



SRI BHARATHI

ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)
Kaikkurichi, Pudukkottai -622 303

www.sbec.edu.in

NAAC DOCUMENTS



Quality Indicator Frame Work

Criterion – 1

CURRICULAR ASPECTS

Submitted by

IQAC

Internal Quality Assurance Cell

Sri Bharathi Engineering College for Women



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN
Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25
KAIKKURUCHI, PUDUKOTTAI – 622 303
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2021-2022/ EVEN SEMESTER

1.2 Academic Flexibility (30)

1.2.1 Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

AND

1.2.2 Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

Certificate Course Title:	R LANGUAGE BASICS				
Resource Person:	Resource Person : Ms.S.Jeyapratha AP/CSE Sri Bharathi Engineering College for Women				
Date of conduct from :	07.03.2022	To:	11.03.2022	Duration:	30 Hours
Organized Department :	COMPUTER AND SCIENCE ENGINEERING				
Participant Year:	2,3,4(CSE)	Semester:	EVEN	No. of Students Registered :	69
Venue:	Auditorium				

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

Date: 01 / 03 /2022

DEPARTMENT CIRCULAR

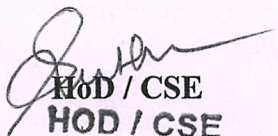
Certificate Course offered by the Department of CSE will be conducted for all Second year, Third year and Final year CSE students on “R LANGUAGE BASICS” from 07.03.2022 to 11.03.2022. Certificates will be issued to all the participants at the end of the Course.

S.No.	Name of the Course	Resource Person
1.	R LANGUAGE BASICS	Ms. S.Jayapratha AP / CSE

Cc:

- Principal's office
- IQAC Coordinator
- Class In charges – II, III, IV Year
- CSE Students - II, III, IV Year
- Notice Board


Dr. S. THILAGAVATHI M.E., Ph.D.,
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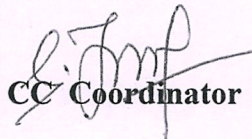
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ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

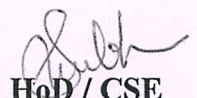
Certificate Course on “R Language Basics”

SYLLABUS

S.NO	TOPIC COVERED	DURATION (in hours)	DATE FN/AN
1	R interpreter, Introduction to major R data structures like vectors, matrices, arrays, list and data frames	3	07.03.2022
2	Flow control and loops, looping over list and array	3	07.03.2022
3	User-defined functions, Designing GUI	3	08.03.2022
4	Installing, loading different packages for file handling	3	08.03.2022
5	Reading and writing files of different formats using inbuilt packages	3	09.03.2022
6	Using inbuilt packages for data cleaning, Continuing with creating GUI for application, building package	3	09.03.2022
7	Transformation of data for statistical analysis	3	10.03.2022
8	Exploring and summarizing data using statistical methods: mean, median, mode, Using inbuilt packages for database connectivity	3	10.03.2022
9	Exploring and summarizing data using statistical methods: quantiles, Building contingency table, Using inbuilt packages for database connectivity	3	11.03.2022
10	Data visualization using Scatter Plot, line graph, histogram, bar chart, box plot, Building complete application with GUI and database connectivity	3	11.03.2022
Total Hours :		30	


CC Coordinator


Dr. S. THILAGAVATHI
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

Certificate Course on "R Languages Basics"

STUDENTS PARTICIPATION LIST-CC PROGRAM

S.NO	REG.NO	NAME OF THE STUDENT	YEAR/BRANCH
1	912618104001	ABIRAMI S	IV / CSE
2	912618104002	AKILA P	IV / CSE
3	912618104003	BUVANESHWARI S	IV / CSE
4	912618104004	EVANJELIN S	IV / CSE
5	912618104005	FEFINA I	IV / CSE
6	912618104007	GOWSALYA A	IV / CSE
7	912618104011	JAYANTHINI T	IV / CSE
8	912618104012	KAVIYASELVI K	IV / CSE
9	912618104013	KOWSALYA S	IV / CSE
10	912618104014	LAKSHMI N	IV / CSE
11	912618104015	LAKSHMI PRABHA M	IV / CSE
12	912618104017	MALA S	IV / CSE
13	912618104018	MAMTHA G	IV / CSE
14	912618104019	NIRANJANADEVIC	IV / CSE
15	912618104020	NIVEDHA M	IV / CSE
16	912618104021	NIVETHA G	IV / CSE
17	912618104022	PRIYADHARSHINI R	IV / CSE
18	912618104023	PRIYAVATHANI A	IV / CSE
19	912618104024	PUVIYARASI S	IV / CSE

Dr. S. THILAGAVATHI M.E., Ph.D.,

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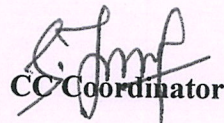
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20	912618104025	RASMI J	IV / CSE
21	912618104026	ROSLINA BEGUM R	IV / CSE
22	912618104027	SINDHU V	IV / CSE
23	912618104028	SIVASANGAVI A	IV / CSE
24	912618104029	SURUTHIKA S	IV / CSE
25	912618104031	SUSHMEENA K	IV / CSE
26	912619104001	ANNAPOORANI M	III / CSE
27	912619104003	ARUNNAVAMEENA A	III / CSE
28	912619104004	DAYANA P	III / CSE
29	912619104005	DHARSHINI D	III / CSE
30	912619104007	FAHMIDHA B	III / CSE
31	912619104009	GULNAS FATHIMA S	III / CSE
32	912619104010	HELAN J	III / CSE
33	912619104011	KEERTHANA R	III / CSE
34	912619104012	MUTHULAKSHMI G	III / CSE
35	912619104013	MUTHU MEENAKSHI M	III / CSE
36	912619104014	NIROSHIKA R	III / CSE
37	912619104017	PARAMESHWARI S	III / CSE
38	912619104019	RANJANI K	III / CSE
39	912619104020	RILWANA PARVEEN J	III / CSE
40	912619104021	ROOPINA R	III / CSE
41	912619104022	SANDHIYA B	III / CSE
42	912619104023	SANTHI D	III / CSE
43	912619104024	SARANYA C	III / CSE
44	912619104027	SNEHA R	III / CSE
45	912619104029	SURIYA JOTHI S	III / CSE
46	912619104301	ABINAYA S	III / CSE

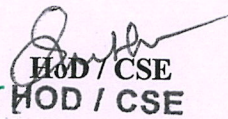

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47	912620104001	AKALYA S	II / CSE
48	912620104002	HEMA V	II / CSE
49	912620104003	ISWARYA R	II / CSE
50	912620104004	KALAIVANI S	II / CSE
51	912620104005	KALPANA K	II / CSE
52	912620104007	MEIYYAMMAL M	II / CSE
53	912620104008	NANDHINI P	II / CSE
54	912620104009	PRASANNA DEVI P	II / CSE
55	912620104010	PRISHIYA E	II / CSE
56	912620104012	ROSAMMAL M	II / CSE
57	912620104013	ROSHIKA K	II / CSE
58	912620104014	SABHA AYSHA S	II / CSE
59	912620104015	SATHIYASRI P	II / CSE
60	912620104016	SIVAGAMI D	II / CSE
61	912620104017	SIVAHARINI S	II / CSE
62	912620104018	SUBASHINI C	II / CSE
63	912620104019	SUBASHINI M	II / CSE
64	912620104020	SWETHA D	II / CSE
65	912620104021	VANATHI T	II / CSE
66	912620104022	VINCIYA MARY S	II / CSE
67	912620104301	AARTHI P	II / CSE
68	912620104303	JANANI B	II / CSE
69	912620104304	VAISHNAVI R	II / CSE


CC Coordinator




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S.NO	REG.NO	NAME OF THE STUDENT	YEAR/ BRANCH	DATE 07.03.22		DATE 08.03.22		DATE 09.03.22		DATE 10.03.22		DATE 11.03.22		NO OF SESSIONS ATTENDED	SIGNATURE OF THE STUDENT
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
1	912618104001	ABIRAMI S	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Abirami
2	912618104002	AKILA P	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	AKILA P
3	912618104003	BUVANESHWARI S	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Buvaneshwari
4	912618104004	EVANJELIN S	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Evanjelin
5	912618104005	FEFINA I	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Fefina
6	912618104007	GOWSALYA A	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Gowsalya
7	912618104011	JAYANTHINI T	IV / CSE	/	/	/	/	a	a	/	/	/	/	08	T. Jayanthini
8	912618104012	KAVIYASELVI K	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Kavi
9	912618104013	KOWSALYA S	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Kowsalya
10	912618104014	LAKSHMI N	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Lakshmi

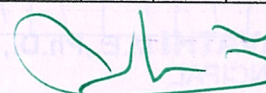
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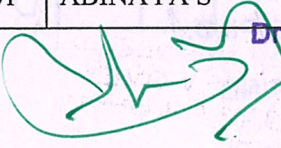
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11	912618104015	LAKSHMI PRABHA M	IV / CSE	/	/	a	a	/	/	/	/	/	/	08	Lakshmi
12	912618104017	MALA S	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	S.Mala.
13	912618104018	MAMTHA G	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Mamtha
14	912618104019	NIRANJANADEVI C	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Niranjana Devi
15	912618104020	NIVEDHA M	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Nivedha
16	912618104021	NIVETHA G	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Nivetha
17	912618104022	PRIYADHARSHINI R	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Priya
18	912618104023	PRIYAVATHANI A	IV / CSE	a	a	/	/	/	/	/	/	/	/	08	Priyavathani
19	912618104024	PUVIYARASI S	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Puviyarasi
20	912618104025	RASMI J	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Rasmi
21	912618104026	ROSLINA BEGUM R	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Roslina
22	912618104027	SINDHU V	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Sindhu
23	912618104028	SIVASANGAVI A	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Sivasangavi
24	912618104029	SURUTHIKA S	IV / CSE	/	/	/	/	/	/	/	/	/	/	10	Suruthika
25	912618104031	SUSHMEENA K	IV / CSE	/	/	/	/	a	a	/	/	/	/	08	Sushmeena
26	912619104001	ANNAPOORANI M	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Anna poornani
27	912619104003	ARUNNAVAMEENA A	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Arunnavameena
28	912619104004	DAYANA P	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Dayana


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29	912619104005	DHARSHINI D	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Dharshini
30	912619104007	FAHMIDHA B	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Fahmidha
31	912619104009	GULNAS FATHIMA S	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Gulnas
32	912619104010	HELAN J	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Helan
33	912619104011	KEERTHANA R	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Keerthana
34	912619104012	MUTHULAKSHMI G	III / CSE	a	a	/	/	/	/	/	/	/	/	08	Muthulakshmi
35	912619104013	MUTHU MEENAKSHI M	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Muthu
36	912619104014	NIROSHIKA R	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Niroshika
37	912619104017	PARAMESHWARI S	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Parameshwari
38	912619104019	RANJANI K	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Ranjani
39	912619104020	RILWANA PARVEEN J	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Rilwana
40	912619104021	ROOPINA R	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Roopina
41	912619104022	SANDHIYA B	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Sandhya
42	912619104023	SANTHI D	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Santhi
43	912619104024	SARANYA C	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Saranya
44	912619104027	SNEHA R	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Sneha
45	912619104029	SURIYA JOTHI S	III / CSE	/	/	/	/	a	a	/	/	/	/	08	Suriya
46	912619104301	ABINAYA S	III / CSE	/	/	/	/	/	/	/	/	/	/	10	Abinaya


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47	912620104001	AKALYA S	II / CSE	/	/	/	/	/	/	/	/	/	/	10	S. Akya
48	912620104002	HEMA V	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Hema V
49	912620104003	ISWARYA R	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Iswarya R
50	912620104004	KALAIVANI S	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Kalavani S
51	912620104005	KALPANA K	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Kalp. K
52	912620104007	MEIYYAMMAL M	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Meiyyammal M
53	912620104008	NANDHINI P	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Nandhini P
54	912620104009	PRASANNA DEVI P	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Prasanna Devi P
55	912620104010	PRISHIYA E	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Prishiya E
56	912620104012	ROSAMMAL M	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Rosammal M
57	912620104013	ROSHIKA K	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Roshika K
58	912620104014	SABHA AYSHA S	II / CSE	/	/	/	/	/	/	/	/	/	/	10	S. Sabhas
59	912620104015	SATHIYASRI P	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Sathyasri P
60	912620104016	SIVAGAMI D	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Sivagami D
61	912620104017	SIVAHARINI S	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Sivaharini S
62	912620104018	SUBASHINI C	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Subashini C
63	912620104019	SUBASHINI M	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Subashini M
64	912620104020	SWETHA D	II / CSE	/	/	/	/	/	/	/	/	/	/	10	Swetha D

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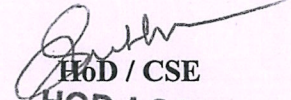
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65	912620104021	VANATHI T	II / CSE	/	/	/	/	/	/	/	/	/	/	/	10	T.Vathy
66	912620104022	VINCIYA MARY S	II / CSE	/	/	/	/	/	/	/	/	/	/	/	10	S. Vijay
67	912620104301	AARTHI P	II / CSE	a	a	/	/	/	/	/	/	/	/	/	10	Arthy
68	912620104303	JANANI B	II / CSE	/	/	/	/	/	/	/	/	/	/	/	10	Jani
69	912620104304	VAISHNAVI R	II / CSE	/	/	/	/	/	/	/	/	/	/	/	10	Vaishy


CC Coordinator


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Report on Certificate Course

Title:	R Language Basics				
Resource Person:	Ms. S.Jayapratha AP / CSE				
Date of conduct from :	07.03.2022	To:	11.03.2022	Duration:	30 Hours
Organized Department :	COMPUTER SCIENCE AND ENGINEERING				
Participant Year:	2,3,4(CSE)	Semester:	EVEN	No. of Students Registered :	69
Venue:	Auditorium				

Outcome of Certificate Course (CC)

At the end of the Certificate course the student can able to

Develop an R script and execute it

Install, load and deploy the required packages, and build new packages for sharing and reusability

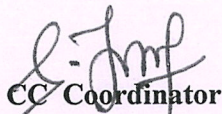
Extract data from different sources using API and use it for data analysis

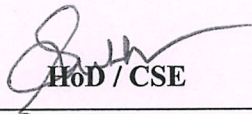
Visualize and summarize the data

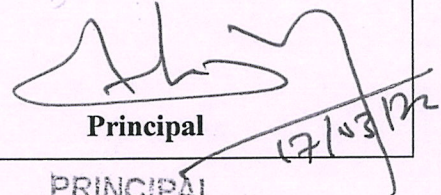
Design application with database connectivity for data analysis

Assessment Process

- Students securing **more than 60% on total score** and secured more than 75% in attendance is eligible to receive the certificate for the CC course conducted
- Total Score = $(0.5 * \text{Attendance in CC out of 100 percentage} + 0.5 * \text{Test mark in CC out of 100 marks})$


CC Coordinator


HoD / CSE


Principal
17/03/22


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PUDUKKOTTAI DISTRICT

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Certificate of Completion

This certificate is awarded to **Ms.G.NIVETHA** of **IV CSE** in recognition of their successful completion of certificate course on **R LANGUAGE BASICS** during the academic year 2021-2022 even semester.

Course Coordinator

HoD / CSE

Principal

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Certificate of Completion

This certificate is awarded to Ms.P.DAYANA of III CSE in recognition of their successful completion of certificate course on R LANGUAGE BASICS during the academic year 2021-2022 even semester.

Course Coordinator

HoD / CSE

Principal

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Certificate of Completion

This certificate is awarded to Ms.K.KALPANA of II CSE in recognition of their successful completion of certificate course on **R LANGUAGE BASICS** during the academic year 2021-2022 even semester.

Course Coordinator

HoD / CSE

Principal

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

Certificate Course on “R Language Basics”

Name of the Student :

Year/Sem:

AU Register Number:

MCQ QUESTIONS (25X1 = 25 Marks)

- In 1991, R was created by Ross Ihaka and Robert Gentleman in the Department of Statistics at the University of _____
 - John Hopkins
 - California
 - Harvard
 - Auckland
- Finally, in _____ R version 1.0.0 was released to the public.
 - 2000
 - 2005
 - 2010
 - 2012
- Which of the following describes R language?
 - Free
 - Paid
 - Available for free trial only
 - Testing
- R runs on the _____ operating system.
 - Linux
 - Windows
 - Ubuntu
 - Any operating system
- Which of the following command is used to print an object “x” in R?
 - printf(x)
 - print(x)
 - printx
 - print[x]
- Advanced users can write ____ code to manipulate R objects directly.
 - C, C++
 - C++, Java
 - Java, C
 - Java
- What is NaN called?
 - Not a Number
 - Not a Numeric
 - Number and Number
 - Number a Numeric
- How can we define ‘infinity’ in R language?
 - Inf
 - Sup
 - Und
 - NaN
- Which of the following is default prompt for UNIX environment?
 - >
 - >>
 - <
 - <<

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10. What is the length of b?

b <- 2:7

- a) 4
- b) 5
- c) 6
- d) 0

11. What is the mode of 'a' in the following R code?

a <- c(1, "a", FALSE)

- a) Numeric
- b) Character
- c) Integer
- d) Logical

12. Which language is best for the statistical environment?

- a) C
- b) R
- c) Java
- d) Python

13. The open source _____ software is available for Unix, Linux, and Windows platforms.

- a) Rserve
- b) Bserve
- c) Cserve
- d) Dserve

14. R has many functions regarding _____

- a) Statistics, Biotechnology
- b) Probability, Microbiology
- c) Distributions, Physics
- d) Statistics, Probability, Distributions

15. Which is simpler for statistical programming?

- a) C
- b) Java
- c) R
- d) No language

16. The four most frequently used types of data objects in R are vectors, matrices, data frames and _____

- a) Function
- b) Lists
- c) Packages
- d) Interfaces

17. What is the simplest way of creating the vector?

- a) C function
- b) Create
- c) Destroy
- d) Invalid

18. A _____ is a set of elements appearing in rows and columns where the elements are of the same mode whether they are logical, numeric (integer or double), complex or character.

- a) Vector
- b) Matrix
- c) Lists
- d) Data frames

19. The _____ function creates a regular sequence of values to form a vector.

- a) sequel
- b) Rep
- c) seq
- d) Grep

20. Which of the following is a 3-dimensional dataset?

- a) Eris
- b) Iris
- c) Toris
- d) aris

21. The _____ function takes an arbitrary number of arguments and concatenates them one by one into character strings.

- a) copy()
- b) paste()
- c) bind()
- d) del()

22. What will be the output of the following R code?


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```
> x <- c(1, 2, NaN, NA, 4)
```

```
> is.na(x)
```

a) FALSE FALSE TRUE TRUE FALSE

b) FALSE TRUE TRUE TRUE FALSE

c) TRUE FALSE TRUE TRUE FALSE

d) TRUE FALSE TRUE FALSE FALSE

23. Which of the following R syntax is correct for while loop?

a) while (statement1) statement2

b) while (statement1) else statement2

c) while (statement1) do statement2

d) while (statement2) doelse statement2

24. _____ is used to break the execution of a loop.

a) next

b) skip

c) break

d) delete

25. What will be the output of the following R code?

```
> x <- c("a", "b", "c", "d")
```

```
> for(i in 1:4) {
```

```
+ ## Print out each element of 'x'
```

```
+ print(x[i])
```

```
+ }
```

a) [1] "a"
[1] "b"
[1] "c"
[1] "d"

b) [1] "c"
[1] "b"
[1] "a"
[1] "d"

c) [1] "d"
[1] "c"
[1] "b"
[1] "a"

d) Error

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CC Coordinator



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

Value Added Course on “R Language Basics”

ANSWER KEY

1	d	6	b	11	b	16	b	21	a
2	a	7	a	12	b	17	a	22	a
3	a	8	a	13	a	18	b	23	a
4	d	9	a	14	d	19	c	24	c
5	b	10	c	15	c	20	b	25	a


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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

Certificate Course on “R Language Basics”

Name of the Student : P. Arathi

Year/Sem: II / 04

AU Register Number: 912620104301

MCQ QUESTIONS (25X1 = 25 Marks)

- In 1991, R was created by Ross Ihaka and Robert Gentleman in the Department of Statistics at the University of _____
a) John Hopkins
b) California
c) Harvard
d) Auckland
- Finally, in _____ R version 1.0.0 was released to the public.
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b) 2005
c) 2010
d) 2012
- Which of the following describes R language?
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c) Available for free trial only
d) Testing
- R runs on the _____ operating system.
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c) Ubuntu
d) Any operating system
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b) print(x)
c) printx
d) print[x]
- Advanced users can write ___ code to manipulate R objects directly.
a) C, C++
b) C++, Java
c) Java, C
d) Java
- What is NaN called?
a) Not a Number
b) Not a Numeric
c) Number and Number
d) Number a Numeric
- How can we define ‘infinity’ in R language?
a) Inf
b) Sup
c) Und
d) NaN
- Which of the following is default prompt for UNIX environment?
a) >
b) >>
c) <
d) <<
- What is the length of b?
a) 4
b) 5
c) 6
d) 0

24/25

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11. What is the mode of 'a' in the following R code?
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 c) Integer d) Logical
12. Which language is best for the statistical environment?
 a) C b) R
 c) Java d) Python
13. The open source _____ software is available for Unix, Linux, and Windows platforms.
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 c) Cserve d) Dserve
14. R has many functions regarding _____
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 c) R d) No language
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22. What will be the output of the following R code?
 a) FALSE FALSE TRUE TRUE FALSE b) FALSE TRUE TRUE TRUE FALSE
 c) TRUE FALSE TRUE TRUE FALSE d) TRUE FALSE TRUE FALSE FALSE
23. Which of the following R syntax is correct for while loop?
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 c) while (statement1) do statement2 d) while (statement2) doelse statement2
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 a) next b) skip
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25. What will be the output of the following R code?

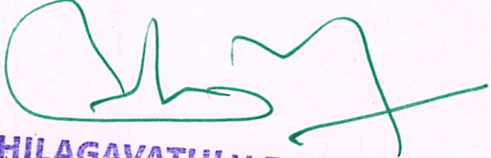
```
> x <- c("a", "b", "c", "d")  
> for(i in 1:4) {  
+ ## Print out each element of 'x'  
+ print(x[i])  
+ }
```

- a) [1] "a"
[1] "b"
[1] "c"
[1] "d"
c) [1] "d"
[1] "c"
[1] "b"
[1] "a"

b) [1] "c"
[1] "b"
[1] "a"
[1] "d"

d) Error


CC Coordinator


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ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

Certificate Course on “R Language Basics”

S.NO	REG.NO	NAME OF THE STUDENT	YEAR/ BRANCH	ATTENDANCE DETAILS		VAC-MCQ TEST		OVERALL MARK(100) (50% of A + 50% of B)
				No of Sessions Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
1	912618104001	ABIRAMI S	IV / CSE	10	100	23	92	96
2	912618104002	AKILA P	IV / CSE	10	100	24	96	98
3	912618104003	BUVANESHWARI S	IV / CSE	10	100	24	96	98
4	912618104004	EVANJELIN S	IV / CSE	10	100	22	88	94
5	912618104005	FEFINA I	IV / CSE	10	100	24	96	98
6	912618104007	GOWSALYA A	IV / CSE	10	100	22	88	94
7	912618104011	JAYANTHINI T	IV / CSE	8	80	24	96	94

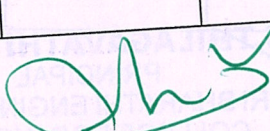
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8	912618104012	KAVIYASELVI K	IV / CSE	10	100	21	84	92
9	912618104013	KOWSALYA S	IV / CSE	10	100	24	96	98
10	912618104014	LAKSHMI N	IV / CSE	10	100	23	92	96
11	912618104015	LAKSHMI PRABHA M	IV / CSE	8	80	24	96	94
12	912618104017	MALA S	IV / CSE	10	100	24	96	98
13	912618104018	MAMTHA G	IV / CSE	10	100	24	96	98
14	912618104019	NIRANJANADEVIC	IV / CSE	10	100	23	92	96
15	912618104020	NIVEDHA M	IV / CSE	10	100	22	88	94
16	912618104021	NIVETHA G	IV / CSE	10	100	24	96	98
17	912618104022	PRIYADHARSHINI R	IV / CSE	8	80	25	100	90
18	912618104023	PRIYAVATHANI A	IV / CSE	10	100	24	96	98
19	912618104024	PUVIYARASI S	IV / CSE	10	100	23	92	96
20	912618104025	RASMI J	IV / CSE	10	100	21	84	92
21	912618104026	ROSLINA BEGUM R	IV / CSE	10	100	21	84	92


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22	912618104027	SINDHU V	IV / CSE	10	100	23	92	96
23	912618104028	SIVASANGAVI A	IV / CSE	10	100	22	88	94
24	912618104029	SURUTHIKA S	IV / CSE	10	100	21	84	92
25	912618104031	SUSHMEENA K	IV / CSE	8	80	24	96	90
26	912619104001	ANNAPOORANI M	III / CSE	10	100	25	100	100
27	912619104003	ARUNNAVAMEENA A	III / CSE	10	100	23	92	96
28	912619104004	DAYANA P	III / CSE	10	100	24	96	96
29	912619104005	DHARSHINI D	III / CSE	10	100	22	88	94
30	912619104007	FAHMIDHA B	III / CSE	10	100	24	96	98
31	912619104009	GULNAS FATHIMA S	III / CSE	10	100	22	88	94
32	912619104010	HELAN J	III / CSE	10	100	23	92	96
33	912619104011	KEERTHANA R	III / CSE	10	100	20	80	90
34	912619104012	MUTHULAKSHMI G	III / CSE	8	80	25	100	90
35	912619104013	MUTHU MEENAKSHI M	III / CSE	10	100	21	84	92

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36	912619104014	NIROSHIKA R	III / CSE	10	100	20	80	90
37	912619104017	PARAMESHWARI S	III / CSE	10	100	19	76	88
38	912619104019	RANJANI K	III / CSE	10	100	21	84	92
39	912619104020	RILWANA PARVEEN J	III / CSE	10	100	22	88	94
40	912619104021	ROOPINA R	III / CSE	10	100	24	96	98
41	912619104022	SANDHIYA B	III / CSE	10	100	24	96	98
42	912619104023	SANTHI D	III / CSE	10	100	23	92	96
43	912619104024	SARANYA C	III / CSE	10	100	19	76	88
44	912619104027	SNEHA R	III / CSE	10	100	22	88	94
45	912619104029	SURIYA JOTHI S	III / CSE	8	80	24	96	88
46	912619104301	ABINAYA S	III / CSE	10	100	22	88	94
47	912620104001	AKALYA S	II / CSE	10	100	24	96	98
48	912620104002	HEMA V	II / CSE	10	100	23	92	96
49	912620104003	ISWARYA R	II / CSE	10	100	22	88	94

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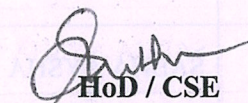
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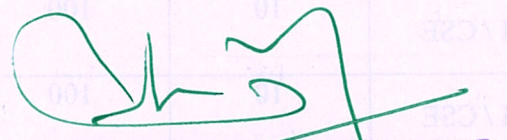
50	912620104004	KALAIVANI S	II / CSE	10	100	22	88	94
51	912620104005	KALPANA K	II / CSE	10	100	23	92	96
52	912620104007	MEIYYAMMAL M	II / CSE	10	100	24	96	98
53	912620104008	NANDHINI P	II / CSE	10	100	23	92	96
54	912620104009	PRASANNA DEVI P	II / CSE	10	100	21	84	92
55	912620104010	PRISHIYA E	II / CSE	10	100	19	76	88
56	912620104012	ROSAMMAL M	II / CSE	10	100	19	76	88
57	912620104013	ROSHIKA K	II / CSE	10	100	20	80	90
58	912620104014	SABHA AYSHA S	II / CSE	10	100	22	88	94
59	912620104015	SATHIYASRI P	II / CSE	10	100	23	92	96
60	912620104016	SIVAGAMI D	II / CSE	10	100	22	88	94
61	912620104017	SIVAHARINI S	II / CSE	10	100	20	80	90
62	912620104018	SUBASHINI C	II / CSE	10	100	23	92	96
63	912620104019	SUBASHINI M	II / CSE	10	100	19	76	88

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64	912620104020	SWETHA D	II / CSE	10	100	18	72	86
65	912620104021	VANATHI T	II / CSE	10	100	19	76	88
66	912620104022	VINCIYA MARY S	II / CSE	10	100	21	84	92
67	912620104301	AARTHI P	II / CSE	8	80	24	96	88
68	912620104303	JANANI B	II / CSE	10	100	23	92	96
69	912620104304	VAISHNAVI R	II / CSE	10	100	24	96	98


CC Coordinator


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KURICHI,
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