	5	5	10	10	20
16	7981		KHANDARE PANKAJ VISHNU	5	5	5	10	7	17
17	7982	*	KHURANDLE VAISHNAVI RAJENDRA	5	5	5	10	7	17
18	7983	*	KORDE SHREYA RAHUL	5	5	5	10	8	18
19	7984	*	KUGAJI BHARGAVI RAMLING	5	5	5	10	7	17

20	7985		MAGDUM RAJVARDHAN SATAPPA	5	5	5	10	8	18
21	7986	*	MAHADIK AKSHATA SUHAS	5	5	5	10	6	16
22	7987	*	MALI KARISHMA RATANLALJI	5	5	5	10	10	20
23	7988		MANE VISHAL SHIVAJI	AB	AB	AB	AB	AB	AB
24	7989		MULLA ASHRAFALLI AKHTARHUSEN	5	5	5	10	0	10
25	7990	*	MUTHANE VAISHNAVI PRAVIN	0	0	0	0	0	0
26	7991	*	NIRMALE SNEHAL SUDHAKAR	5	5	5	10	6	16
27	7992		PATIL AADESH SATISH	5	5	5	10	7	17
28	7993		PATIL ABHISHEK AJIT	5	5	5	10	7	17
29	7994	*	PATIL NIKITA SUBHASH	5	5	5	10	7	17
30	7995		PATIL ROHAN ASHOK	5	5	5	10	9	19
31	7996	*	PATIL SAKSHI PRAMOD	5	5	5	10	7	17
32	7997		PATIL SAMMED RAJGONDA	5	5	5	10	7	17
33	7998		PATIL SANTOSH SUBHASH		5	5	7	9	16
34	7999		PATIL SHRITEJ SUBHASH	5	5	5	10	8	18
35	8000		PATIL SIDDHARTH SUBHASH		5	5	7	7	14
36	8001	*	PATIL SNEHAL SANJAY	5	5	5	10	7	17
37	8002		PATIL SUJIT SUNIL	5	5	5	10	9	19
38	8003		PATIL SUNIL SURESH	5	5	5	10	7	17
39	8004		POWAR PRASHANT VISHAL	5	5		7	7	14
40	8005	*	POWAR SARASWATI AJIT		5		7	8	15
41	8007		PUSALKAR TANAY DHAVAL	5		5	7	0	7
42	8008	*	SAGAONKAR TEJASHREE SARANG		5	5	7	7	14
43	8009	*	SANKPAL PRAJAKTA PANDURANG		5	5	7	8	15
44	8010	*	SHINDE KRITI PRAVIN	5	5	5	10	7	17
45	8011		SHINTRE PRANJAL PRAKASH	5	5	5	10	8	18

46	8012		SHIVANE ASHUTOSH DHANAJI	5	5	5	10	9	19
47	8013	*	SUTAR HARSHADA SANJAY	5	5	5	10	6	16
48	8014	*	SUTAR VAISHNAVI SURESH	5	5	5	10	6	16
49	8015		SUTAR VISHWAJEET GANESH		5	5	7	7	14

VIVEKANAND COLLEGE,KOLHAPUR(Autonomous)

Dept. of Computer Science

B.Sc. III Internal Examination Mar 2022

Sr.No.	Roll No.	Name	Internal1 Practical Exam on 26th April 2022(Marks 50)	Internal2 Practical Exam on 30th April 2022	Journal Submission	
1	7966	ARADE SAMADHAN ANIL	40	48	C	8.8
2	7967	CHAVAN AISHWARYA SUNIL	35	48	C	8.3
3	7968	CHAVAN PRATIK PRADIP	25	25	C	5
4	7969	CHOUGALE KETAN KRISHNAT	30	40	C	7
5	7970	DABADE AMRUTA SHAHAJI	30	38	C	6.8
6	7971	DINDE RUTUJA AMAR	30	45	C	7.5
7	7972	EKAL SANKET SARJERAO	25	25	C	5
8	7973	GARADI SANIYA HARUN	25	35	C	6
9	7974	GIRI POONAM SANJAY	28	30	C	5.8
10	7975	JADHAV SAYALI VIJAY	30	45	C	7.5
11	7976	JADHAV VAISHNAVI RAVASO	30	48	C	7.8
12	7977	JAMADAR TASMIYA KASIM	30	40	C	7
13	7978	KADWALE ANANYA BALWANT	40	35	C	7.5
14	7979	KATIYAR KAJAL LAKHMICHAND	45	48	C	9.3
15	7980	KATYAR PREETI MANOHAR	48	48	C	9.6
16	7981	KHANDARE PANKAJ VISHNU	40	30	C	7
17	7982	KHURANDLE VAISHNAVI RAJENDRA	35	35	C	7
18	7983	KORDE SHREYA RAHUL	30	38	C	6.8
19	7984	KUGAJI BHARGAVI RAMLING	35	45	C	8
20	7985	MAGDUM RAJWARDHAN SATAPPA	25	45	C	7
21	7986	MAHADIK AKSHATA SUHAS	35	35	C	7

22	7987	MALI KARISHMA RATANLALJI	49	48	C	9.7
23	7988	MANE VISHAL SHIVAJI				0
24	7989	MULLA ASHRAFALLI AKHTARHUSEN	25	35	C	6
25	7990	MUTHANE VAISHNAVI PRAVIN				0
26	7991	NIRMALE SNEHAL SUDHAKAR	30	48	C	7.8
27	7992	PATIL AADESH SATISH	45	38	C	8.3
28	7993	PATIL ABHISHEK AJIT	30	35	C	6.5
29	7994	PATIL NIKITA SUBHASH	30	30	C	6
30	7995	PATIL ROHAN ASHOK	30	30	C	6
31	7996	PATIL SAKSHI PRAMOD	25	45	C	7
32	7997	PATIL SAMMED RAJGONDA	35	25	C	6
33	7998	PATIL SANTOSH SUBHASH	30	30	C	6
34	7999	PATIL SHRITEJ SUBHASH	25	25	C	5
35	8000	PATIL SIDDHARTH SUBHASH	25	30	C	5.5
36	8001	PATIL SNEHAL SANJAY	25	35	C	6
37	8002	PATIL SUJIT SUNIL	25	40	C	6.5
38	8003	PATIL SUNIL SURESH	35	45	C	8
39	8004	POWAR PRASHANT VISHAL	25	25		5
40	8005	POWAR SARASWATI AJIT	25	30	C	5.5
41	8007	PUSALKAR TANAY DHAVAL				0
42	8008	SAGAONKAR TEJASHREE SARANG	25	30	C	5.5
43	8009	SANKPAL PRAJAKTA PANDURANG	40	40	C	8
44	8010	SHINDE KRITI PRAVIN	35	35	C	7
45	8011	SHINTRE PRANJAL PRAKASH	30	45	C	7.5
46	8012	SHIVANE ASHUTOSH DHANAJI	45	48	C	9.3
47	8013	SUTAR HARSHADA SANJAY	25	25	C	5
48	8014	SUTAR VAISHNAVI SURESH	30	30	C	6
49	8015	SUTAR VISHWAJEET GANESH	30	25	C	5.5

Vivekanand College, Kolhapur (Autonomous)		
Department of Computer Science		
B.Sc.-II		
Object Oriented Programming using Python		
Online Test CIE		
Date- 15-02-2022		
Last name	First name	Grade/10.00
Shinde	Omkar	10
Todakar	Shveta	7
Pendhari	Shoaib	7
Ingale	Aditi	10
Hawale	Abhishek	10
More	Onkar	10
Chavan	Komal	10
Pathan	Shifa	9
Dhavale	Pankaj	10
Kante	Gunjan	8
Borage	Samrudhi	10
Patil	Dnyaneshwari	10
Jadhav	Parth	10
Yadav	Aishwarya	10
Ambardekar	Siddika	8
Pandharapatte	Siddhi	9
Vanarse	Sahil	10
Powar	Sayali	10
Kore	Shubham	9

Kesarkar	Nikhil	10
Kale	Aditya	10
Jasud	Atharva	8
Shintre	Isha	10
Ananda Patil	Gayatri	10
Patil	Apeksha	10
Patil	Shweta	10
Shinde	Sejal	10
Shinde	Sanika	10
Chougule	Madhura	10
Ingale	Shreyash	9
Chougule	Tejas	10
Patil	Mithila	10
Tahsildar	Pratik	9
Jadhav	Dhiraj	10
Durugale	Shubham	10
Vibhute	Vidira	10
Bote	Prajakta	9
Gadave	Swarup	10
Chougule	Prathamesh	8
Bhopale	Animesh	10
Patil	Vrushali	9
Shaikh	Aman	10
Ingale	Shreyash	0
Todakar	Shveta	10
Ambardekar	Siddika	0
Ingale	Aditi	0
Waghmare	Rutuja	0

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

B.Sc.-II

**Operating System
Online Test CIE**

Date- 15-02-2022

Last name	First name	Grade/10.00
Hawale	Abhishek	8.57
Kore	Shubham	8.57
Patil	Dnyaneshwari	9.57
Kesarkar	Nikhil	8
Shintre	Isha	7.43
Pathan	Shifa	8
Shinde	Omkar	7.57
Patil	Shweta	7.43
Shinde	Sanika	6.29
Powar	Sayali	10
Durugale	Shubham	7.29
Jasud	Atharva	9
Vanarse	Sahil	9
Patil	Apeksha	8.71
Jadhav	Parth	8.43
Bote	Prajakta	8.71
Yadav	Aishwarya	9.57
Borage	Samrudhi	9.43
Ananda Patil	Gayatri	7.86

Dhavale	Pankaj	8.34
Patil	Mithila	8.57
Kante	Gunjan	7.57
Vibhute	Vidira	9.57
Chavan	Komal	8
More	Onkar	9.86
Jadhav	Dhiraj	9
Ingale	Shreyash	8.71
Pendhari	Shoaib	8.77
Gadave	Swarup	7.57
Todakar	Shveta	9.57
Shinde	Sejal	9.86
Kale	Aditya	8.2
Chougule	Madhura	9
Pandharapatte	Siddhi	10
Chougule	Tejas	8.14
Patil	Vrushali	8.2
Chougule	Prathamesh	9
Shaikh	Aman	9.57
Ambardekar	Siddika	6.86
Ingale	Aditi	8.71
Waghmare	Rutuja	4.34
Bhopale	Animesh	8.66
Tahsildar	Pratik	8.43
Jadhav	Parth	0
Bote	Prajakta	5.57
Overall average		8.21

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

B.Sc.-II

**Operating System
Online Test CIE**

Date- 06-07-2022

Last name	First name	Grade/10.00
Jadhav	Dhiraj	10
Kore	Shubham	10
Shinde	Omkar	9
Waghmare	Rutuja	7
Vanarse	Sahil	8
Ambardekar	Siddika	7
Chougule	Madhura	10
Todakar	Shveta	8
Hawale	Abhishek	10
Durugale	Shubham	8
Shintre	Isha	7
More	Onkar	10
Gadave	Swarup	10
Chougule	Tejas	8
Kale	Aditya	8
Vibhute	Vidira	10
Shinde	Sejal	8
Kamate	Sakshi	6
Kesarkar	Nikhil	10
Patil	Vrushali	8

Yadav	Aishwarya	9
Bote	Prajakta	9
Chavan	Komal	10
Tahsildar	Pratik	7
Ingale	Aditi	9
Powar	Sayali	10
Jasud	Atharva	8
Ingale	Shreyash	8
Shaikh	Aman	9
Chougule	Prathamesh	10
Borage	Samrudhi	9
Pendhari	Shoaib	8
Ananda Patil	Gayatri	10
Patil	Apeksha	10
Kante	Gunjan	10
Shinde	Sanika	7
Patil	Shweta	9
Dhavale	Pankaj	8
Patil	Dnyaneshwari	9
Patil	Mithila	8
Pathan	Shifa	8
Jadhav	Parth	10
Pandharapatte	Siddhi	10
Nadale	Swapnali	9
Overall average		8.77

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

B.Sc.-III

Computer Network Online Test CIE

Date- 08-02-2022

Last name	First name	Grade/10.00
Jadhav	Vishnavi	10
Sutar	Harshada	8.15
Jadhav	Sayali	10
Katyar	Kajal	10
Shinde	Kirti	10
Sankpal	Prajakta	10
ARADE	SAMADHAN	10
Jamadar	Tasmiya	10
Korde	Shreya	10
Powar	Prashant	8.5
Chougale	Ketan	10
Magdum	Rajvardhan	9
Chavan	Aishwarya	10
Patil	Nikita	7.45
Patil	Snehal	10
Khandare	Pankaj	9.75
Dinde	Rutuja	10
Kadwale	Ananya	10
Garadi	Sania	10

Sutar	Vishwajeet	10
Nirmale	Snehal	9
Sagaonkar	Tejashree	9.6
Mali	Karishmakumari	9
Patil	Sunil	9.8
Khurandale	Vaishnavi	9
Patil	Aadesh	8
Katyar	Preeti	10
Dabade	Amruta	8.6
Patil	Sammed	7.5
Ekal	Sanket	10
Patil	Sakshi	9
Shivane	Ashutosh	10
Mahadik	Akshata	6.55
Kugaji	Bhargavi	9.55
Shintre	Pranjal	10
Sutar	Vaishnavi	10
Patil	Abhishek	10
Powar	Saraswati	8
Mulla	Ashraf	9
Patil	Rohan	9.5
Patil	Sujit	9.75
Muthane	Vaishnavi	9
Giri	Poonam	10
Patil	Siddharth	10
Patil	Santosh	10
Chavan	Pratik	10
Patil	Shritej	9.6

Pusalkar	Tanay	9.5
Mali	Karishmakumari	0
Patil	Rohan	10
Patil	Rohan	10
Patil	Snehal	7.7
Sutar	Harshada	6.65
Jamadar	Tasmiya	10
Patil	Nikita	2
Overall average		9.08

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

B.Sc.-III

**Object Oriented Software Engineering
Online Test CIE**

Date- 17-06-2022

Last name	First name	Grade/10.00
Chougale	Ketan	10
Patil	Sunil	10
Ekal	Sanket	10
Powar	Prashant	6
Shivane	Ashutosh	10
Sankpal	Prajakta	10
Sutar	Vishwajeet	10
Sutar	Vaishnavi	9
Nirmale	Snehal	9
Shinde	Kirti	10
Katyar	Kajal	10
Garadi	Sania	10
Khurandale	Vaishnavi	5
Katyar	Preeti	10
Patil	Snehal	10
ARADE	SAMADHAN	10

Khandare	Pankaj	10
Kadwale	Ananya	10
Mali	Karishmakumari	8
Patil	Sujit	10
Sagaonkar	Tejashree	10
Sutar	Harshada	10
Mulla	Ashraf	9
Patil	Sakshi	10
Korde	Shreya	9
Patil	Nikita	10
Kugaji	Bhargavi	10
Dinde	Rutuja	10
Dabade	Amruta	10
Shintre	Pranjal	10
Powar	Saraswati	10
Chavan	Aishwarya	10
Chavan	Pratik	10
Jadhav	Sayali	9
Jamadar	Tasmiya	8
Patil	Sammed	10
Patil	Santosh	10
Patil	Aadesh	10
Mahadik	Akshata	7
Magdum	Rajvardhan	9
Giri	Poonam	10
Patil	Siddharth	10

Patil	Shritej	9
Sutar	Vaishnavi	10
Patil	Abhishek	9
Mali	Karishmakumari	0
Pusalkar	Tanay	10
Patil	Rohan	10
Jadhav	Vishnavi	8
Mali	Karishmakumari	10
Overall average		9.28

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

B.Sc.-III

Advanced Computer Network Online Test CIE

Date- 11-06-2022

Last name	First name	Grade/10.00
Nirmale	Snehal	8
Katyar	Preeti	9
Khandare	Pankaj	10
Dinde	Rutuja	9
Sutar	Vishwajeet	9
Mulla	Ashraf	9
Chavan	Aishwarya	9
Chougale	Ketan	10
Kadwale	Ananya	10
Shinde	Kirti	9
Jadhav	Sayali	9
Patil	Siddharth	10
Patil	Santosh	10
Shivane	Ashutosh	10
Jadhav	Vishnavi	10
Patil	Aadesh	8
Garadi	Sania	10
ARADE	SAMADHAN	10
Mali	Karishmakumari	9
Ekal	Sanket	10

Sankpal	Prajakta	9
Patil	Sakshi	9
Katyar	Kajal	10
Patil	Sunil	10
Sutar	Vaishnavi	10
Patil	Sammed	8
Dabade	Amruta	10
Korde	Shreya	10
Giri	Poonam	9
Shintre	Pranjal	10
Patil	Rohan	10
Powar	Prashant	10
Patil	Sujit	10
Patil	Abhishek	10
Kugaji	Bhargavi	10
Powar	Saraswati	7
Chavan	Pratik	10
Patil	Shritej	10
Sutar	Harshada	8
Magdum	Rajvardhan	10
Sagaonkar	Tejashree	10
Patil	Nikita	10
Mahadik	Akshata	10
Jamadar	Tasmiya	10
Pusalkar	Tanay	10
Khurandale	Vaishnavi	8
Overall average		9.48

Vivekanand College, Kolhapur (Autonomous)		
Department of Computer Science		
B.Sc.-III		
Data Science using Python CIE Online Test		
Date- 24-06-2022		
Last name	First name	Grade/20
Patil	Sunil	17
Jadhav	Vishnavi	15
Sutar	Harshada	16
ARADE	SAMADHAN	17
Katyar	Kajal	18
Patil	Nikita	16
Shinde	Kirti	19
Jadhav	Sayali	16
Chougale	Ketan	16
Patil	Snehal	16
Sankpal	Prajakta	16
Sutar	Vishwajeet	14

Katyar	Preeti	17
Khurandale	Vaishnavi	13
Mali	Karishmakumari	16
Patil	Santosh	17
Nirmale	Snehal	15
Garadi	Sania	18
Ekal	Sanket	18
Dinde	Rutuja	17
Jamadar	Tasmiya	11
Khandare	Pankaj	14
Kugaji	Bhargavi	12
Dabade	Amruta	17
Powar	Prashant	15
Magdum	Rajvardhan	15
Shintre	Pranjal	19
Korde	Shreya	20
Shivane	Ashutosh	18
Mahadik	Akshata	12
Patil	Sammed	11
Patil	Shritej	14

Kadwale	Ananya	15
Chavan	Aishwarya	17
Patil	Siddharth	14
Giri	Poonam	15
Mulla	Ashraf	15
Sagaonkar	Tejashree	17
Patil	Aadesh	14
Patil	Rohan	14
Patil	Abhishek	13
Powar	Saraswati	11
Chavan	Pratik	15
Sutar	Vaishnavi	9
Patil	Sujit	8
Overall average		15

Name :- Pahl Vipul Ashok

Sub :- Computer Science

Roll No :- 7800

15/02/22
D D M M Y Y Y Y

Q1. Define OS and write a short notes on System Software and Application software.

• [Operating System] OS :-

→ The operating system is a nothing but a interface between user and computer hardware is called as 'operating system'.

• System Software :- System software is used to the operating computer hardware. System software is a installed in a computer when operating system is in the computer. So

System software is a run in independently it is a not to need any other system
e.g :- Drives etc

• Application Software :-

Application software are used to user. Application software is can't run in without system software.

Application software is a can not run in independently because not a found in a system software so.

e.g :- chrome etc

Q3 System call is an a fundamental unit of the System

- 1) Memory management
- 2) process management
- 3) Device management
- 4) file management
- 5) Security management

Q4

User interface :-

The user interface is

~~the~~ for the access the information to user.

Q.1 What is system? Define characteristics & elements of system.

Defⁿ: A system means "an organized relationship among functioning units or components"

System is a group of elements or components which work together to accomplish a common task.

Characteristics of System:

1. Organization: Organization implies structure and order. It is the org arrangement of components that helps to achieve objectives.

2. Interaction: It refers to the manner in which each components function with other component of the system.

3. Interaction: It refers to the m

3. Interdependence: It means the part of organization or computer system depend on one another.

4. Integration: Integration refers to the holism of system. Synthesis follows analysis to achieve the central objective of the organization.

5. Central Objective: Objective may be real or stated objective may be the real objective, it is not uncommon for an organization to state one objective and operate to achieve another.

Elements of System:

• Outputs and Inputs:

i) The main aim of a system is to produce an output which is useful for it's user.

ii) Inputs are the info. that enters into the system for processing.

Processor(s) :

- i) The processor is the element of the system that involves the actual transformation of input into output.
- ii) It is the operational component of a system. Processors may modify the input either totally or partially depending on the output specification.

Control :

- i) The control element guides the system. It is the decision making subsystem that controls the pattern of activities governing input, processing and output.

Feedback :

- i) The control element of Feedback provides the control in a dynamic system.
- ii) Positive feedback is routine in nature, that encourages the performance of the system.

Environment :

- i) The environment is -the 'supersystem' (supersystem) within which an organization operates.
- ii) It is the source of external elements that strike on system.

Boundries and Interfaces :

- i) A system should be defined by it's boundries. The limits that identify it's components, processes and interrelationship when it interfaces with another system.

Q.2] Write difference between.

a) Physical or abstract systems

1) Physical systems are tangible entities that may be static or dynamic in operation.

2) Physical system may be static or dynamic in nature.

3) Abstract systems are non-physical entities or conceptual that may be formulas, representation or model of a real system.

b) Open and closed systems

1) An open system has many interfaces with its environment.

2) A system is isolated from environmental influences.

3) A closed system does not interact with its environment.

4) It is isolated from environmental influences.

5) A completely closed system is rare in reality.

Q.3] a) Explain activities in requirement analysis:

1) Requirement Anticipation:

It predicts the characteristics of system based on previous experience which include certain problems and requirements for new system.

2) Requirement Investigation:

It is studying the current system & documenting its features for further analysis.

s) Requirements Specification :

It includes the analysis of data which determine the requirement specification, description of features for new system.

4) Software Requirement Specification (SRS)

A software requirements specification is a document that captures complete description about how the system is expected to perform.

b) Activities involved in System Architecture Design

1) Partition of requirements

2) Identification of sub-system

3) Assignment of requirements to sub-systems

4) Specification of sub-system functions

5) Definition of sub-system interface.

Q.4] Explain Characteristics Form of SRS

1) Correct :

The SRS or SRS requirements specification should correctly describe the system.

2) Unambiguous :

Software requirements should be written in such a manner as they are not subject to different interpretations.

3) Complete :

The software requirements documents should completely describe the system's expected

4) Consistent :

Requirements for the system under discussion must not contradict each other.

5) Ranked:

You must rank your software requirements for importance.

Each software requirement has its own level of importance.

6) Variable:

If the requirement cannot be verified as having been met.

7) Modifiable:

The requirements must be easy to modify or change.

8) Traceable:

The requirements must be traceable.

8.5

Q.5] Explain System analyst.

∴ Roles & responsibilities.

Communicate with customers and stakeholders to learn and document requirements.

• Deploy the system

∴ Skills :

a) Interpersonal

1) Interface with users and programmers

2) Managing expectations

b) Analytical

1) system study & organizational knowledge

2) Sound commonsense.

c) Management skills

1) Understand users jargon and practices

2) Resource and project management.

d) Technical

1) Knowledge of computer and s/w

2) Keep abreast of modern development.

18
20

MP

Name - Anany Balwant kadwale

Date - 22/12/2021

Page No.	
Date	

⑤ What is System? Define characteristics & element of system.

⇒ System :-

A system is an organized relationship between the functioning units of components.

- i) A system exists because it is designed to achieve one or more objective.
- ii) In our day-to-day life we are connect with the system eg. business system, accounting system, transportation system.
- iii) A system has interrelated departments which are called as subsystem.
- iv) None of the subsystem is single or independant unit eg. In business system, we have subsystems like production, sales and accounting etc.

Characteristics of System:-

① Organization :-

It implies structure & order of a system. It is the arrangement of components to achieve objective.

② Interaction :-

The components of systems interacts or function with one another.

③ Interdependant :-

The part of organization / computer is depends on one another.

④ Integration :-

It is the holism of system. It synthesis the ^{whole} system and find central objective of the system.

⑤ Central objective :-

Objective is real or steady. It is not uncommon for the system.

* Elements of System :-

① Input & output :-

- i) The input are the elements which are used for processing and output is outcome of the process.
- ii) The main objective of system is to produce output.
- iii) The output should be related to requirements of user

② Processor -

- i) It is the element which is used in actual transformation of input into output.
- ii) It is operational component of system.

③ Control -

- i) Control elements guides the system.
- ii) It is the decision making subsystem & controls input, o/p.

④ Feedback :-

control of the system is achieved by feedback.

⑤ Environment :-

It is the element in which organization operates the system.

⑥ Boundaries & Interfaces

The system is define by its boundary.

① What is SRS ? Explain templates.

→ System Requirement Specification (SRS):-

It is the document that describes how the system is expected to perform.

* Templates of SRS:-

① Scope of the product:-

It is the short description of the software with their purpose, their objective & goals.

② Defⁿ, acronyms & abbreviations:-

The software needs to properly interact with system.

③ References:-

It is the list of components that refers to SRS and web address which refers to SRS.

④ Overview of SRS:-

A system should be overviewed by analyst and find out requirements for the new systems.

* Qualities of SRS:-

① Correct -

SRS should be correctly define in the system.

② Unambiguous -

It is written in appropriate manner to avoid ambiguity

③ Consistent

SRS should not contradict with each other.

⑤ Ranked - We should rank our SRS, each SRS has its own level of importance

⑥ Modifiable -
SRS is modified by SRS length.

⑦ Tracable -
It is able to trace SRS depends on its functionality

⑧ Difference .

① Physical

i) These are the entities which are static

ii) We cannot update according to users need.

Abstract .

i) These are the entities which are dynamic

ii) We can change it according to user need.

Open

i) These systems are interacts with environment.

ii) This system has a isolated environmental influence.

Close

i) These systems are not interacts with environment.

ii) This system does not have environmental influence.

Q a) Explain activities in req. analysis.

⇒ Activities in req. analysis

① Requirement Anticipation

- i) It provides previous characteristics of systems to find out problems & requirement for new system.
- ii) It analysis the area which is unnoticed by unexperienced analyst, but when shortcuts are taken & bias is introduced the system should be.

② Requirement Investigation :-

- i) It is the heart of system analysis.
- ii) It describes system by using fact finding techniques, prototype computers assisted tools.
- iii) The system analysis is taken & requirements for further use.

③ Requirement Specification :-

- i) It is the analysis which are used to specify the req. of the system.
- ii) The factual data, programs are specified in this system.

System Design

- ① Partition of system
- ② Investigation for the requirement
- ③ Assignment of system to requirement.
- ④

16 MP
20

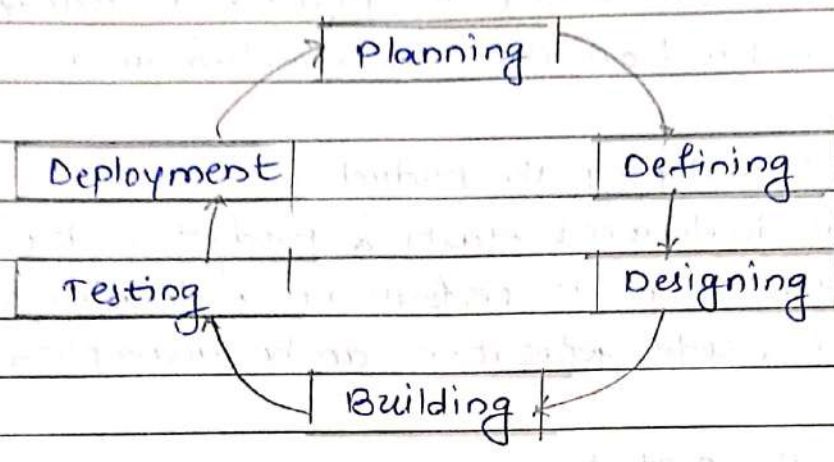
Name - Ananya Balwant Kadiwale
Roll No - 7978

18/12/2021

Page No.	
Date	

① Explain SDLC model

⇒ Software Development Life Cycle :-



It is a process used by the s/w industry to design, develop & test high quality s/w.

SDLC is a framework defining task perform at each step in the s/w development process.

It consists of following stages -

① Planning & req. analysis :-

- i) It is the most important & fundamental stage in SDLC
- ii) Planning for the quality assurance req. & identification of the risk associated with the project also done in planning stage.
- iii) It take input from customers, sales, dept, market survey and domain expert industry.

② Defining Requirements :-

- i) It is clearly define & document the product req. and get them approved from customer & market analyst
- ii) It is done through an SRS document which is consists of all products req. to be designed & develop during the project life cycle.

⑧ Designing the product Architecture:-

- i) SRS is a ref. for the product argument to come out with best architecture for product to manage & docs in dev.
- ii) It is based on the req. specified in SRS.

⑨ Building / Developing the product:-

- i) Actual development starts & product is build.
- ii) The design is perform in a detailed & organized manner, code generation can be accomplish.

⑩ Testing the product:-

- i) This stage refers to the testing only the stage of the product where products defects are reported, track, fixed & tested until reaches the quality standard define in the SRS.

⑪ Deployment in the market & maintainence:-

- i) Once the product is tested & ready to deploy it is released formally in this appropriate market.
- ii) The product may first be released in a limited segment & tested in the real business env. which is UAT

⑫ Explain Waterfall model

⇒ Waterfall model:-

The development of SW proceeds linearly & seq. from req. analysis to design, coding, testing, integration, implementation & maintainence. This model is also known as linear sequential model.

It is simple to understand. The new product becomes input of next process.

System / Information Engineering Modeling

Requirement - Gathering and analysis.

Design

Coding

Testing

Implementation & maintenance.

* Phases in Waterfall Model:-

① System / Information Engineering Model :-

- i) It establishes seq. for all parts of the system.
- ii) System engineering includes collecting seq. at the system level while information engineering includes collecting seq. at level where all decisions regarding business are taken.

② Req. Analysis :-

- i) It focuses on the seq. of the SW to be develop.
- ii) This phase involves interaction betⁿ users & SW engineers and produces document known as SRS.

③ Design :-

- i) This phase determines the detailed process of the developing SW after req. have been analyzed.
- ii) The SW engineer is mainly concerned with data structure, algorithm details & interface representation.

④ Coding :-

- i) This phase emphasis translation of design to a language using coding style & guidelines.
- ii) The programs created should be easy to read & understand.

⑤ Testing :-

- i) This phase ensures that the SW is develop as per the users req. Testing is done to check that SW is running efficiently & with minimum errors.

⑥ Implementation & maintenance :-

- i) This phase delivers fully functioning operational SW to the user.
- ii) This phase focuses on modifying SW, correcting errors and improving the performance of the SW.

③ What is feasibility study? Explain types.

→ Feasibility study :-

- i) It is defined as the practical extend to which a project can be performed successfully.
- ii) To evaluate feasibility, a feasibility study is perform which determines whether the solⁿ considered to accomplish the requirements is practical & workable in SW.

Types of feasibility study :-

① Technical Feasibility :-

It gives report where there exists correct required resources & technology which will be used for project development.

② Operational Feasibility:-

The degree of providing service to org. is analyzed along with how much easy product will be to operated & maintenance after deployment

③ Economical Feasibility:-

In this feasibility cost & benefit are analyzed, It is used for development which includes all the org. cost for all final deployment.

④ Define fact finding techniques

⇒ Fact finding techniques:-

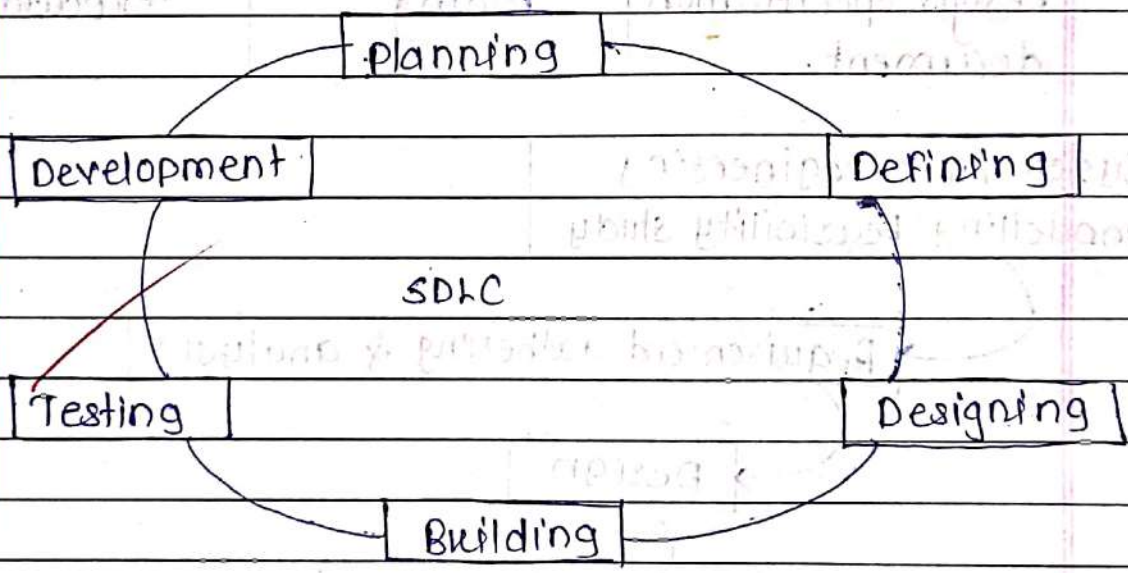
To study any system the analyst needs to do collect facts & all relevant information. The facts when expressed in quantitative form are data

Techniques

- ① Interview
- ② Questionnaire
- ③ Record View
- ④ observation.

8.11 Explain SDLC

- 1) SDLC is software development life cycle.
- 2) SDLC is a process used by software industry to design develop and test high quality software. The SDLC aims to produce a high quality software that meets or exceeds customer expectations reaches completion within times and cost estimates.
- SDLC is acronym of SDLC
- It is also called software development process
- It is framework defining tasks performed at each step in the software development process.
- ISO/IEC 12207 is an international standard for software life-cycle processes.
- It aims to be the standard that defines all the tasks required for developing and maintaining software.

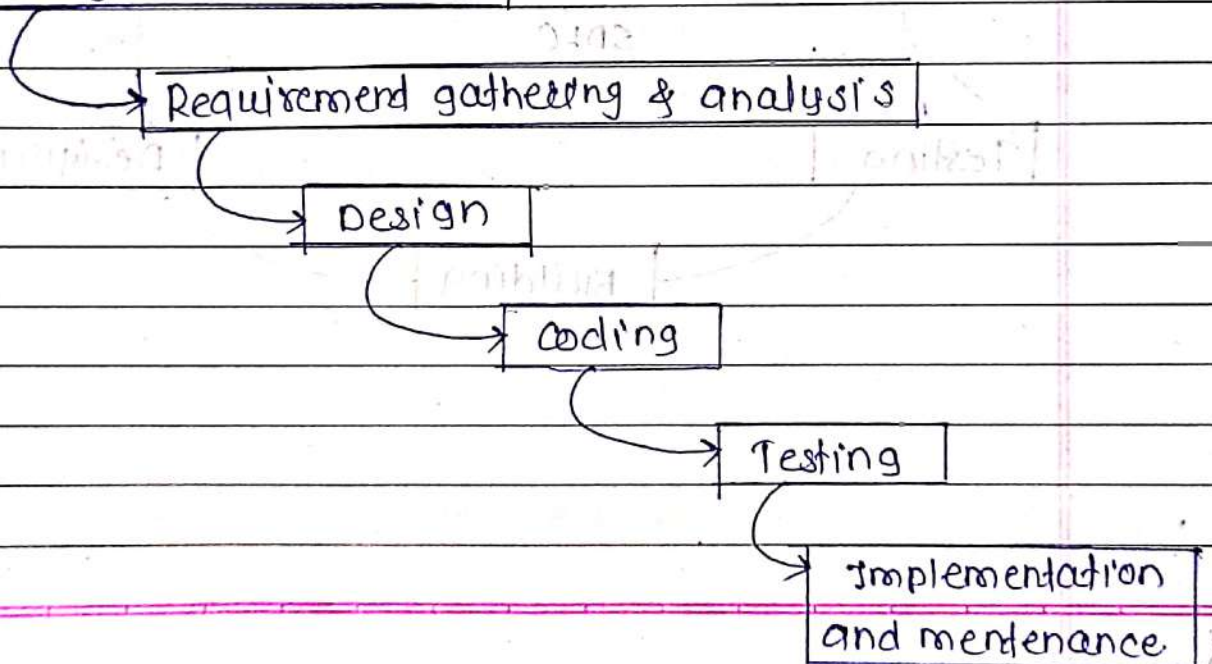


Q3 Explain waterfall model.

In this, the development of software proceeds linearly and sequentially from requirement analysis to linearly design coding testing integration implementation and maintenance. Thus, this model is also known as the linear sequential model.

Input Phase	Process / Phase	Output of phase
defined through communication	Requirements analysis	software requirements specification.
software requirements document	design	Design specification
Design specification document	coding	Executable software.

System/info engineering
modelling/feasibility study



Q.8] What is feasibility study and explain type of it
: feasibility is defined as practical extent to which a project can be performed successfully.

• Types :

1) Technical feasibility :

In this current resources both H/W, S/W along with required technology are analyzed to develop project.

this technical feasibility study gives report whether there exists correct required resources.

2) Operational Feasibility :

In this degree of providing service to requirements is analyzed along with how much easy product will be to operate and maintenance after deployment. Along with this other operational scopes are determining usability of product.

3) Economic Feasibility :

In this study cost and benefit of project is analyzed means under this a detail analysis is carried out what will be the cost of project for which includes all required, design and development cost and operational cost.

8.5] Define Fact finding techniques.

1) Interview:

This method is used to collect the info from groups of individuals. Analyst selects the people who are related with the system. For the interview, in this method the analyst sits face to face with people.

2) Questionnaire:

It is the technique used to extract info from no. of people. This method can be adopted and used only by an skillful analyst. The questionnaire consists of series of questions framed together in logical manner.

3) Record View:

The info related to the system is published in the sources like newspapers, magazines, journals, documents, etc.

4) Observation:

Unlike the other fact finding techniques, in this method the analyst himself visits the organization & observes & understand the flow of documents. The system for this method to be adopted.

8.5] Characteristics of software

1) Functionality :

- Suitability
- Accuracy
- Interoperability
- Compliance
- Security

2) Reliability :

- Recoverability
- Fault Tolerance
- Maturity

3] Efficiency :

- In time
- In Resource

4) Usability

- Understandability
- Learnability
- Operability

5] Maintainability

- Testability
- Stability
- Changeability

6] Portability

- Adaptability
- Installability
- Replaceability

16 28/4/2022
20 MP

ज्ञान, विज्ञान आणि सुरांरकार यांसाठी शिक्षण प्रसार
- शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Signature of Supervisor

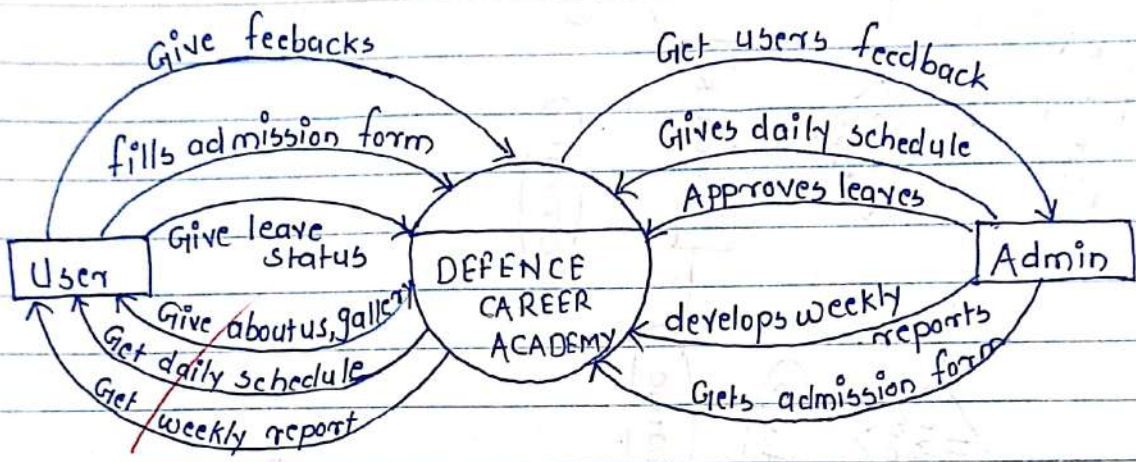
[Signature box]



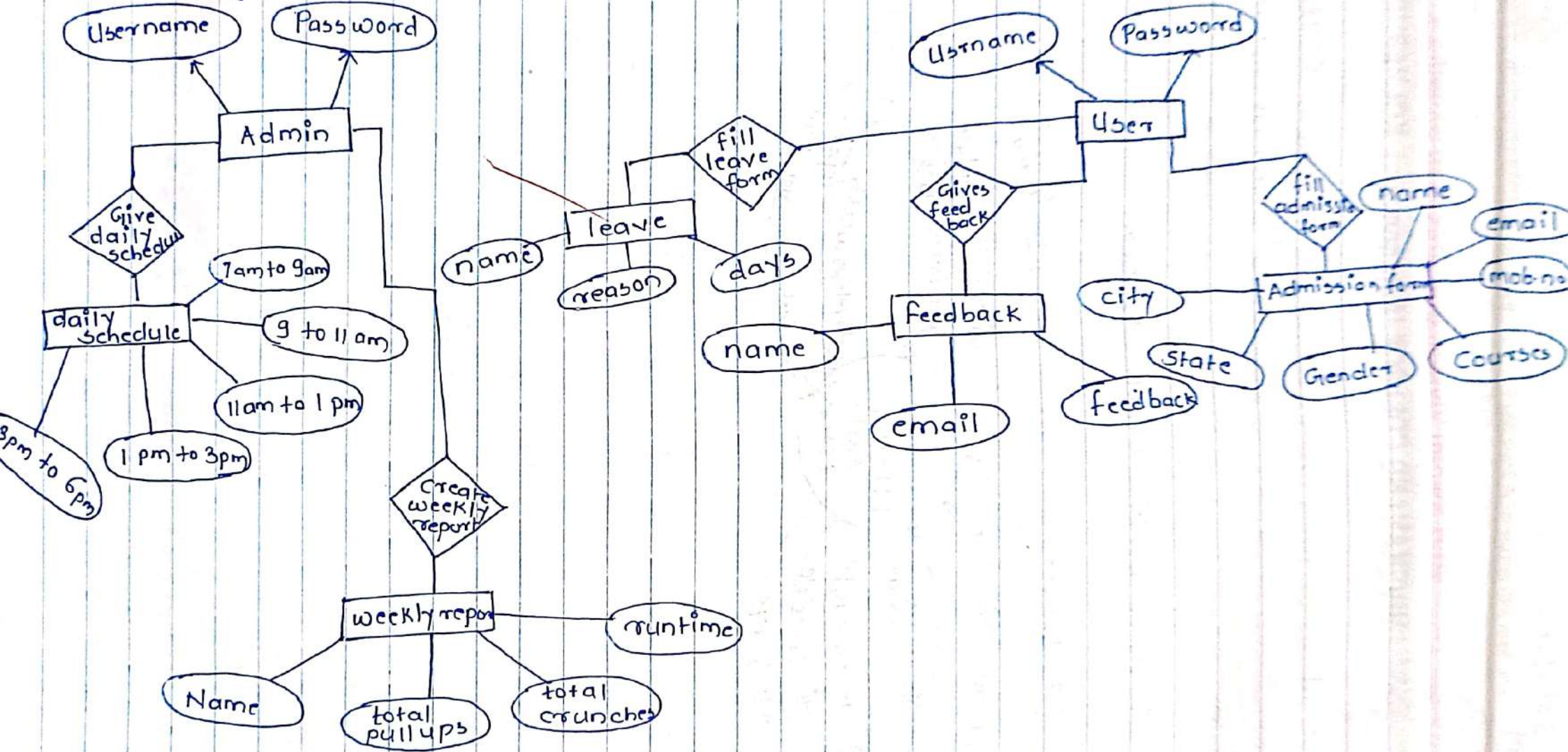
Shri Swami Vivekanand Shikshan Sanstha's VIVEKANAND COLLEGE (Autonomous), KOLHAPUR

Class Bsc III Div. _____ Roll No. 87983
Suppliment No. _____ Subject O.O Software Engineering
Test / Tutorial No. _____

Q.1] DFD of DEFENCE CAREER ACADEMY

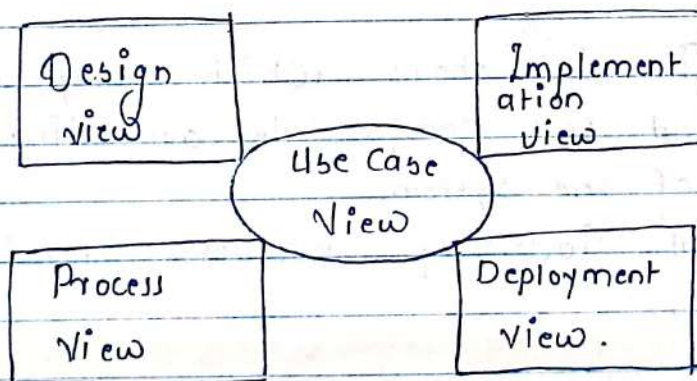


ERD Diagram



Q.3] UML Architecture.

In real world architecture system is used by users, business people, analysts, project managers and many more. It is very necessary to build a system by getting different perspectives of different users. It helps the users to visualize the system from different users to get different ideas for building an appropriate user-friendly system. The better we can understand the system the better we can build the system. It must reuse and adapt the system. We can build the system correctly when we will get to know the actual concept of the users need to build a better system. We require proper organization of system to build better architecture of the systems.



Design view:- Design view is used to know the actual functionality of system. It is used to get design of system to build better system by organizing appropriate system. It gets the internal functioning of system by static structure and dynamic behaviour.

Use Case View:- It is used for the functionality maintaining of the system. by involving external actors.

Implementation view:- It showcases functionality of core components and files present inside the system

Deployment view:- Deployment view is used for the deployment of system and sets concerns according to the requirements of the system.

Process view:- Process view is used to show processes and work that involves internally in a system.

Q.4) Conceptual Model of UML

This view shows which components are deployed and sets components according to the concern of the system.

Conceptual Modelling involves following components.

- 1) Class
- 2) Object
- 3) Inheritance
- 4) Abstraction
- 5) Polymorphism
- 6) Inheritance

Roll No: 7984

- 1) Class :- Class is a collection of objects with same characteristic properties. Classes are blueprint of object. Instantiation of object is performed by class.
- 2) Object :- Object is a real world element which has similar characteristic properties. Object is an instance of class.
- 3) Inheritance :- Inheritance involves creation of subclasses from existing classes. For eg. subclass is derived from superclass from deriving some of the properties of superclass.
- 4) Abstraction :- Abstraction is a process where main work is shown and real implementation is hidden.
- 5) Polymorphism :- Polymorphism is referred to using one single method by one or more ways of implementation. If area() is function taken to perform on circle and rectangle then implementation of area() in circle is different and in rectangle is different. It uses same method but different parameters.
- 6) Encapsulation :- It is a process of encapsulation the processes of objects performed in a class.

Q.6]

Class :- Class is a collection of well defined objects with same characteristic properties. Objects are instance of a class. Creation of objects in a class is known as instantiation.

Constituents are set of attributes used in class and operations performed on it.

Object is a real world element which has similar characteristic properties. Object is instance of class.

17/20 MP

" ज्ञान, विज्ञान आणि सुरास्कार मांसादी शिक्षण प्रसार "
- शिक्षणसहवी डॉ. बापूजी साबुळे

Signature of Supervisor



Shri Swami Vivekanand Shikshan Sanstha's VIVEKANAND COLLEGE (Autonomous), KOLHAPUR

10/5/2022

Class BSc III Div _____ Roll No. 1974

Suppliment No. _____ Subject _____

Test / Tutorial No. object oriented software engineering

• Class Diagram

i) A class diagram describes classes and objects in the system

ii) It also describes relationship between them. Thus, class diagram is also known as object model.

iii) Class diagram identifies high level entities in the system

iv) class diagram gives an overview of a system

v) class diagrams are static

vi) Class diagram is similar to family tree.

vii) Class diagram consists of group of classes and objects

viii) classes and objects are represent members in family tree, and their relationship is analogs to member of family.

ix)

• Component of Class Diagram:

class diagram consists of 3 section

① Upper section

② Middle section

③ Lower section

① Upper section -

① Upper section is name of class. A class is representation of similar objects having same attributes.

relations, operations, symbols.

Following rules should be taken care while presenting an upper section.

- i) Capitalise initial letter of class name
- ii) Class name must be in centre of an upper section
- iii) Class name should be written in bold format.
- iv)

2) Middle section -

Middle section is of attributes, which describes quality of system characteristics -

i) attributes must be written with visibility factor

- a) public (+)
- b) private (-)
- c) protected (#)
- d) package (w)

ii) The accessibility of attributes is illustrated by a visibility factor

iii)

3) Lower section -

Lower section is of methods or operations. Each operation must be written in single line with explanation usage.

class name
Attributes
Operations

Relationships

1) Dependency -

It is semantic relationship between two or more objects. It forms weaker relationship.

Ex - Consider following example with student_name student_id.



2) Generalization -

In generalization child classes inherited from parent class (super class) where arrow is towards parent class (super class) and end of arrow is at child class (sub class). It forms is-a relationship.

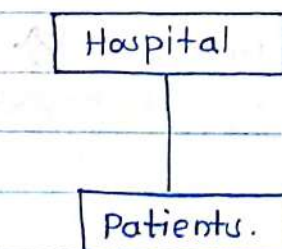
Ex - A generalise of form of bank account.



3) Multiplicity -

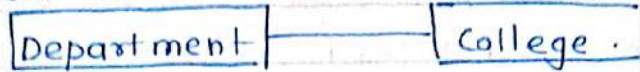
Multiplicity is a set of allowable instances. are depicted. if range is not given default is consider as multiplicity.

Ex - Multiple patients are admitted to a hospital.



4) Association - static or physical
It is relationship between two or more classes
is known as association

Ex Department is associated with college.



5) Aggregation -

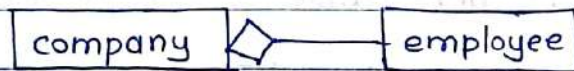
i) Aggregation is subset of association.

ii) It represents has-a relationship.

iii) In aggregation, part-child class is not dependent on parent class.

iv) This defines part-of or p relationship.

v) Example - if an employee of any company resigns, the company still exists.



6) Composition -

i) Composition is subset of aggregation.

ii) In composition, if one part is deleted, then the other part will also get discarded.

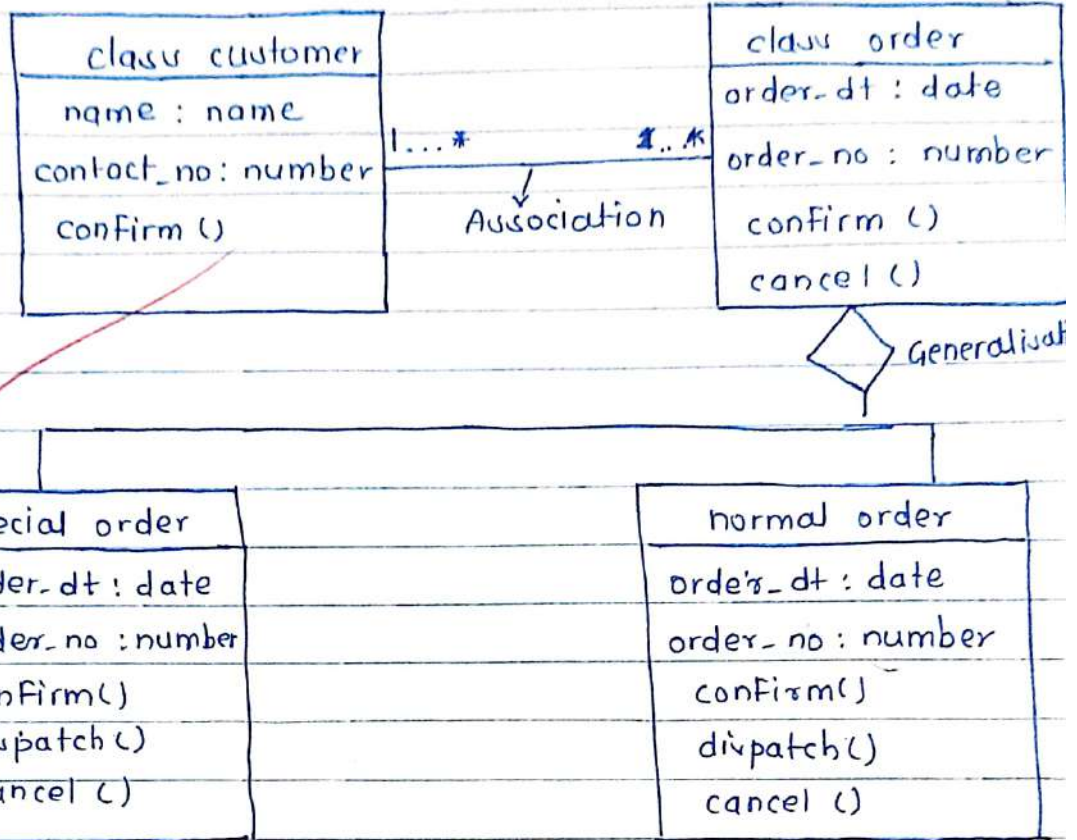
iii) It represents whole-part relationship.

iv) Example -

Consider a contact book having a number of multiple contacts, if the contact book is deleted, all contacts will be deleted.



Class Diagram for customer placing order.



Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science


B.Sc. III- Skill Test

Date-08/01/2022

Student Roll Number	Signature
8008	Sagaontar
7989	Ant.
8015	Bhatar
7973	Prasadi
7996	Satil

09+03=07
10

Java Program	Output and Justification
<pre>class A { public static void main(String[] args) { System.out.println('j' + 'a' + 'v' + 'a'); } }</pre>	<p>Output- java</p> <p>Justify- String have a special append operator '+' that concatenate strings.</p>
<pre>class B { public static void main(String[] args) { int \$ _ = 15; System.out.println(\$ _); } }</pre>	<p>Output- 15</p> <p>Justify- Variables in java are convenient</p>
<pre>class Main { public static void main(String args[]) { System.out.println(myfun()); } int myfun() { return 20; } }</pre>	<p>Output- <u>Syntax error</u></p> <p>Justify- we cannot call funⁿ without creating a object.</p>

Java Program	Output and Justification
<pre> class BankAccount{ double balance; void deposit(double x){ balance = balance + x; System.out.println("Current balance is: "+balance); } } class q1c{ public static void main(String args[]){ BankAccount myAccount; myAccount.deposit(10000); } } </pre>	<p>Output- Syntax error ✓ Justify- Syntax error at line 10</p> 
<pre> class q2a{ public static void printarray(double a[]){ for (int i=0; i<a.length; i++){ System.out.println(a[i]); } } public static void main(String args[]){ double x[] = {2.2, 4.4}; double y[] = {1.1, 3.3, 5.5}; y = x; x[0]=8.8; printarray(x); printarray(y); } } </pre>	<p>Output- 8.8 Justify- 2.2 4.4 2.2 4.4 ✓</p> <p>Justify:- at line 9 the content of x x becomes content of y. & at line 10 value of 0th position 8.8 added to array of x</p>

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science



B.Sc. III- Skill Test

Date-08/01/2022

Student Roll Number	Signature
7980	P. Katyaje
7979	K Katyaje
7975	A. Yank
7987	M. Kishor Karmad
7976	P. S. Dhar

07 + 03 = 10
10

Java Program	Output and Justification
<pre>class A { public static void main(String[] args) { System.out.println('j' + 'a' + 'v' + 'a'); } }</pre>	<p>Output- java Justify- System.out.println('j'+ 'a'+ 'v'+ 'a') is statement used to print string / message. Concatenation of string elements is done.</p>
<pre>class B { public static void main(String[] args) { int \$_ = 15; System.out.println(\$_); } }</pre>	<p>Output- 15 Justify- Variable / Identifiers can start with a letter, underscore or dollar sign. System.out.println(\$_); statement is used to print variable value.</p>
<pre>class Main { public static void main(String args[]) { System.out.println(myfun()); } int myfun() { return 20; } }</pre>	<p>Output- Error (undefined method myfun()) Justify- because function should be static to call in main method.</p>

Java Program	Output and Justification
<pre> class BankAccount{ double balance; void deposit(double x){ balance = balance + x; System.out.println("Current balance is: "+balance); } } class q1c{ public static void main(String args[]){ BankAccount myAccount; myAccount.deposit(10000); } } </pre>	<p>Output- Compile Time Error</p> <p>Justify- Syntax Error during creation of object. Correct Syntax: classname objname = new classname();</p> 
<pre> class q2a{ public static void printarray(double a[]){ for (int i=0; i<a.length; i++) System.out.println(a[i]); } public static void main(String args[]){ double x[] = {2.2, 4.4}; double y[] = {1.1, 3.3, 5.5}; y = x; x[0]=8.8; printarray(x); printarray(y); } } </pre>	<p>Output- 8.8 Justify- 4.4 2.2 4.4</p>  <p>Justify- Since, printarray method is static, there is no need to call separately using object</p>

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

B.Sc. III- Skill Test

Date-08/01/2022

Student Roll Number	Signature
8014	<i>[Signature]</i>
7991	<i>[Signature]</i>
7974	<i>[Signature]</i>
8013	<i>[Signature]</i>
7986	<i>[Signature]</i>

$03/10 + 03 = 06$
[Signature]

Java Program	Output and Justification
<pre>class A { public static void main(String[] args) { System.out.println("j" + 'a' + 'v' + 'a'); } }</pre>	<p>Output- java Justify- It's a string, so we get whole word java without any blank space</p>
<pre>class B { public static void main(String[] args) { int \$_ = 15; System.out.println(\$_); } }</pre>	<p>Output- 15 Justify- integer variable \$_ is initialized as 15. The print statement prints the value of variable \$_. Therefore the output 15 is displayed</p>
<pre>class Main { public static void main(String args[]) { System.out.println(myfun()); } int myfun() { return 20; } }</pre>	<p>Output- 20 Justify- In the class Main, the integer function myfun() is defined which returns value 20. The statement, System.out.println(myfun()) executes the function and the value returned by the function is displayed as output</p>

Java Program	Output and Justification
<pre> class BankAccount{ double balance; void deposit(double x){ balance = balance + x; System.out.println("Current balance is: "+balance); } } class q1c{ public static void main(String args[]){ BankAccount myAccount; myAccount.deposit(10000); } } </pre>	<p>Output-Justify- <i>error</i> <i>/</i> <i>✓</i></p> <p><i>✓</i></p>
<pre> class q2a{ public static void printarray(double a[]){ for (int i=0; i<a.length; i++) System.out.println(a[i]); } public static void main(String args[]){ double x[] = {2.2, 4.4}; double y[] = {1.1, 3.3, 5.5}; y = x; x[0]=8.8; printarray(x); printarray(y); } } </pre>	<p>Output-Justify-</p> <p><i>✓</i></p>

21-22



Shri Swami Vivekanand Shikshan Sanstha's
VIVEKANAND COLLEGE (Autonomous), KOLHAPUR

Date : 10/08/2024

Class BSC-III

Div _____

Roll No. 7961

Suppliment No. _____

Subject Software Engineering

Test / Tutorial No. _____

Q1] Class Diagram :

1) Class diagram is used to describe the object and the classes in the system and relation between them, thus the class diagram is also known as object Model.

2) Class diagram depicts the static view. The dynamic changes are not included in class diagram. The data values and attributes are not involved in class diagram.

3) Class diagram is a representation of the class and the object.

4) Following are the components of class diagram:

a) Upper section

b) Middle section

c) Lower section.

a) Upper section : The upper section, in it class name is present. class name of the system is represent in upper section with some rules.

Following are the some rules :

1) Capitalize the initial letter of the class name.

2) The class name of the system should be in center.

3) The class name of the system must be in bold format.

4) The class name should be in italic format.

1) Middle Section: The middle section of a class diagram represents the attributes which have the some characteristics. The characteristics are depends on visibility factor. are following:

- i) Public (+)
- ii) Private (-)
- iii) Protected (#)
- iv) Package (')

The accessibility of visible factors of attributes are represent. The attributes of class diagrams are present.

2) Lower Section: The lower section of class diagram includes the methods & operations.

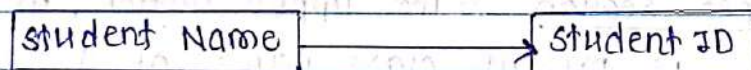
Notation or symbol of class Diagram:

Class Name
Attributes
Methods

Relationships:

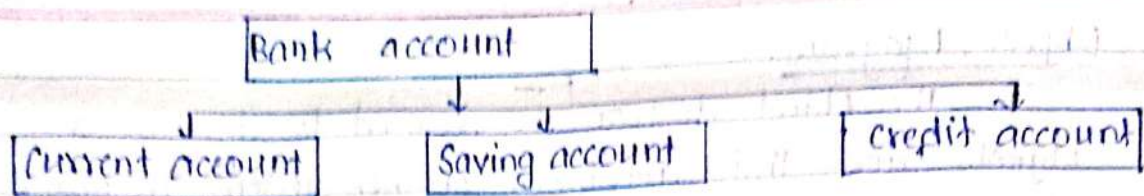
1) Dependency: Dependency is the relationship between two or more classes in which one class is depend on another class.

Eg. Student name is depend on student ID.



2) Generalization: Generalization is the process where or is the relationship between parent class and child class. where child class is inherited by parent class.
Eg. Bank account.

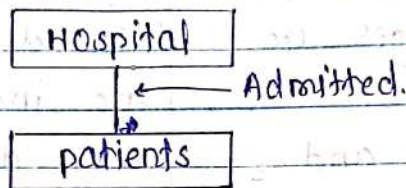
Credit account, current account and saving account is geneelized from bank account.



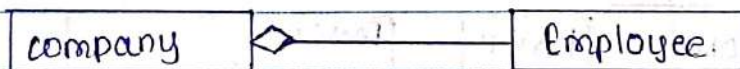
4) Association: Association is the relationship between two classes in which one class is associated with another class. E.g. Department of collage is associated with collage.



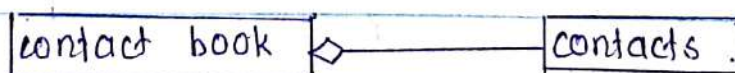
4) Multiplicity: Multiplicity is the relationship between two or more classes. It is the one to many relationship. The one class is in relationship with multiple classes. E.g. The multiple patients are admitted in one hospital.



5) Aggregation: Aggregation is the relationship between two classes in which one parent class is independent on another one. If another class discarded the parent class remains constant. E.g. The class of company. The one employee is resigns then the company still constant not discarded.



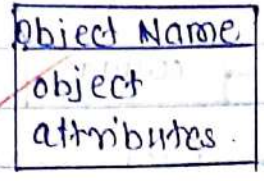
6) Composition: Composition is a sub part of aggregation. It is the relationship between two or more classes. If the one class is discarded then other also be discarded. E.g. In contact book, ^{all} contacts _{are} discarded or deleted then contact book also will discarded.



97 Object Diagram:

The object diagram is used to describe objects and their attributes of the system. In object diagram there are two sections object and attributes. The upper section includes the object name, and the second one includes objects and attributes.

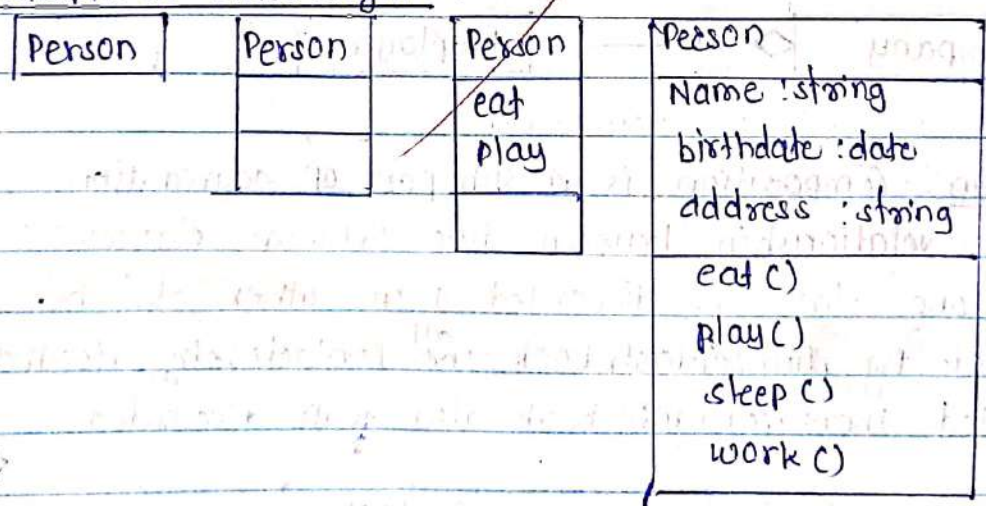
Notation of object diagram:



Difference:

class Diagram	object Diagram
1) class diagram depicts the static view	1) object diagram depicts real-time behaviour.
2) The dynamic changes are not included	2) The dynamic changes are included in it.
3) The data values and attributes are not involved	3) The data values and attributes are involved
4) The object behaviour is not involved in class diagram.	4) The object behaviour is involved in object diagram.

Example of class Diagram:



ASSIGNMENT NO. 1

Q.1 What is an shell ? Explain the types of shells of Linux.

• Shell

→ A shell is an interpreter where we can provide commands and get a response.

→ A shell can perform powerful and un-countable number of actions based on the commands we provide.

→ Basically a shell is a programme which runs other programmes.

• Types of shell

1] Bash shell (Bourne again shell):

→ Bash stands for Bourne again shell and it is default shell on many linux distributions.

→ It is also sh-compatible shell and offers practical improvements for over sh for programming and interactive use while editing :-

- 1) command line editing
- 2) Job control
- 3) Unlimited size command history
- 4) shell function
- 5) Unlimited size index array.

ASSIGNMENT - 1

Q1) state and explain the concept of paging.

i) In computer operating system paging is a memory management scheme by which a computer store and retrieves data from secondary storage for use in main memory.

ii) Paging divides memory into fixed pages. Paging is a memory management scheme that eliminates the need for contiguous allocation of physical memory. This scheme permits the physical address space of a process to be non-contiguous.

iii) A computer can address more memory than the amount of physical installed on the system. This extra memory is actually called virtual memory and it is a section of a harddrive that's set-up emulate the computer RAM.

iv) Paging technique plays an important role in implementing virtual memory. Paging is a memory management technique in which process address space is broken into blocks of the same size called 'pages'. The size of the pages is measured in the number of pages.

v) Similarly, main memory is divided into small fixed size blocks, of memory called 'frames' and the size of the frame is kept same as that of a page. have optimum utilization of the main memory and to avoid external fragmentation.

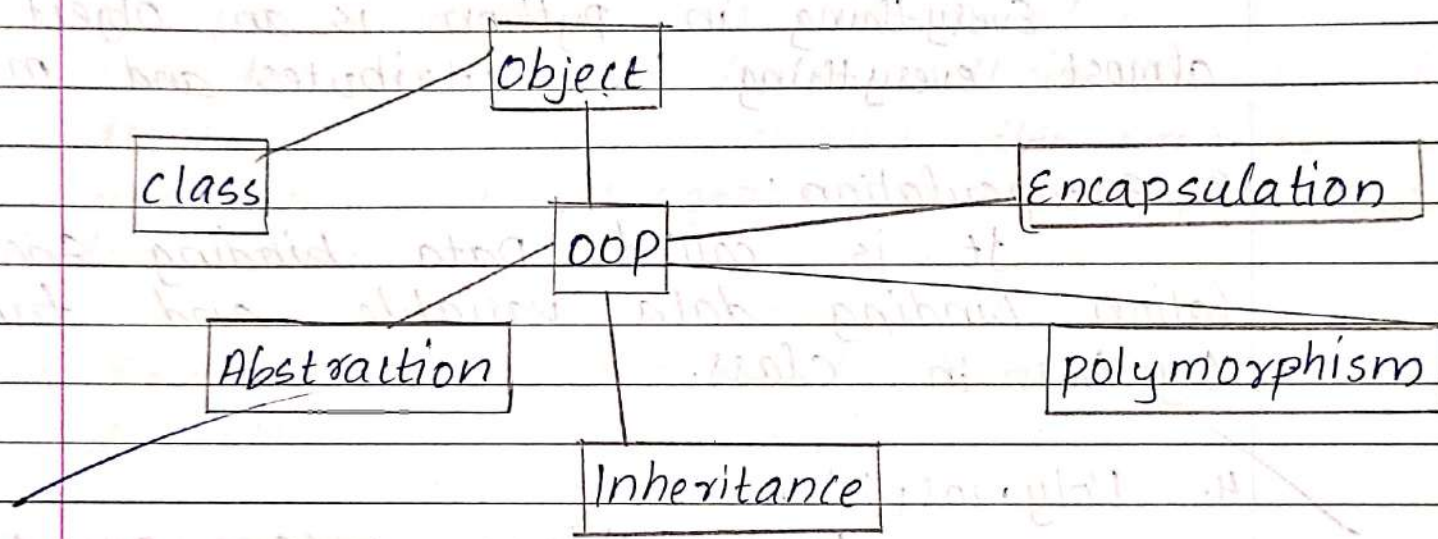
vi) The basic purpose of paging is to separate each procedure into pages.

ASSIGNMENT - 1

Explain object oriented programming with its features.

- python is multi-paradigm programming language meaning it support different programming approach.
- In oop creating an object/instance of class is popular approach to solve a programming problem this approach is called object oriented programming.

Main features of oop :-



1. class:- It is very similar to structure in C language. class can also define as user defines data type but also contain function in it so class is basically called blue print for an object. class is group of homogeneous entities and each entity of class is called object. class is collection of variable and function (method)

ASSIGNMENT-2

Q.1 What is methods in python? Explain its type with suitable example.

Methods :-

In object-oriented programming, we have objects. These object consists of properties and behaviour. Furthermore, properties of the object are defined by the attributes and the behaviour is defined using methods. These methods are defined inside a class. The methods are reusable piece of code that can be called at any point in the programme. Python offers various types of these methods. These are crucial to becoming an efficient programmer and consequently are useful for a data science professional.

Types of methods in Python :-

These are basically three types of methods in python.

a) Instance method :-

The purpose of instance method is to set or get details about instance (objects) and that is why they're known as instance methods. They are the most common type of methods used in Python class.

They have one default parameter self, which points to an instance of the class. Although you don't have

THEORY ASSIGNMENT

No:- 1

Q.1) What is System? Explain in detail characteristic, element and types of System

Ans Definition:-

A System means an original or organized relationship among functioning unit.

Characteristic of System:-

1) Organization:-

It implies structure and order. It is the arrangement of computer components that helps to achieve objectives.

2) Interaction:-

It refers to the manner in which each component functions with other components of the system.

THEORY ASSIGNMENT

No :- 2

Q.1) What is Software testing? What are the types of Software testing?

- ans
- 1) Software testing is a process of executing a programme with objectives of finding error.
 - 2) Software quality should be a primary concern in software development efforts.
 - 3) Software testing and evolution are traditional method of software quality.
 - 4) Software testing is successful only if all errors from the software are removed.

Types of Software testing:-

1) White Box testing (WBT)

WBT is related with the structure (internal logic of the program) to test the logic of program. Various

ASSIGNMENT

No: 3

Q.1) Explain in detail Software project manager & project Scheduling

→ Software project manager:-

A software project manager is a person who undertakes the responsibility of executing the software project. Software project manager is thoroughly aware of all the phases of SDLC that the software would do through. Project manager may never directly involved in producing the end product but he controls & manages the activities involved in production.

Software project management comprises of a number of activities which contains planning of project, Deciding scope of software product, estimation of cost in various terms, scheduling of tasks & events & resources management. project management activities may include:

Project planning, scope management, project estimation.