

MBA – II SEM-III
 304 : Advanced Statistical Methods using R
 MULTIPLE CHOICE QUESTIONS

Q No	Question	Answer
1	Which of the following is apply function in R? a) apply() b) tapply() c) fapply() d) rapply()	B
2	Point out the correct statement? a) Writing functions is a core activity of an R programmer b) Functions are often used to encapsulate a sequence of expressions that need to be executed numerous times c) Functions are also often written when code must be shared with others or the public d) All of the mentioned	D
3	Functions are defined using the _____ directive and are stored as R objects. a) function() b) funct() c) functions() d) fun()	A
4	What will be the output of the following R code? <pre>f <- function() { ## This is an empty function }</pre> f() 0 b) No result c) NULL d) 1	C
5	Point out the wrong statement? a) Functions in R are “second class objects” b) The writing of a function allows a developer to create an interface to the code, that is explicitly specified with a set of	A

	parameters c) Functions provides an abstraction of the code to potential users d) Writing functions is a core activity of an R programmer	
6	What will be the output of the following R code? <pre>> f <- function() { + ## This is an empty function + } > class(f)</pre> a) "function" b) "class" c) "procedure" d) "system"	A
7	Which of the following R code will print "Hello, world!"? a) <pre>> f <- function() { + cat("Hello, world!\n") + } > f()</pre> b) <pre>> f <- function() { + cat("Hello, World!\n") + } < f()</pre> c) <pre>> f <- function() { + cat("Hello world!\n") + } >= f()</pre> d) <pre>> f <- function() { - cat("Hello world!\n") + }</pre>	A

	<code><= f()</code>	
8	<p>What will be the output of the following R code?</p> <pre>> f <- function(num) { + for(i in seq_len(num)) { + cat("Hello, world!\n") + } + }</pre> <p>a)</p> <p>Hello, world!</p> <p>Hello, world!</p> <p>b)</p> <p>Hello, world!</p> <p>Hello, world!</p> <p>Hello, world!</p> <p>c)</p> <p>Hello, world!</p> <p>d)</p> <p>Hello, world!</p> <p>Hello, world!</p> <p>Hello, world!</p> <p>Hello, world!</p>	B
9	<p>What will be the output of the following R code?</p> <pre>> f <- function(num) { + hello <- "Hello, world!\n" + for(i in seq_len(num)) { + cat(hello) + } + chars <- nchar(hello) * num + chars + }</pre> <p>> meaningoflife <- f(3)</p>	A

	<pre>> print(meaningoflife)</pre> <p>a) 32 b) 42 c) 52 d) 46</p>	
10	<p>R has how many atomic classes of objects?</p> <p>a) 1 b) 2 c) 3 d) 5</p>	D
11	<p>Point out the correct statement?</p> <p>a) Empty vectors can be created with the vector() function b) A sequence is represented as a vector but can contain objects of different classes c) "raw" objects are commonly used directly in data analysis d) The value NaN represents undefined value</p>	A
12	<p>Numbers in R are generally treated as _____ precision real numbers.</p> <p>a) single b) doublec c) real d) imaginary</p>	B
13	<p>If you explicitly want an integer, you need to specify the _____ suffix.</p> <p>a) D b) R c) L d) K</p>	C
14	<p>Point out the correct statement?</p> <p>a) The value NaN represents undefined value b) Number Inf represents infinity in R c) NaN can also be thought of as a missing value d) "raw" objects are commonly used directly in data analysis</p>	B

15	Attributes of an object (if any) can be accessed using the _____ function. a) objects() b) attrib() c) attributes() d) obj()	C
16	. R objects can have attributes, which are like _____ for the object. a) metadata b) features c) expression d) dimensions	A
17	Which of the following can be considered as object attribute? a) dimensions b) class c) length d) all of the mentioned	D
18	What will be the output of the following R code? <pre>> x <- vector("numeric", length = 10) > x</pre> a) 10 b) 0 0 0 0 0 0 0 0 0 0 c) 01 d) 00120	B
19	The _____ function can be used to create vectors of objects by concatenating things together. a) cp() b) c() c) concat() d) con()	B
20	Which of the following statement is invalid? a) x <- c(1+0i, 2+4i) b) x <- c(TRUE, FALSE)	D

	c) <code>x <- c(T, F)</code> d) None of the mentioned	
21	Point out the correct statement? a) Use explicit TRUE and FALSE values when indicating logical values b) <code>rm</code> command is used to remove objects in R c) R operates on named data structures d) All of the mentioned	D
22	What will be the output of the following R code? <pre>> x <- 6 > class(x)</pre> a) "integer" b) "numeric" c) "real" d) "imaginary"	B
23	What will be the output of the following R code? <pre>> x <- 0:6 > as.logical(x)</pre> a) FALSE TRUE TRUE TRUE TRUE TRUE TRUE b) "0" "1" "2" "3" "4" "5" "6" c) 0 1 2 3 4 5 6 d) 6 5 5 3 2 1	A
24	Point out the correct statement? a) The usual operator, <code><-</code> , can be thought of as a syntactic shortcut to expression operation b) Assignment can also be made using the function <code>assignment()</code> c) Vectors can be used in arithmetic expressions, in which case the operations are performed element by element d) <code>seq()</code> is used to delete the numbers	C

25	<p>. Which of the following is invalid assignment?</p> <p>a)</p> <pre>> c(10.4, 5.6, 3.1, 6.4, 21.7) -> x</pre> <p>b)</p> <pre>> assign("x", c(10.4, 5.6, 3.1, 6.4, 21.7))</pre> <p>c)</p> <pre>> x <- c(10.4, 5.6, 3.1, 6.4, 21.7)</pre> <p>d) None of the mentioned</p>	D
26	<p>What will be the output of the following R code?</p> <pre>> sqrt(-17)</pre> <p>a) -4.02 b) 4.02 c) NaN d) 3.67</p>	C
27	<p>Which of the following code constructs vector of length 11?</p> <p>a)</p> <pre>> v <- 3*x + y + 1</pre> <p>b)</p> <pre>> v <- 3*x + y + 2</pre> <p>c)</p> <pre>> v <- 2*x + y + 1</pre> <p>d)</p> <pre>> v <- 2*x + y + 4</pre>	C

28	. _____ function returns a vector of the same size as x with the elements arranged in increasing order. a) sort() b) orderasc() c) orderby() d) sequence()	A
29	Which of the following is used for generating sequences? a) seq() b) sequence() c) order() d) orderasc()	A
30	Which of the following is used for reading in saved workspaces? a) unserialize b) load c) get d) set	B
31	. Point out the wrong statement? a) write.table is used for for writing tabular data to text files (i.e. CSV) or connections b) writeLines is used for for writing character data line-by-line to a file or connection c) dump is used for for dumping a textual representation of multiple R objects d) all of the mentioned	D
32	_____ is used for outputting a textual representation of an R object. a) dput b) dump c) dget d) dset	A
33	Which of the following argument denotes if the file has a header line?	A

	a) header b) sep c) file d) footer	
34	. Point out the correct statement? a) unserialize is used for converting an R object into a binary format for outputting to a connection b) save is used for saving an arbitrary number of R objects in binary format to a file c) The read.data() function is one of the most commonly used functions for reading data d) save is not used for saving an arbitrary	B
35	Which of the following statement would read file "foo.txt"? a) data <- read.table("foo.txt") b) read.data <- read.table("foo.txt") c) data <- read.data("foo.txt") d) data <- data("foo.txt")	A
36	Which of the following function is identical to read .table? a) read.csv b) read.data c) read.tab d) read.del	A
37	Which of the following code would read 100 rows? a) initial <- read.table("datatable.txt", nrow = 100) b) tabAll <- read.table("datatable.txt", colClasses = classes) c) initial <- read.table("datatable.txt", nrow = 99) d) initial <- read.table("datatable.txt", nrow = 101)	A
38	. Individual R objects can be saved to a file using the _____ function. a) save b) put	A

	c) save_image d) get	
39	Point out the correct statement? a) The complement to the textual format is the binary format b) If you have a lot of objects that you want to save to a file, you can save all objects in your workspace using the save.image() function c) The serialize() function is used to convert individual R objects into a binary format that can be communicated across an arbitrary connection d) All of the mentioned	D
40	Which of the following R statement will save the output to the file for following R code? <pre>> a <- data.frame(x = rnorm(100), y = runif(100)) > b <- c(3, 4.4, 1 / 3)</pre> a) save(a, b, file = "mydata.rda") b) save_image(a, b, file = "mydata.rda") c) keep(a, b, file = "mydata.rda") d) keep_image(a, b, file = "mydata.rda")	A
41	Which of the following statement will load the objects to the file named "mydata.RData"? a) save("mydata.RData") b) load("mydata.RData") c) loadAll("mydata.RData") d) put("mydata.RData")	B
42	Point out the wrong statement? a) When you call unserialize() on an R object, the output will be a raw vector coded in hexadecimal format b) serialize() function is the only way to perfectly represent an R object in an exportable format c) .rda extension is used when save() function is incorporated d) The complement to the textual format is the binary format	A

43	. _____ opens a connection to a file compressed with gzip. a) url b) gzfile c) bzfile d) file	B
44	Connections to text files can be created with the _____ function. a) url b) gzfile c) bzfile d) file	D
45	. Which of the following R code creates a connection to 'foo.txt'? a) con <- file("foo.txt") b) open(con, "r") c) opencon(con, "r") d) ocon(con, "r")	A
46	Which of the following code opens a connection to the file foo.txt, reads from it, and closes the connection when its done? a) data <- read.csv("foo.txt") b) data <- read.csvo("foo.txt") c) data <- readonly.csv("foo.txt") d) data <- getonly.csv("foo.txt")	A
47	Which of the following opens connection to gz-compressed text file? a) con <- gzfiles("words.gz") b) con <- gzfile("words.gz") c) con <- gzfile2("words.gz") d) con <- gzfiles2("words.gz")	B
48	Which of the following is example of vectorized operation as far as subtraction is concerned?	B

	<pre>> x <- 1:4 > y <- 6:9</pre> <p>a) x+y b) x-y c) x/y d) x-y</p>	
49	<p>Point out the wrong statement?</p> <p>a) Very less operations in R are vectorized b) Vectorization allows you to write code that is efficient, concise, and easier to read than in non-vectorized languages c) vectorized means that operations occur in parallel in certain R objects d) Matrix operations are also vectorized</p>	A
50	<p>What will be the output of the following R code?</p> <pre>> x <- 1:4 > y <- 6:9 > z <- x + y > z</pre> <p>a) 7 9 11 13 b) 7 9 11 13 14 c) 9 7 11 13 d) NULL</p>	A
51	<p>What will be the output of the following R code?</p> <pre>> x <- 1:4 > x > 2</pre> <p>a) 1 2 3 4 b) FALSE FALSE TRUE TRUE c) 1 2 3 4 5 d) 5 4 3 1 2 1</p>	B
52	<p>Point out the wrong statement?</p> <p>a) Dates are represented by the Date class b) Times are represented by the POSIXct or the POSIXlt class c) Dates are represented by the DateTime class</p>	C

	d) Times can be coerced from a character string	
53	<p>What will be the output of the following R code?</p> <pre>> x <- 1:4 > y <- 6:9 > x/y</pre> <p>a) 0.1666667 0.2857143 0.4444444 b) 0.1666667 0.2857143 0.3750000 0.4444444 c) 0.2857143 0.3750000 0.4444444 d) Error</p>	B
54	<p>Which of the following code represents internal representation of a Date object?</p> <p>a) class(as.Date("1970-01-02")) b) unclass(as.Date("1970-01-02")) c) unclassint(as.Date("1970-01-02")) d) classint(as.Date("1970-02-02"))</p>	B
55	<p>What will be the output of the following R code?</p> <pre>> x <- as.Date("1970-01-01") > x</pre> <p>a) "1970-01-01" b) "1970-01-02" c) "1970-02-01" d) "1970-02-02"</p>	A
56	<p>R is an _____ programming language?</p> <p>a) Closed source b) GPL c) Open source d) Definite source</p>	C

57	Who developed R? a) Dennis Ritchie b) John Chambers c) Bjarne Stroustrup	B
58	R was named partly after the first names of ____ R authors? a) One b) Two c) Three d) Four	B
59	Packages are useful in collecting sets into a ____ unit ? a) Single b) Multiple	A
60	Many quantitative analysts use R as their ____ tool? a) Leading tool b) Programming tool c) Both the above	C
61	Predictive analysis is the branch of _____ analysis? a) Advanced b) Core c) Both the above	A

62	<p>_____ is used to make predictions about unknown future events?</p> <p>a) Descriptive analysis b) Predictive analysis c) Both the above</p>	B
63	<p>How many steps does the predictive analysis process contained?</p> <p>a) 5 b) 6 c) 7 d) 8</p>	C
64	<p>Descriptive analysis tell about_____?</p> <p>a) Past b) Present c) Future</p>	A
65	<p>How many types of R objects are present in R data type?</p> <p>a) 4 b) 5 c) 6 d) 7</p>	C
66	<p>How many types of data types are present in R?</p> <p>a) 4 b) 5 c) 6 d) 7</p>	C
67	<p>Which of the following is a primary tool for debugging?</p>	A

	a) debug() b) trace() c) browser() d) None of the above	
68	Which function is used to create the vector with more than one element? a) Library() b) plot() c) c() d) par()	C
69	In R every operation has a _____ call? a) System b) Function c) None of the above	B
70	The _____ in R is a vector. a) Basic data structure b) Basic datatypes c) Both	A
71	Vectors come in two parts _____ and _____. a) Atomic vectors and matrix b) Atomic vectors and array c) Atomic vectors and list	C
72	How many types of atomic vectors are present? a) 3	B

	b) 4 c) 5 d) 6	
73	How many types of vertices functions are peresent? a) 1 b) 2 c) 3 d) 4	B
74	_____and_____ are types of matrices functions? a) Apply and supply b) Apply and lapply c) Both	C
75	R is an interpreted language so it can access through_____ a) Disk operating system b) User interface operating system c) Operating system d) Command line interpreter	D