

# Student Guide for Actuarial Examination

IAI May 2024 Exams

# **Table of Contents**

Page 3
Page 4
Page 6
Page 11
Page 17

# Introduction

This student guide endeavours to furnish comprehensive information essential for examinees appearing the upcoming Actuarial examination. It outlines the key elements for pre-exam preparations, offers guidance for the exam day and provides insights for post-examination procedures.

Student Guide accompanies with:

- 1. Mitigating Circumstance Policy and Procedure
- 2. Notice for Exam Entry Fee Refund
- 3. Policy for Differently Abled Candidates
- 4. Instructions of Hall Ticket

All examinees are entrusted with the responsibility of thoroughly perusing and acquainting themselves with the above contents along with student guide prior appearing for IAI exams.

# Minimum Technical Requirements<sup>1</sup>

Below are the minimum hardware and software requirements that shall be furnished by you for smooth functioning of exam browser.

	Personal Desktop/ Laptop
Hardware	Web Camera
	Microphone
	Licensed Windows 10 and above
Operating System	(NOTE: IOS / MAC BOOK ARE NOT ALLOWED)
	.NET Framework 4.5.1 and above
Web Browser	Google Chrome - Ver. 121.0.6167.185 & above (Recommended)
(Any One)	Firefox -Ver. 121.0.1 and above (Recommended)
Internet	Minimum speed of 1 Mbps and above
	Note: Use of mobile hotspot may lead to unstable internet
	connectivity.
RAM	Minimum 1-2 GB
Note:	

### Note:

- 1. Device should have free space of more than 250 MB on the default hard drive.
- 2. No tablet or mobile devices are eligible.

For the following subjects, below are some add-on requirements to be fulfilled alongside with above:

CM1, CM2, CP2: MS Office (Licensed) - 2010 or above

Note: Functional Keys, Escape key and right click of the mouse will be disabled during the time of examination. Refer FAQ section on IAI Website.

# CS1, CS2:

- ✓ MS Office (Licensed) 2010 or above
- ✓ R version 3.6.1 or higher
- ✓ R Studio Version 1.1 or higher for 32 bit operating system Version 1.2 or higher for 64 bit operating system

Packages - base, stats, utils, graphics, fpp, markov chain, forecast, dplyr, readxl, psych, corrplot, flexsurv, survival, etc.

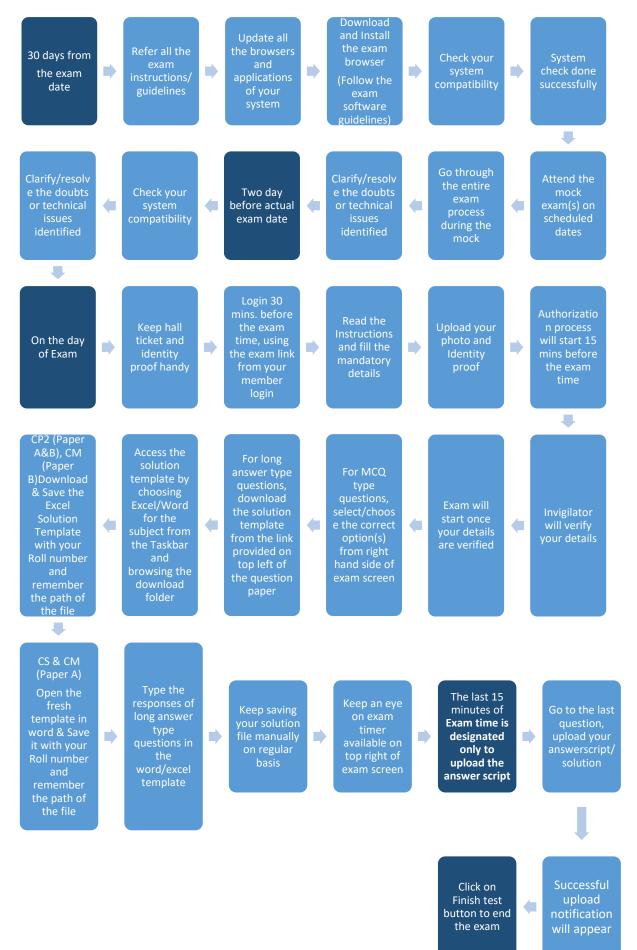
<sup>&</sup>lt;sup>1</sup>Any modifications in above technical requirements will be notified by the Institute.

# **Process Flow:**

# CB1, CB2, CP1, CP3, SP & SA Series Subject



# CS, CM Series & CP2 Subject



# **Pre-Exam Preparations**

# Communications:

- You are strongly advised to use registered email id and contact number throughout the examination process.
- You will be granted access to the online home-based exam platform.
- You will receive exam link and other exam related information's 2 days before your exam.
- > All Frequently Asked Questions are available on official website of the Institute.
- You are advised to email your queries for assistance at <a href="mailto:exam@actuariesindia.org">exam@actuariesindia.org</a>.
- During Examinations if you face any technical issue, kindly contact the helpline number available on the Examination platform +91 80471 90902/ email the issue on mettl-support@mercer.com keeping copy to exam@actuariesindia.org. In case you are not able to reach the helpline number, kindly contact Institute immediately at 91 22 62433334/36/38 or +91 8329321986/ 8080225226/ 8655028028.

# System Check

- Institute will arrange for mock exams before the actual exam providing a good opportunity for students to test their system compatibility. The details will be shared only with candidates registered for the upcoming exam session.
- Click here to test your internet speed.
- Click here to test your system compatibility.
- You are advised to use any third-party browser to check your microphone and webcam.
- You are strongly advised to check hardware and software of your system well prior mock and final examination.
- You are strongly advised to uninstall all screen sharing applications like zoom, teams, any desk, etc & antivirus during the exams.
- Disable the windows firewall in your system as they may interfere in proper functioning of exam secure browser.
- > You will receive exam link 2 days before the actual examination to check for system compatibility during home based online examination.
- > Ensure necessary steps for challenges faced during mock exam or system compatibility check well prior the final exams.
- ➤ It is advised to turn ON the system speaker with maximum volume for notifications and messages from proctors.

## **Exam Instructions**

- You can use **only** scientific calculator as per IAI approved list during the examination.
- You can use only hard copy of Actuarial table during the examination. (Note: Print or xerox copy is not allowed)
- > You may be asked to provide a **360-degree view of the exam surroundings** by the proctor/invigilator during the examination.
- Any candidate who appears or registers for the examinations from the excluded country as per Registration Announcement may lead to cancellation of their Exam or result of the respective examination.
- > Do not read the questions loudly during the exam.
- Ensure to maintain ethical standards and exam conditions while appearing exam.
- Ensure there is enough light on your face. You are not allowed to move away from the exam screen.
- Please ensure that the web camera is not covered/ blocked by any object, even your hands while giving the exam as the same shall be treated as violation.
- In case you get disconnected, please click on the same exam link shared with you and you may be able to resume where you had left off after 7-8 minutes. In case you are not able to reconnect within 20 minutes from the time of disruption, kindly call the technical support as well as inform Institute immediately for assistance.

- All your screen activities will be recorded and captured. Ensure that you do not open any irrelevant application/files other than that mentioned in the question/exam instructions.
- Don't use any electronic devices like mobile phones, earphones/headphones, tablets, smart watch etc. during the exam it will be treated as violation.
- You can navigate the questions by navigation panel on top of exam window or by clicking "Next" available on bottom right of exam window.
- You are strongly advised to keep a track of exam timer to avoid loss of time.
- > Do not press **F5** key at any point during the examination.
- For text editor-based examination i.e., CB1, CB2, CP1, CP3, SP Series and SA series subjects do not press Ctrl+Z shortcut key at any point during the examination.
- Kindly navigate the questions appropriately, ensure you do not click on "All questions" button available on top right of the exam window. You can also navigate using "Prev Question" and "Next Question" buttons available on bottom right of exam platform.
- > The examination will end automatically at the exam end time.
- > For CS1, CS2, CM1, CM2 & CP2 Subjects,
  - 1. You can download and save the solution template and data files (if any) from the link provided along with question paper. Keep a note of location you saved the solution template and data files (if any).
  - 2. Solution template should be **saved with roll number only**. No other file name will be permitted.
  - 3. Keep a track of exam timer, you are advised to keep a check on exam timer while working on the solution.
  - 4. Do not mention your name/member id/roll number inside the solution document/worksheet.
  - 5. You are strongly advised to keep saving your answer scripts on your local drive and upload the same on examination platform in a timely manner.
  - 6. The exam timer includes additional 15 minutes of upload time, it is mandatory to apportion the last 15 minutes to just upload your answer script/solution. Any working done during additional 15 minutes might lead to loss of attempt or failure in uploading the answer script. The last successfully uploaded answer script in exam platform shall be considered for evaluation.
  - 7. Upload option will be available on the last question.
  - 8. Steps to upload the solution/answer script:
    - i) Click on "Select File".
    - ii) Navigate the location you previously saved your file.
    - iii) Select the file and click on "open/upload".
    - iv) You are allowed to re-upload the file (if required). To re-upload the file please delete the earlier file uploaded, then follow the steps again for uploading the file.

### Note:

- 1. AutoSave feature is not applicable for mentioned subjects.
- 2. It is responsibility of the candidate to keep a track of exam timer.
- 3. Upload your answer script/solutions before the timer gets over.
- 9. Finish test button will be available at the top right corner and click on it only once you have answered all the questions.



# **Actuarial Notations/Symbols**

Notation / Symbols / Meaning	Symbol / Notation that may be used	
Mathematical Mathematical		
Multiplication, ×	*	
Division, ÷	/	
Approximately equal, ≈	~= OR; approx. = OR; c. =	
Inequalities e.g. a ≥ b and c ≤ d	a >= b and c <= d	
Proportionality, a ∝ b	a is proportional to b	
Square root √	sqrt()	
Superscripted letters, $a^x$	a^x	
Subscripted letters, e.g. $X_{ij}$	X_ij OR; Xij	
Exponential, $e^x$	exp(x) OR; e^x	
Accented symbols, e.g. $\hat{b}$ , $ar{X}$	b^hat, X^bar OR; bhat, Xbar	
Greek letters, e.g. $\mu$ , $\sigma$ , $\alpha$ , $\beta$ , $\theta$ , $\varphi$ , $\lambda$ , $\eta$ , $\rho$ , $\delta$	Use the typed word for the letter e.g. mu, sigma, alpha, beta, theta, phi, lambda, eta, rho, delta. Match case of Greek letter, for example phi for φ and PHI for Φ.  OR; an Arabic alternative where available e.g. a instead of alpha, b instead of beta, d for delta or D for DELTA.	
Symbols, e.g. infinity symbol, ∞	Infinity OR; Inf	
Derivatives, e.g. $f'(x)$ , $f''(x)$ , $\delta f/\delta s$	f'(x), f''(x), df/ds (stating partial, if necessary) OR; df/dx, d^2f/dx^2	
Integral, e.g. $\int_{a}^{b} f'(t)dt$ And Solved Integral, e.g. $= [f(t)]_{a}^{b}$	INT(a,b):f'(t) dt OR; Integral over a to b (f'(t)) OR; int(a,b)[ f'(t)] = [f(t)]:(a,b)	
Summation, e.g.		
	Page <b>8</b> of <b>18</b>	

$\sum_{t=a}^{b} \mu_{t}$ Product, e.g.	sigma(a,b): mu(t) OR; sum(a,b): mu(t) OR; Sum over a to b (mu(t)) OR; Sum(a,b)[mu(t)]  Product (a,b):f(x)	
$\int_{a}^{b} f(x)$	OR; product over a to b(f(x))	
	Statistical	
Expected values e.g. $E()$	E()	
Conditional expectation, e.g. $E(X Y)$	E(X given Y)	
Variance, V()	V()	
Covariance, Cov()	Cov()	
Distributions, e.g. $\chi^2_m$	chi-squared_m OR; chi-squared with m degrees of freedom	
Binomial Coefficient, e.g.		
$\binom{n}{r}$	n choose r OR; choose (n, r)	
Сотро	und interest functions	
$i^{(p)}$	i(p)	
$d^{(p)}$	d(p)	
δ	delta	
ν <sup>n</sup>	v^n	
S	s: <n></n>	
$\overline{a}_{\overline{n}}$	abar: <n></n>	
$a_{\overline{n} }^{(p)}$	a(p): <n></n>	
Life table functions		
$\frac{l_y}{l_x}$	Ly/Lx	
	Page <b>9</b> of <b>18</b>	

dx/Ly
kpx
m qx
рх:у
adue:x: <n></n>
a(p):x
adue:x:y
adue:x:y: <n></n>
adue(p):x:y: <n></n>
adue:x y
m adue:x
EA:x: <n></n>
EAbar:x: <n></n>
TA:x: <n></n>
PE:[x]: <n></n>
I(TA):x: <n> equation notations may also be acceptable.</n>

**Disclaimer:** The above list is not exhaustive, and other symbol & equation notations may also be acceptable.

# On the Day of Examination

You are strongly advised the below do's and don'ts before sitting for online examinations.

Do's	Don'ts
Keep yourself cool and calm	Don't panic during the examination
Keep your exam desk neat and clean.	Don't use sticky notes, notepads, etc.
Keep your Hall Ticket and Government ID	Don't move away from system during the
proof in original handy.	live examination.
You can keep only approved scientific	Don't use any electronic gadget viz. Cell
calculator, Actuarial table, blank papers	Phones, Earphones/Headphones, Smart
and pen with you for rough work	Watch, Fitness Band, etc.
Keep your mail id logged-in before exam	Don't access any other browser or social
start time.	accounts during the exam.
Keep a transparent water bottle.	Don't connect any external ports to system
Keep track of exam timer available on the	during the Examination.
upper right corner of the exam window	
during the examination	
Use restroom before login.	
To adhere the instructions to the examinees	Don't violate the instructions to the
available in the hall ticket and the	examinees and instructions given by
instructions of the proctor/invigilator	proctor/invigilator
throughout the examination.	proctor/invigitator

Note: Candidates are strongly advised to appear examination in smart casuals.

# **Steps to Start Examination**

1. Click on Start Test button available on the email received from <a href="mailto:admin.mettl@mercer.com">admin.mettl@mercer.com</a>. Exam link and instructions will be made available under your examination tab of your member login one day before the exam.

- 2. Close all the background applications, clear all cache, browser history, uninstall antivirus, screen sharing applications and disable windows firewall before accessing online exam platform.
- 3. Ensure all notifications, pop-ups are closed/blocked before you start the examination to avoid the computer screen navigation away from the online examination window.
- 4. You are advised to check your system compatibility before starting the examination. System compatibility check link will be sent along with exam link.
- 5. To download and install the examination software<sup>2</sup>.

  Note: Kindly uninstall the exam software installed for earlier examination session(s). While uninstalling the software, kindly ensure you delete the existing software folder from the local drive. You need to download and install the latest exam software from the provided exam link. If you have already appeared for the mock exam scheduled before the actual exam, please skip this step.
- 6. Login to the exam platform **30 mins** before exam start time using the link shared by IAI. (Do not share your examination link with anyone).
- 7. In case if you face any technical issue kindly contact technical support number available on your examination screen/hall ticket.
  - Note: If you are not provided with proper assistance within 10 mins from login time kindly contact IAI on +91 022 62433334/36/38 or email us on <a href="mailto:exam@actuariesindia.org">exam@actuariesindia.org</a>

\_

<sup>&</sup>lt;sup>2</sup> We recommend that you should complete this step at least one week before the day of examination.

- 8. Click on Start Test (wait for few seconds, the system will close the background applications and start the test).
- 9. Check the subject name, question count and test duration. Click on "Proceed".
- 10. Post system compatibility check, share your screen and allow access to microphone & camera, then click on "Proceed".
- 11. Read the exam instructions thoroughly, click on "Agree & Proceed".
- 12. Fill the following details, check the terms & condition and click on submit:
  - a. Member ID
  - b. Roll number
  - c. Name
  - d. Email ID
- 13. Click pictures of yourself and Government approved Photo ID using the web camera of the laptop/desktop and submit for approval. In case the clicked picture is not properly visible then you will receive a prompt to capture the picture again.
- 14. Profile verification will start 15 mins before the exam start time. You will be in queue till your profile gets verified.
- 15. Proctor shall verify your hall ticket during the examination.
- 16. Read the Instructions and click on "Start Test" to start the examination. (Note: Your exam timer will start immediately after clicking the "Start Test" button and will end accordingly)

# Subject wise approach to write solution:

Subject	Approach to Write Solution
CS & CM (Paper A)	Open a new word document from the task bar of the exam platform and type solutions question wise and upload the same in exam platform.
CS (Paper B)	Open a new word document from the task bar of the exam platform and copy & paste the R codes and output question wise and upload the same in exam platform.
CM (Paper B)	Download and save the Solution Template (Excel) embedded within the question and then upload the worked solution template back to the exam platform.
CP2	Open a new excel workbook from the task bar of the exam platform and upload the same in the exam platform.
CB, SP, SA, CP1 & CP3	To type solutions in Text Editor within the exam platform

For CS, CM and CP2 (Paper A & B), It is the responsibility of student to track the exam timer. The exam timer includes additional 15 minutes of upload time, it is mandatory for you to utilize the last 15 minutes only to upload your answer script/solution. You will find the upload option on the last question. Any working done during that additional 15 minutes might lead to loss of attempt or failure in uploading the answer script. The last successfully uploaded answer script in exam platform shall be considered for evaluation.

## Step for CS, CM (Paper A)

- For Multiple Choice Questions (MCQ's), you can select the correct option within the platform. (No working or calculation is required for MCQ's)
- > For Subjective Questions, you can access MS-Word from taskbar in the exam platform.
- > You are advised to open a new word document from the task bar of exam platform with default file type (MS Office).

- Save as the document only with your "Roll Number" e.g. CS1A2001 in your local drive and upload in exam platform once you have answered all the questions.
- > You are strongly advised to save your work in the MS Word Document in your local drive periodically till it is ready for upload in the exam platform in a timely manner.
  - Note: Please be informed your working will not get auto saved in the exam platform.
- > The last successfully uploaded file by you will be considered as answer script.
- After submission you will receive a submission confirmation pop-up on the screen, will be able to see file size in summary.

Note: If you don't get the submission pop-up, re-upload the file.

# Step for CM1B, CM2B, CP2A and CP2B:

- You can access MS-Excel from taskbar in the exam platform.
- You will be provided with link to download the answer template within the question paper.
- On clicking the link, you will be asked to save the file, kindly save the file with your roll number only.

# Step to open file

- i. Open a blank excel file from taskbar, click on "File" option.
- ii. Select Open option, browse the location.
- iii. Select all files from the bottom right of the popped-up screen.
- iv. Select the required file and click on "Open".
- v. If you face file corrupt issue, please follow below steps:
  - a) Open a blank excel file from taskbar, click on "File" option.
  - b) Go to option > Trust Centre > Trust Centre Settings > Protected View > Uncheck all the three options > Click on "Ok".
- You are advised to open the downloaded file with default file type (MS Office).
- Save as excel workbook with your "Roll Number" e.g. CM1B2001 in your local drive.
- Write the solutions of respective question mentioned in excel and upload the file in the exam platform.
- You are strongly advised to save your work in the MS Excel worksheet in your local drive periodically till it is ready for upload in the exam platform in a timely manner. Note: Please be informed your working will not get auto saved in the exam platform.
- > The last successfully uploaded file by you will be considered as answer script.
- After submission you will receive a submission confirmation pop-up on the screen. Note: If you don't get the submission pop-up, re-upload the file.

### Step for CS1B and CS2B:

- You can access R/R Studio of available in your system from examination platform.

  Note: R Studio must be installed in following path C:\Program Files (i.e. default windows drive). If the Secure Exam Browser is unable to locate the R Studio, you can manually locate the "R Studio.exe" by browsing to the saved location.
- You are advised to open a new word document from the task bar of exam platform with default file type (MS Office).
- You can write the respective codes in R and copy the R codes & output and paste to MS Word document question wise. Save as the document only with your "Roll Number" e.g. CS1B2001 in your local drive and upload in exam platform.
- You can access "R", MS-Excel & MS-Word from taskbar in the exam platform.

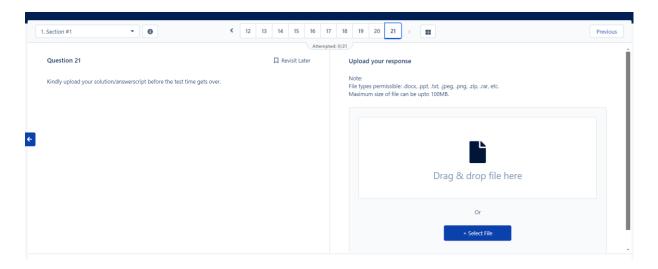
You will be provided with link to download the dataset (if any) within the question paper.

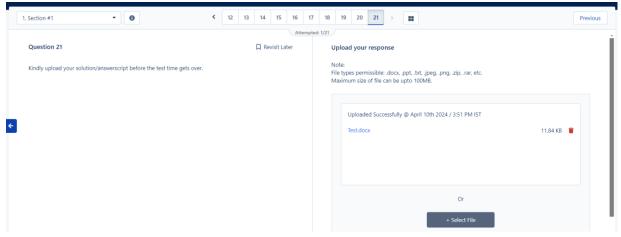
# Step to open file

- i. Open a blank excel file from taskbar, click on "File" option.
- ii. Select Open option, browse the location.
- iii. Select all files from the bottom right of the popped-up screen.
- iv. Select the required file and click on "Open".
- v. If you face file corrupt issue, please follow below steps:
  - a) Open a blank excel file from taskbar, click on "File" option.
  - b) Go to option > Trust Centre > Trust Centre Settings > Protected View > Uncheck all the three options > Click on "Ok".
- You are strongly advised to save your work in the MS Word Document in your local drive periodically till it is ready for upload in the exam platform in a timely manner.
  - Note: Please be informed your working will not get auto saved in the exam platform.
- > The last successfully uploaded file by you will be considered as answer script.
- After submission you will receive a submission confirmation pop-up on the screen. Note: If you don't get the submission pop-up, re-upload the file.

# Please take note of the following:

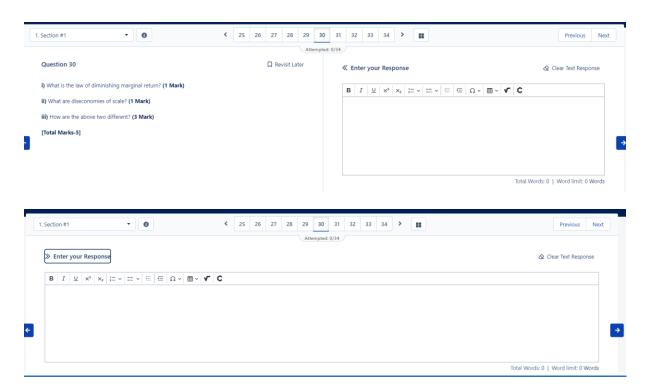
- You can use any standard function available in Excel, Word and R (excluding the use of Macros).
- You can use the Equation Editor to construct any actuarial notation/symbol/equation. Alternately, you can use any other form of presentation of the same as long as any third person can comprehend what is written.
- You are not permitted to handwrite mathematical equations. This includes the use of freehand drawing tools or other hardware such as drawing tablets, which are prohibited.
- You are prohibited to use 'Dictate' or any similar function. You are expected to complete all examination answers using keyboard entry into the applicable platform as outlined earlier (To view Click Here).
- You are requested to delete or disable any customized add-ins within the MS
  Office platform as its use or access is prohibited during the examination
  session.
- You are prohibited to use RMarkdown and knitR during the R-based examination.





### Steps for CB, CP1, CP3, SP and SA

- You can type the solution within the text editor of the exam platform.
- > The equations can be inserted using the equation editor available in the exam platform wherever required.
- For text editor-based examination do not press Ctrl+Z shortcut key at any point during the examination.
- Kindly navigate the questions appropriately from buttons available on centre of the exam screen, you can also navigate using "Previous" and "Next" buttons available on top right of exam screen.
- Your work on the text editor within the examination platform gets auto saved every after 90 seconds.
- You will not have access to any other application, document, or file.



## **Proctoring/Invigilation**

- ➤ Each and every activity will be observed, monitored and recorded by the proctor/invigilator during the Examination.
- Proctors/invigilators are trained to detect every malpractice happening during the online exam.
- > Proctor/invigilator can warn you for any malpractices came to notice through chat.

- Proctors/invigilators may pause/terminate your examination at any time for any malpractices observed.
- You need to follow all the instructions and guidelines provided by proctor/invigilator throughout the exam.

Note: Proctor/Invigilator is only for supervision, in case of technical help, kindly contact the helpline number available on the Examination platform. In case you are unable to reach the helpline number kindly contact the Institute immediately.

# **Malpractices**

- > You may be asked to provide a **360-degree view of the exam surroundings** by the proctor/invigilator during the examination.
- Violations may include but not limited to:
  - Using mobile, headphones, smartwatches or any other electronic devices.
  - Communicating with someone during the exam.
  - Referring notes/materials during the exam.
  - Moving away from exam screen without permission.
  - Disabling camera or microphone during exam.
- Any malpractices noticed/violation of instructions by proctor/invigilator shall lead to termination of your examination.
- It is brought to your notice that in accordance with provisions contained in the Professional Conduct Standard, if any candidate is found copying or involved in any other form of malpractice, during or in connection with the examination, then he/she will be liable to disqualification from the examination and disciplinary action. Candidates found guilty could face suspension of two years leading to academic loss.
- All screen activities will be recorded and captured. Ensure that you do not open any irrelevant application/files other than that mentioned in the question/exam instructions.
- > Don't use any electronic devices like mobile phones, earphones/headphones, tablets, smart watch etc. during the exam; it will be treated as violation.

## Technical Issue/ Internet failure/ Electricity failure

- ➤ You are strongly advised to keep alternate arrangement for software/hardware/internet/power supply disruption at least a day before or on the exam day/during the examination.
- No extra time shall be granted for any software/hardware failures faced during the examinations.
- kindly contact the helpline number available on the Examination platform +91 80471 90902/ email the issue on <a href="mailto:mettl-support@mercer.com">mettl-support@mercer.com</a> keeping copy to <a href="mailto:exam@actuariesindia.org">exam@actuariesindia.org</a>. In case you are not able to reach the helpline number, kindly contact Institute immediately at 91 22 62433334/36/38 or +91 8329321986/ 8080225226/ 8655028028.

# **Post-Examination**

- > Post completion of exam you need to submit the survey shared via email by IAI.
- > Survey will be available for 24 hours from the exam end time.
- ➤ The students are advised to email at <u>exam@actuariesindia.org</u> for the issues relating to the examination. Queries which are received within 2 days of completion of examination will only be entertained.

