



Institute of Actuaries of India

Demonstration for Online R Exam

Under 2019 IAI Syllabus

Purpose



- To show how to use the examination platform
 - To start the exam
 - To prepare the Answer Script
 - To submit the Answer Script

- How to work in R and copy the solutions (including charts) to examination platform

- How to read data files given at specific location

Initializing Exam Platform



Exam Login Screen



Skill Assessment Test

CBT ID:

Password:

Login

Server IP : 192.168.0.50
Client IP : 192.168.1.101
Data Version : 1

Computer No : 1
Server Status: Not Found

SAT Version : 1.0
Copyright © 2018-2019 Ginger Webs Pvt. Ltd.

Start Your Exam (First Screen)

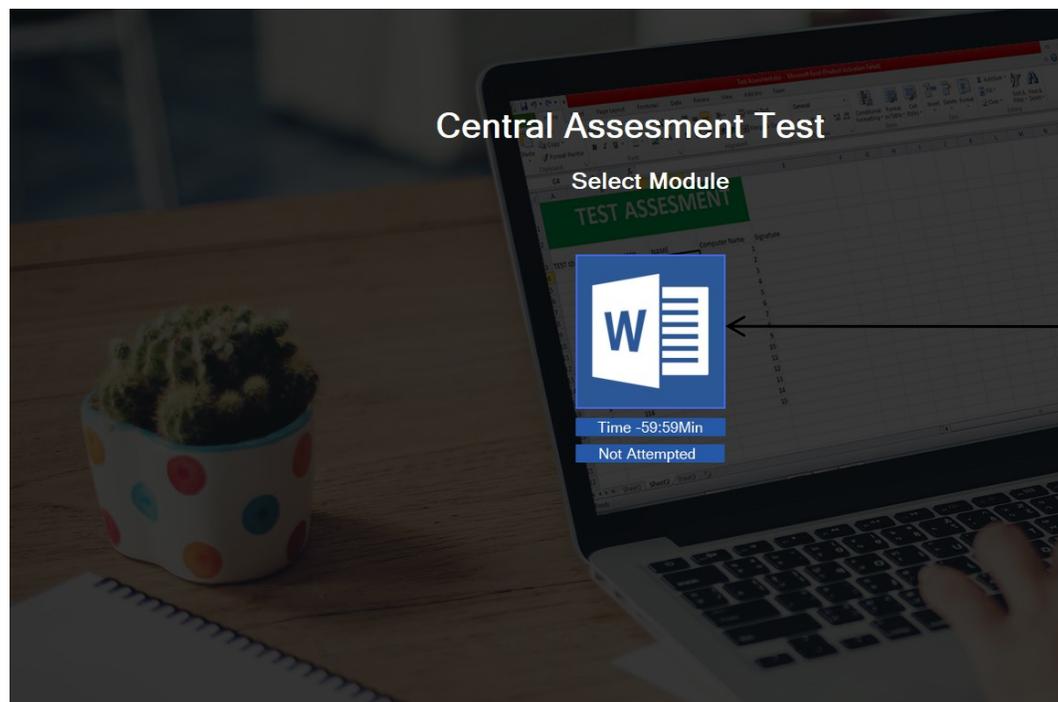


Central Assessment Test

Test Name	Start Date	Start Time	End Date	End Time	Duration (In Min.)	Status
RTest	12-05-2018	00:00:01	12-12-2018	23:59:59	1	Start Test

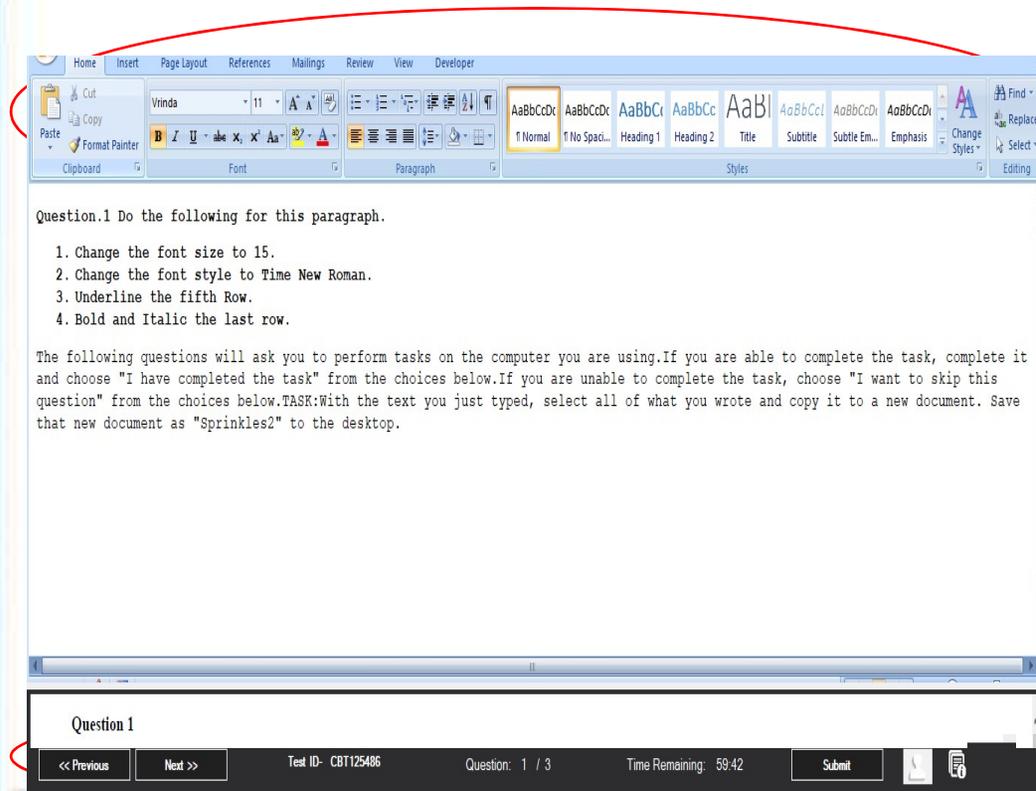
Click here

Start Your Exam (Next Screen)



**Click here to
Start your
Attempt –
Timer will
start**

Screen shot - Answer Script



The screenshot shows the Microsoft Word interface. The ribbon is set to the 'Home' tab, with the 'Font' group selected. The font is 'Vinda', size 11. The document content includes a question and a task description. Below the document is a black exam control panel with the following elements:

- Question 1
- << Previous
- Next >>
- Test ID- CBT125486
- Question: 1 / 3
- Time Remaining: 59:42
- Submit
- Print
- Help

Menu for MS Word Answer Script

Write your Solution here (Word Doc)

Question Number

Exam Control Panel – Explained in next page

Exam Control Panel



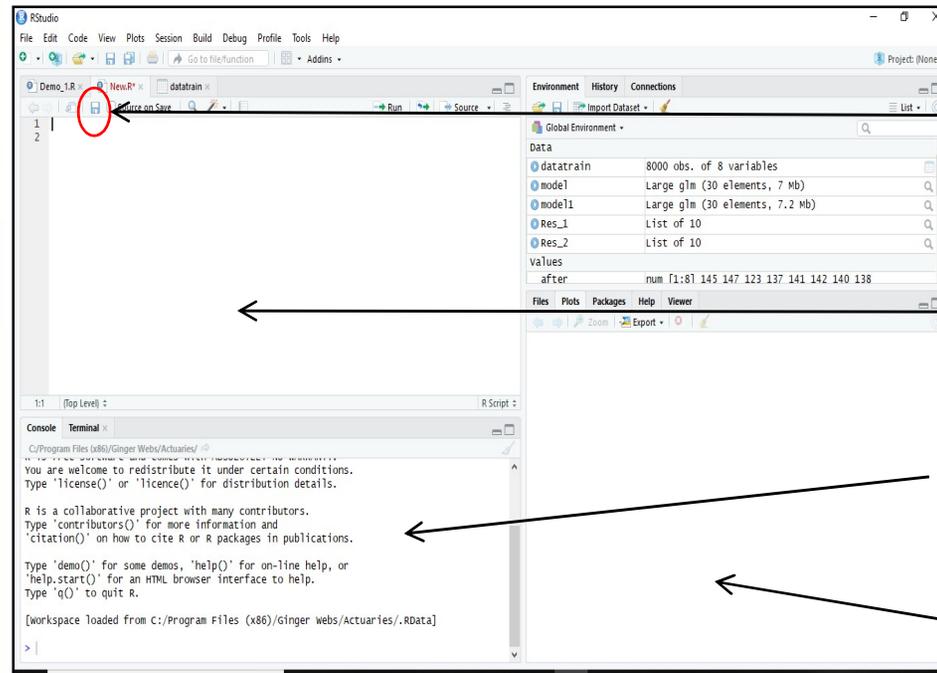
The Exam Control Panel interface includes the following elements:

- << Previous**: Button to navigate to the previous question.
- Next >>**: Button to navigate to the next question.
- Test ID- CBT125486**: Your Test ID.
- Question: 1 / 3**: Current Question No. and Total No. of Questions.
- Time Remaining: 59:42**: Time Remaining.
- Submit**: Button to submit your answer script.
- Exam Instruction**: Icon representing exam instructions.

Please Note:

Please Submit button to End Your Exam. You cannot make any change in your answer script thereafter.

R-Studio for Exam



Save button for R-Script file (Or use Ctrl+S)

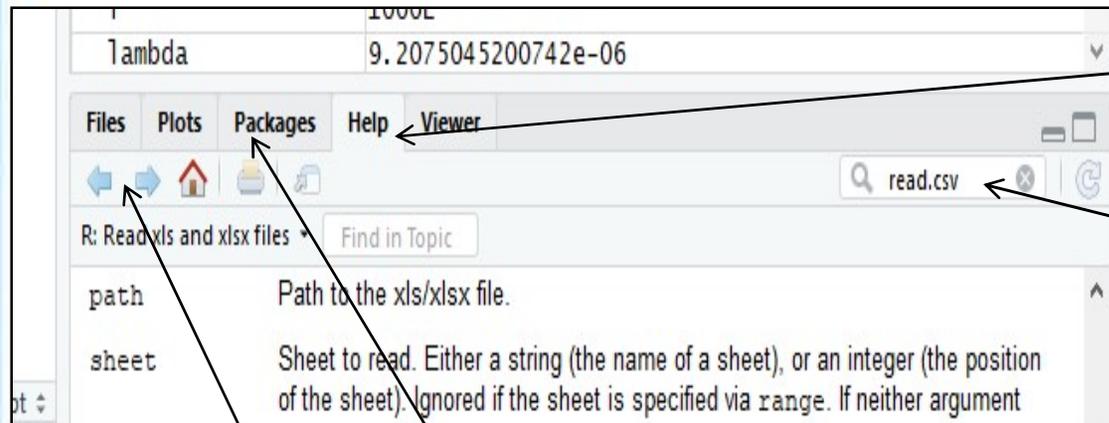
R-Script file (Write code here, Use Ctrl + Enter to run the selected lines of code)

Console (Shows the result)

Window for Plot, Packages, Help etc.

- With start of your exam the R-Studio will open automatically.
- You have to use Alt + Tab to switch between R-Studio and Answer Script
- Write code on Script file and save it at regular interval. **Exam platform will not auto save your R-Script.**

Using Help in R-Studio



Use “Help” tab

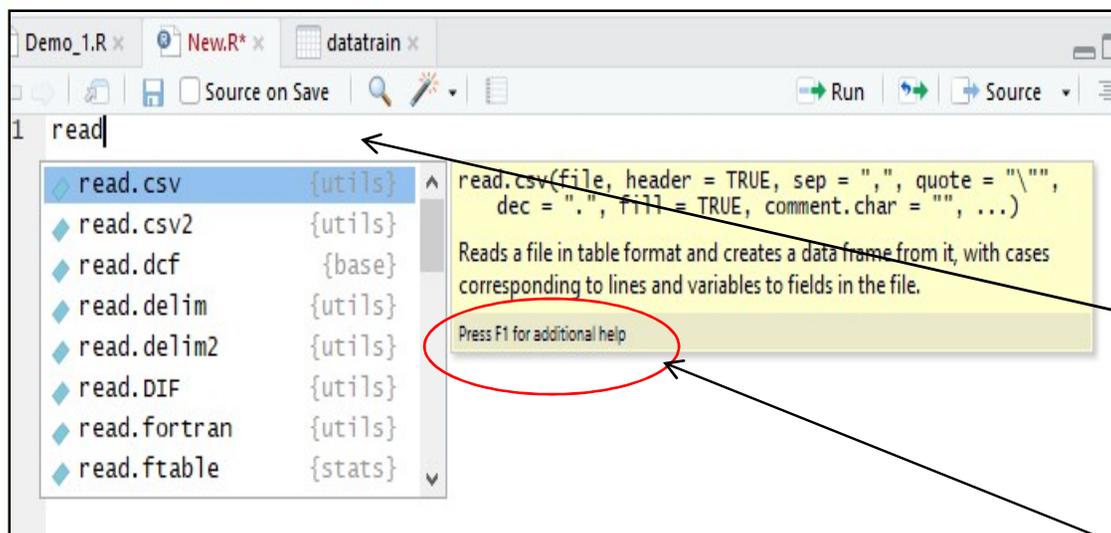
Search for the command

To get commands for a package, click on “Packages” tab and click on the required package name

Use forward/backward arrows accordingly

➤ You can also use “`help(package=‘package_name’)`” to get all the commands available for a particular package.

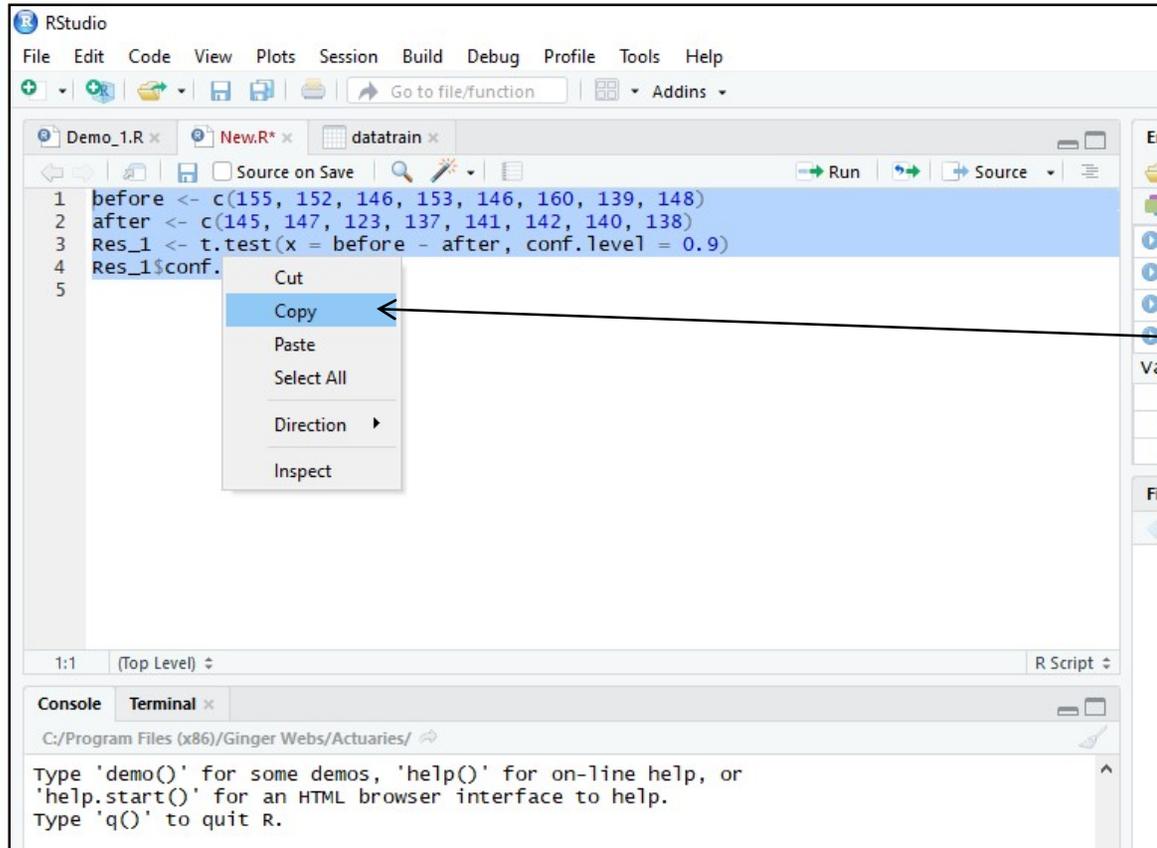
Using Help in R-Studio (Contd..)



As you type a command (in script or console area), R-Studio will show the related ones, you can select the required one and press F1

- Press F1 to get help for a particular command.
- Alternatively you can use “?*command_name*” to get the help.
- “help.search” or “install.packages” commands may not work in exam.

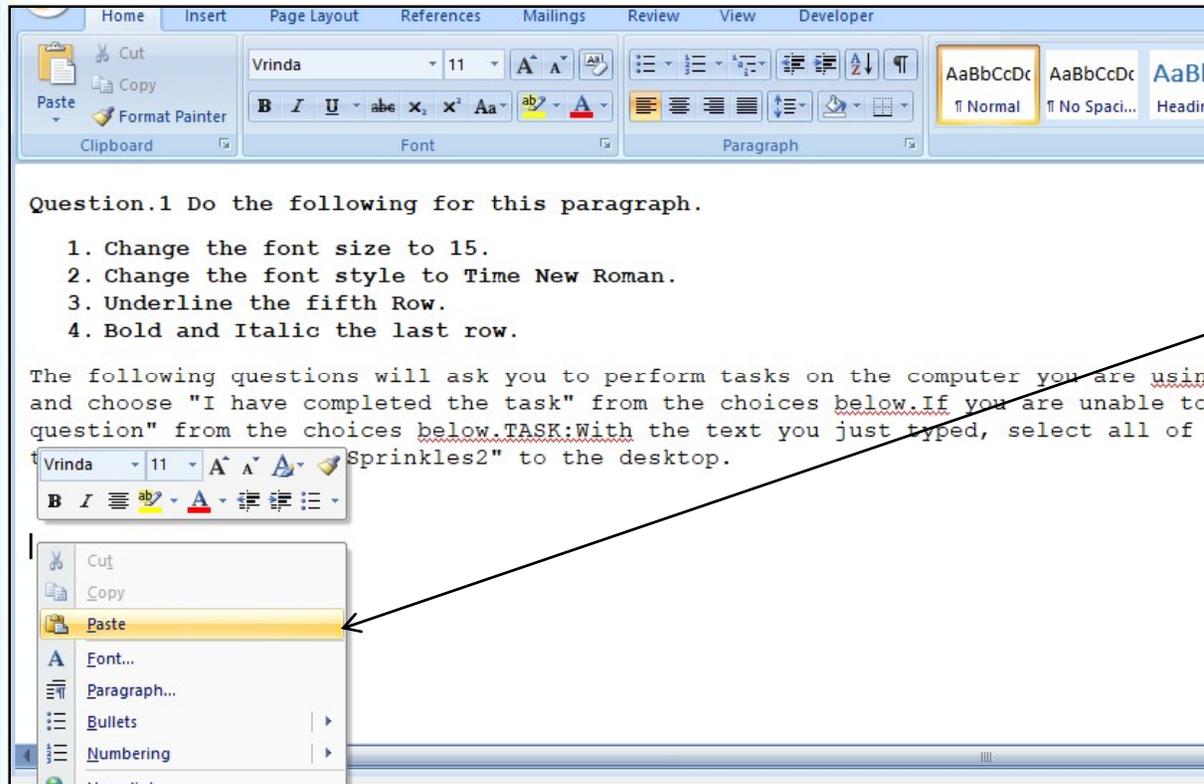
Copy Code from R-Studio



```
1 before <- c(155, 152, 146, 153, 146, 160, 139, 148)
2 after <- c(145, 147, 123, 137, 141, 142, 140, 138)
3 Res_1 <- t.test(x = before - after, conf.level = 0.9)
4 Res_1$conf.
5
```

You can select and copy the code from R-Script File

Paste R Code in Answer Script



You can paste the copied R code in Answer Script (Word Doc)

Copy Result from R-Studio Console



```
1:1 (Top Level) ↓
Console Terminal ×
C:/Program Files (x86)/Ginger Webs/Actuaries/ ↗
Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[workspace loaded from C:/Program Files (x86)/Ginger webs/Actuaries/.

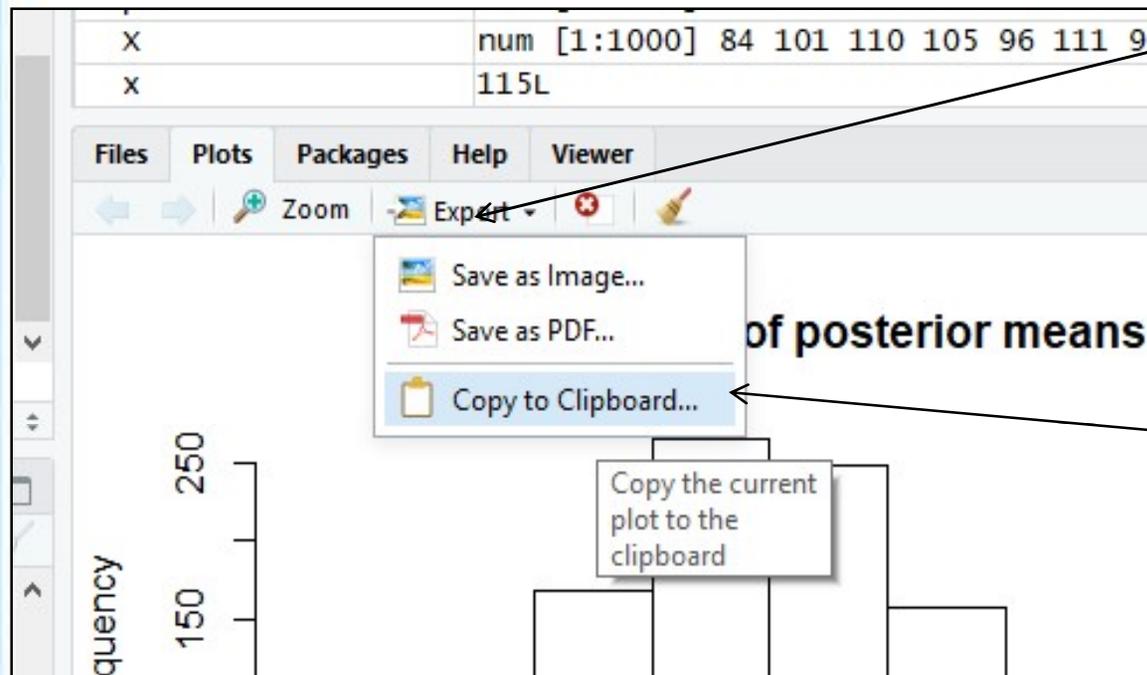
> before <- c(155, 152, 146, 153, 146, 160, 139, 148)
> after <- c(145, 147, 123, 137, 141, 142, 140, 138)
> Res_1 <- t.test(x = before - after, conf.level = 0.9)
> Res_1$conf.int
[1] 5.46661 16.02229
attr(,"conf.level")
[1] 0.9
> |
```

Similarly you can select and copy the result from R-Studio Console and paste it in Answer Script

Copy Charts to Answer Script



Step 1: Click on Export in Chart Area



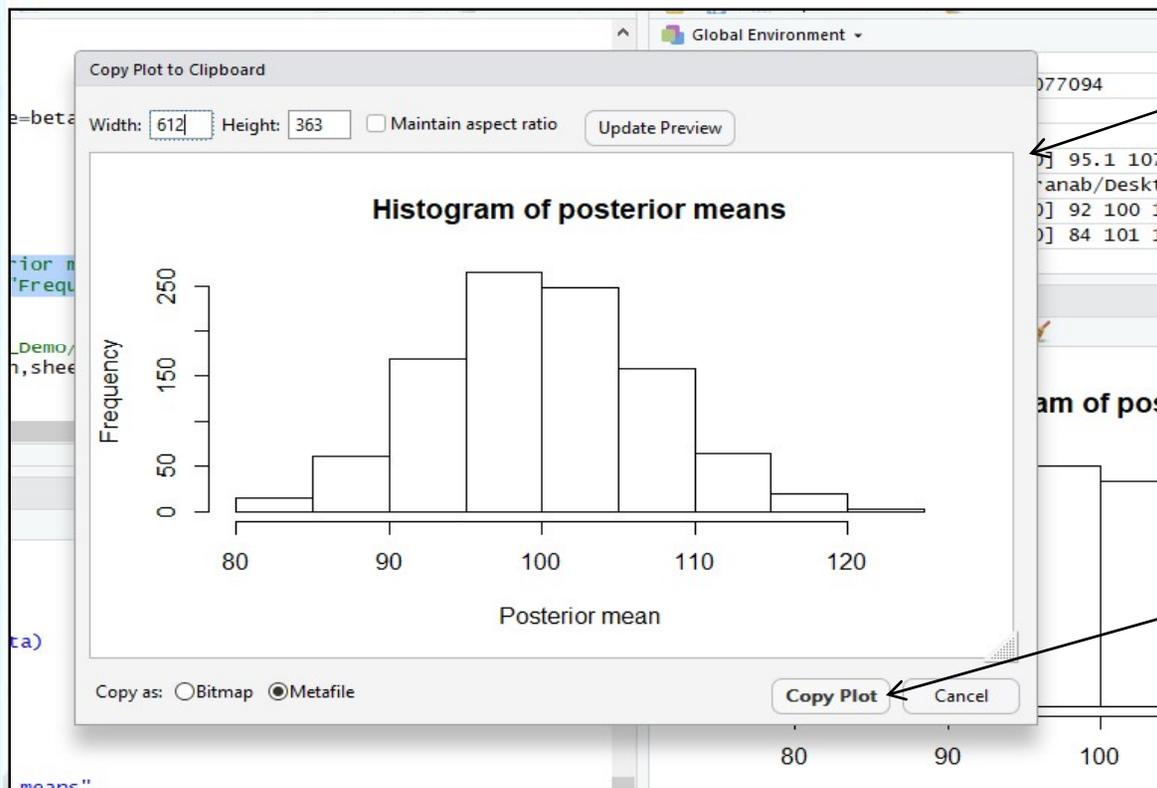
Step 2: Click on “Copy to Clipboard” in Chart Area – after this a pop-up window will appear (shown in next page)

Please note: Charts are visible in chart area of R-Studio only after running the corresponding code in R Script File.

Copy Charts to Answer Script (Contd..)



Pop-up window will appear after the 2nd step shown in previous page



Step 3: Click on "Copy Plot"

You can now simply paste it in your Answer Script (word doc)

How to Read Data



```
1  
2  
3 Path<- "C:/Users/Data/Datatrain.xlsx"  
4  
5 datatrain<-readxl::read_xlsx(Path,sheet=1)  
6  
7 view(datatrain)  
8
```

Copy the path where data is stored in your PC

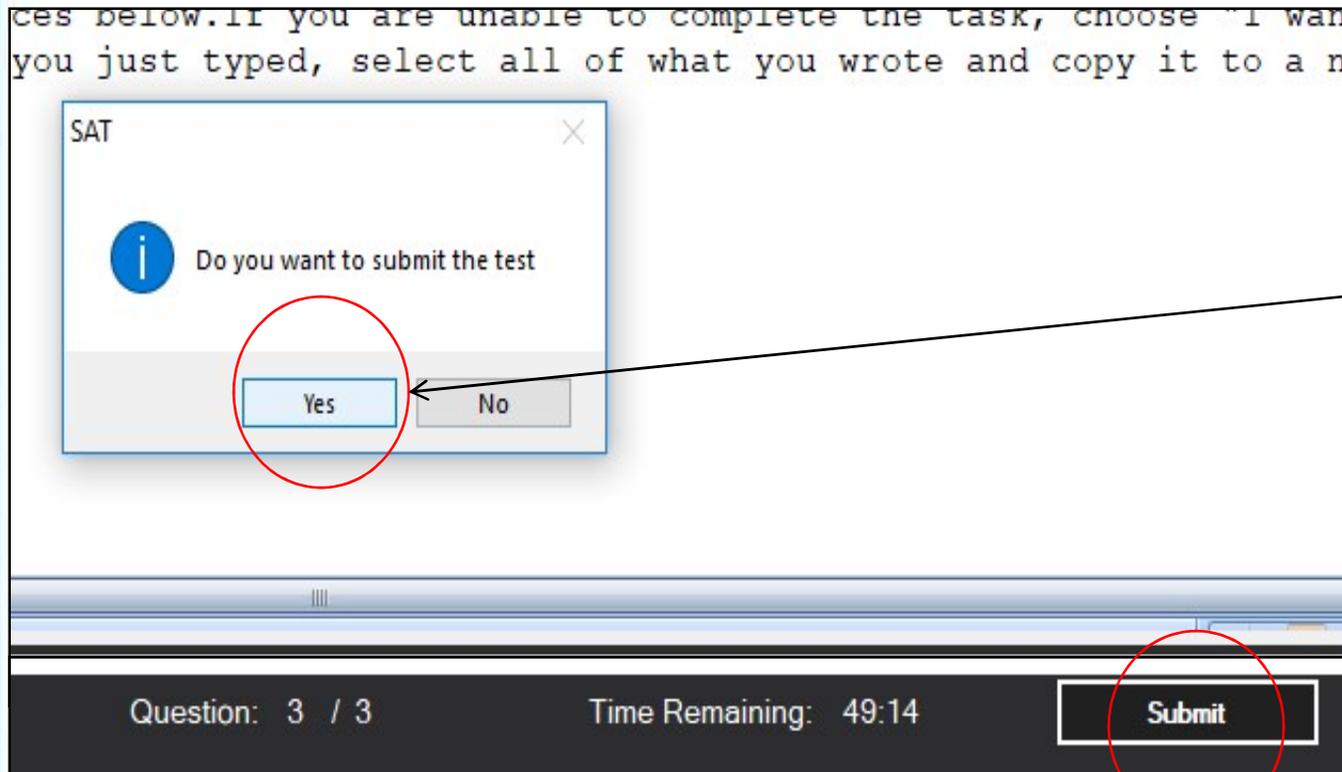
Read the data using suitable command

You may view data using View command

ID	Age	Car Group	Area	NCD	Gender	Claim number
1	1	89	7 London	1	Female	0
2	2	22	6 South East	1	Female	0
3	3	52	3 South West	2	Male	0
4	4	90	11 North East	2	Female	0
5	5	89	5 Yorkshire and the Humber	3	Female	0

Tab showing the data after executing View command

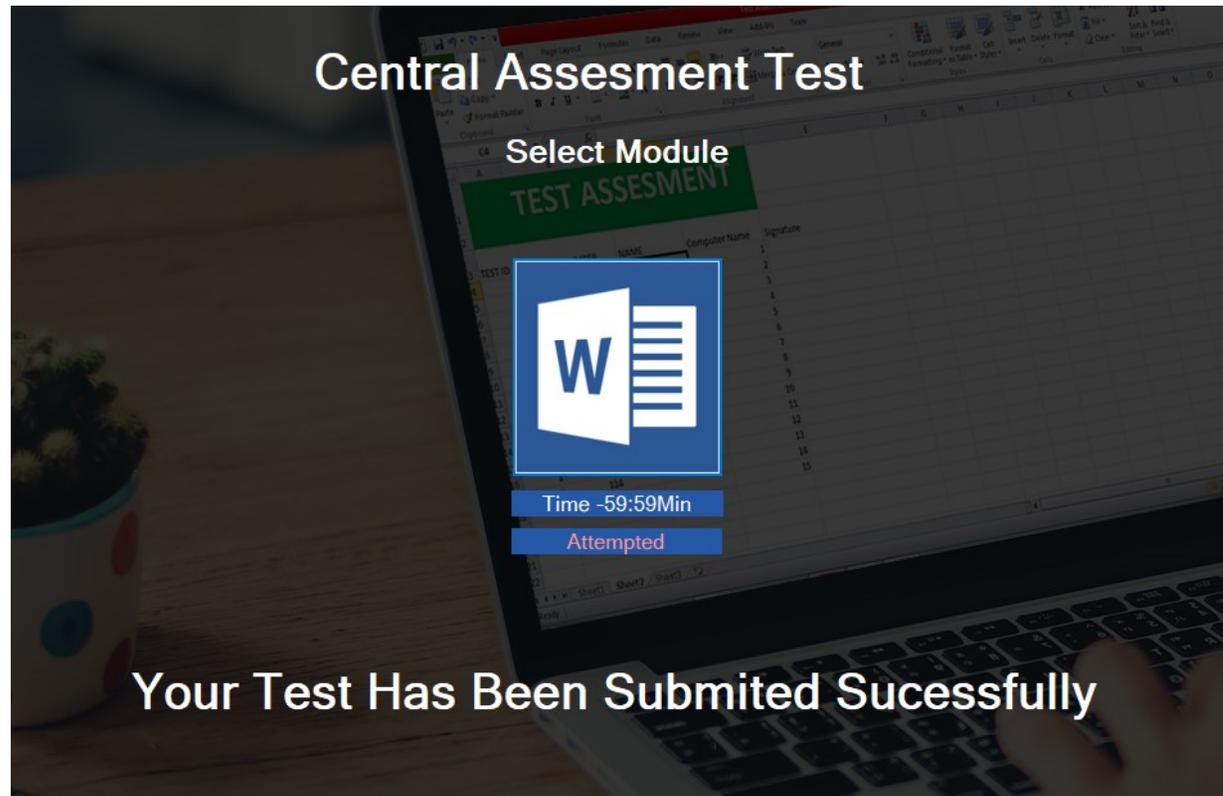
How to Submit Your Exam



Click on
"Yes" to
Confirm
SUBMIT

Click
Submit
Button

Screen Confirming Successful Submit



Important Points

- Exam duration is fixed and monitored by system. Once the exam duration is over your answer script will be submitted automatically. **You cannot submit the R-Studio file.**
- R-Studio will open along with your exam platform but in different window
- You have to submit the solution in word documents provided in the Exam platform. The R-Studio file will not be marked by the examiners.
- The Exam platform will auto-save the word Answer Scripts at regular frequency. But R-Studio file need to be saved manually, if required.
- **Once the “Submit” button is clicked, no changes can be made in the Answer Script.**

Institute of Actuaries of India



THANK YOU!!