



Quick Guide for Administration of Assessments for Remote Proctoring (with Web Conferencing)

Subject Exams, Customized Assessments, and IFOM

June 7, 2021

What's inside

- Prior to Test Day Instructions
- Test Day Instructions
- Troubleshooting

Resources

- E-mail questions concerning the administration of the exam to nbmewebtest@nbme.org

What's New

- NBME Exam Security Protocols for Remote Administrations (**pages 4-8**)
- Examinee Read Aloud Instructions for Remote Administrations (**pages 2 and 12**)

This document contains proprietary information that must remain confidential.

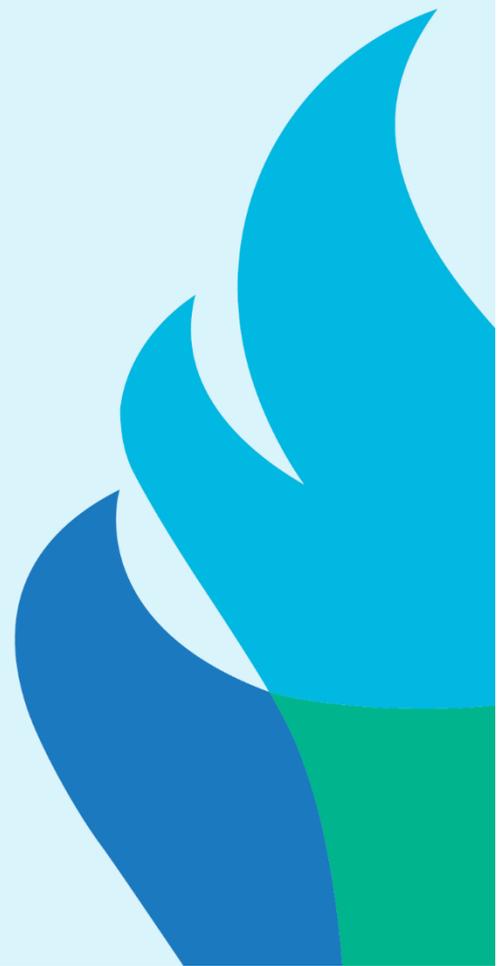


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This Quick Guide for Administration of Assessments for Remote Proctoring supplements the Web-based Exam and IFOM Chief Proctor Manuals. Please contact us at nbmewebtest@nbme.org or 215-590-9298 with any questions.

Prior To Test Day

- Place exam order and assign examinees to roster
- Create distribution list of examinee email address and cell phone numbers to communicate with examinees via text or email prior to and on exam day
- Schedule video conference session (Zoom, Webex, Microsoft Teams)
- Email pre-test day instructions to examinees
 - ▶ Email meeting invitation to examinees
 - ▶ Email Exam URL and instructions for using the conferencing software on exam day (attached)
 - ▶ Email Workstation Certification Laptop Check and instructions to examinees (see page 6 of Web-based and IFOM Chief Proctor Manuals)
- Ensure examinees have their ID numbers available. Examinees are required to enter their Examinee ID to successfully launch the exam on test day
- Arrange for institutional IT staff to assist examinees with troubleshooting problems remotely prior to test day and on test day
- Conduct Practice Exam to test out using your conferencing software in conjunction with the Chief Proctor Resource site prior to a live administration (see **page 12** of Web-based and IFOM Chief Proctor Manuals)
- Consider assigning additional staff to monitor the video conference chat session on exam day

On Test Day

Start Exam Session

- Log in to Chief Proctor Resource site
<http://wbt.nbme.org/proctor>
- Start remote video conference session (Zoom, Webex, Microsoft Teams)
 - ▶ Mute examinees on entry to minimize audio disruptions and instruct examinees to communicate via chat or by cell phone to the Chief Proctor
- Verify examinees are in a secure testing environment by requesting a 360 view of the room using their laptop/standalone desktop camera
 - ▶ See **page 16** in the Web-based and IFOM CPM for a list of unauthorized items. Exceptions for remote proctoring are as follows:
 - ▶ Cell phones, the Examinee Instructions, and pen or pencil is permissible
 - ▶ Examinees are allowed to use the back of the Examinee Instructions for calculations or notes
- Read Aloud Examinee Instructions. When all previous steps are complete, read aloud the Examinee Instructions on **page 12** in Appendix
- Start exam session on Chief Proctor Resource site (**pages 18-19** in Web-based CPM or **pages 19-20** in IFOM CPM)
- In the conference chat, provide exam link to examinees to download and run Secure Browser
<http://wbt.nbme.org/exam>
- Communicate Examinee Startup Code (email/text start up code to examinees via phone or communicate the code via chat with instructions to document the code on the back of the Examinee Instructions)
- Examinees launch exam

Click on the icons to view a video:



Communicating with Examinees during the Test Session

- In order to allow proctors and students to effectively communicate and coordinate during examination administrations, NBME is allowing students to use cell phones to communicate with proctors for assistance (such as if the examinee encounters technical difficulties), or for the proctor to communicate directly with the examinee during an examination. Use of cell phones by examinees for other reasons is prohibited.
- The chat feature in the web conferencing software can be used prior to exam launch and after the exam is complete to communicate with examinees. Once examinees have launched the exam, you will be able to see the examinees. But, the conferencing features including chat will be unavailable to examinees. You should plan to communicate with examinees via cell phone once the exam is launched. Examinees should be instructed to close the Secure Browser prior to performing any troubleshooting actions. Once out of the Secure Browser, you may utilize the chat feature to communicate with examinees.

Monitor Exam Session

- Monitor video feed of examinees testing via conference software.
- Switch to Chief Proctor Resource site when necessary to view the testing status of examinees, approve late starts, restarts and any additional actions required while monitoring the exam (**pages 21-29** in the Web-based Chief Proctor's Manual or **pages 22-27** in the IFOM Chief Proctor's Manual).

Scheduled and Unscheduled Breaks

Unscheduled Breaks-Subject Exams, CAS and IFOM

Please note that allowing unscheduled breaks during remote test administrations adds risk, because examinees cannot be visually monitored during these breaks. NBME recommends that you avoid allowing unscheduled breaks, and that you warn examinees prior to test day that unscheduled breaks will not be allowed. If you choose to allow unscheduled breaks, you may follow these guidelines:

- If the examinee needs to take an unscheduled break, the examinee may use their cell phone to communicate with the Chief Proctor. Once contact has been established between the examinee and Chief Proctor, instruct the examinee to click on **Pause**. The examinee's testing time will continue to elapse during the unscheduled break. The examinee should click on **Cancel** to resume testing.

Scheduled Breaks-Subject Exams, CAS and IFOM

Follow the existing procedures for scheduled breaks on **pages 41-42** of the Web-based CPM or **page 37** of the IFOM CPM. Prior to taking the scheduled break, examinees should communicate their scheduled break status to the Chief Proctor via cell phone. Once contact has been established between the examinee and Chief Proctor, the examinee can proceed with taking the break.

Security Protocol for Remote Administrations

NBME is committed to partnering with medical schools to protect the integrity and security of its examination content. Failure to maintain the security of test materials could impact scores and compromise the validity of the exam for all examinees. When the security of test materials is compromised there are costs to the program to investigate the incident and replace content as appropriate; this process may affect availability and pricing of examinations.

As described in the Web-Based Examinations Chief Proctor's Manual, on **page 40** under Managing the Test Session, "The Chief Proctor is responsible for the overall supervision of examinees and for the continuous monitoring of the actions of examinees. During the administration of the examination, proctors should observe examinees to ensure that no one is using written materials or electronic devices and examinees are not communicating with one another in any way. Examinees are not to be left unattended during the exam session."

The information in the Chief Proctor's Manual applies to remote administrations as well as in-person administrations. In addition to not communicating with one another, examinees testing in a remote setting are not permitted to speak to anyone other than a proctor or technical staff.

Five scenarios have been included below to help guide you while working through and reporting exam security issues that occur during remote administrations. If you have questions or suspect an individual of capturing, copying, transmitting, or communicating test content before, during, or after an administration please notify us immediately at subjectexams@nbme.org in addition to submitting an incident report.

Remote Administrations Exam Security Procedures

Establish examination security protocol and inform examinees of the protocol prior to each exam administration so that examinees know what to expect during their examination session. Your protocol should include the following:

- Inform each examinee that they are not permitted to reproduce examination content by any means, including taking photos or copying items onto scrap paper. If the examinee is observed using or trying to access a phone or reproducing content in any way, their examination will be stopped immediately and the examinee will not be permitted to retest. Additionally, the proctor will notify school officials and NBME which may result in an investigation and disciplinary action.
- Inform each examinee that you may contact them during an examination if you have a question about their behavior or about the examinee's testing environment.
- Identify and communicate the method you will use to communicate with examinees. If you decide to contact examinees by cell phone, be sure to collect cell phone numbers prior to the examination. Also, be sure to share the phone number you will use to contact examinees.
- Advise examinees that they are expected to answer their cell phone if you reach out to them.
- Ensure examinees that if you contact them you will provide directions to stop their examination so they do not lose testing time while you ask questions.
- Explain to examinees that you may restart their examination after you have finished asking questions and the examination will pick up where it left off.

Exam Security Scenarios

Scenario #1: As a proctor, you notice that one of your students lost their Zoom, Webex, or Microsoft Teams connection and you are no longer able to observe the examinee taking their examination.

Proctor Response: As a proctor, you should continuously monitor test takers using Zoom, Webex, or Microsoft Teams. Your first step is to communicate immediately with the examinee to address the situation.

- Contact the examinee via telephone;
- Instruct the examinee to use the key sequence Ctrl + Shift + Q to stop their examination so they do not lose testing time;
- Allow 15 minutes to reestablish the web-conferencing connection;
- If you cannot reestablish the connection, end the exam;
- Submit an incident report for documentation purposes.
- The Incident Report should include the following information:
 - The name of the examinee;
 - The time the web-conferencing connection was lost;
 - Communication that occurred with the examinee;
 - The amount of time you waited to reestablish the connection;
 - If the connection was not reestablished when did the exam end;
 - Include the steps you took to address the issue.

Scenario #2: As a proctor, you witness an examinee holding a cell phone or other electronic device up to the screen of the computer. It appears that the examinee is taking photographs of exam content.

Proctor Response: As a proctor, you should always be vigilant for possible attempts to photograph test content or capture and remove test content by any means. Your first step is to communicate with the examinee to address the situation immediately upon noticing the behavior.

- Contact the examinee via telephone;
- Instruct the examinee to use the key sequence Ctrl + Shift + Q to stop their examination so they do not lose testing time;
- Ask the examinee to explain what they are doing with their cell phone;
- Ask the examinee to stop the behavior as soon as you notice it;
- Remind the examinee that they are not permitted to use a cell phone for any reason other than to communicate with the proctor or as a second monitoring device providing video to the proctor;
- Ask to see the last photo that was taken with the cell phone. If the photo shows exam content ask the examinee to delete the photo in a manner in which you can witness the deleting of the photograph.
- End the exam and inform the examinee that school officials and NBME will be notified of the incident;
- If the examinee did not show you a photograph of exam content, inform the examinee that they must stop any suspicious behavior or you will end their examination;
- If the examinee complies, follow directions on **page 11** to restart the examination;
- If the examinee does not comply, end the exam;
- Submit an incident report for documentation purposes and inform the executive chief proctor of the incident.
- The Incident Report should include the following information:
 - How the cell phone or electronic device was discovered;
 - The time the electronic device was discovered;
 - If or how long the examinee was inappropriately using the electronic device;
 - Where the electronic device was located upon discovery;

- If the examinee was observed using the electronic device during the exam or during a break
- Communication that occurred with the examinee including the examinee's response;
- Include the steps you took to address the issue.

Scenario #3: As a proctor, you observe an examinee who appears to be talking.

Proctor Response: As a proctor, you should always be vigilant for possible attempts between examinees to communicate, capture, or transmit test content. Your first step is to communicate with the examinee to address the behavior.

- Contact the examinee via telephone;
- Instruct the examinee to use the key sequence Ctrl + Shift + Q to stop their examination so that they do not lose testing time;
- Ask the examinee who they were speaking with;
- If the examinee says they were not talking, inform the examinee you saw their lips moving;
- If the examinee states that they are speaking with someone at their home, remind the examinee that they are not permitted to speak with others during their examination;
- If the examinee states that they are reading the test questions aloud, ask them to stop the behavior;
- Inform the examinee that if they do not stop the behavior you will end their examination;
- If the examinee does not stop the behavior immediately, end the exam;
- If the examinee complies, follow directions on **page 11** to restart the examination;
- Submit an incident report for documentation purposes and inform the executive chief proctor of the situation.
- The Incident Report should include the following information:
- The time the behavior was observed;
- A detailed description of the examinee or of each examinee's behavior;
- The amount of time the examinee was engaged in the behavior;
- Communication that occurred with the examinee including the examinee's response;
- If the behavior occurred during the exam or during a break.
- The steps you took to address the issue including if you asked the examinee to show you their surroundings using the laptop camera and your findings.

Scenario #4: As a proctor, you observe an examinee who appears to be looking intently at something other than the computer screen. The examinee may be looking at something in a particular direction, off to the side, or at something on the workstation surface like notes.

Proctor Response: As a proctor, you should always be watchful for suspicious behavior and unauthorized belongings in the examinee's work area. Be ready to ask questions when suspicious behavior is observed. Your first step is to communicate with the examinee to address the behavior.

- Contact the examinee via telephone;
- Instruct the examinee to use the key sequence Ctrl + Shift + Q to stop their examination so they do not lose testing time;
- Inform the examinee that you noticed them looking at something and describe where the examinee was looking;
- Ask the examinee what they were doing;
- Ask the examinee to show you (using the camera on the laptop) the area where they had fixed their gaze;
- If there are notes or materials other than two pieces of scratch paper, ask the examinee to show you the notes or document by holding it in front of the computer camera;
- Take a photograph of the content being displayed, if possible; if not possible copy several lines of text to document the unauthorized material the examinee is using during the exam;

- Ask the examinee to tear up the notes into small pieces and dispose of the notes in front of the computer's camera and end the exam;
- If the examinee is not referring to notes but other material, end the examination and inform the examinee that the incident will be reported to school officials and to NBME.
- If no extraneous materials are discovered but the examinee's behavior remains very suspicious, inform the examinee that if suspicious behavior continues, you will end the exam;
- If the examinee complies, follow directions on **page 11** to restart the examination;
- Submit an incident report for documentation purposes and inform the executive chief proctor of the situation.
- The Incident Report should include the following information:
 - What did the camera view show when focused on the area where the examinee's attention was focused;
 - Were notes or other unauthorized material discovered or was nothing visible;
 - If unauthorized material was discovered, what time was the discovery made;
 - How long was the examinee using the unauthorized material or engaged in suspicious behavior;
 - Where were the unauthorized materials located upon discovery;
 - Was the examinee observed using the unauthorized materials during the exam or during a break
 - Communication that occurred with the examinee including the examinee's response when questioned;
 - Include the steps you took to address the issue.

Scenario #5: As a proctor, you observe on the proctor resource site that an examinee has not answered any test questions. The examinee is taking a three-hour exam and is one-and-a-half hours into the exam. Your first step is to refresh the proctor page on the Proctor Resource Site to ensure the examinee has not answered any test questions. If after refreshing the page, it still appears that the examinee has not answered any test questions do the following:

- Contact the examinee via telephone;
- Instruct the examinee to use the key sequence Ctrl + Shift + Q to stop their examination so they do not lose testing time;
- Inform the examinee that you noticed they are one and a half hours into the exam and have not answered any test questions;
- Ask the examinee why they are not selecting answers and instruct them to start doing so;
- Submit an incident report for documentation purposes and inform the executive chief proctor of the situation.
- Examinees are not permitted to take examinations to preview test questions, for practice, or for any reason other than to obtain a score.
- The Incident Report should include the following information:
 - The time the proctor noticed that the examinee was not selecting answers;
 - Communication that occurred with the examinee including the examinee's response;
 - Include the steps you took to address the issue

See Proctor Security Protocol Checklist on next page.

Proctor Security Protocol Checklist

Be on the alert for....

- Connection disruptions
- Cell phones or other electronic devices used to photograph or capture content
- Examinees talking or moving their lips
- Examinees looking in a direction other than the computer screen
- Unauthorized notes or belongings in examinee's work area
- Examinees not progressing through the test questions

Take immediate action...

- Contact examinee to inquire about the behavior
- Ask examinee to temporarily stop the exam while you investigate
- Remind examinee of examination rules and security protocol
- Issue a warning to the examinee to discontinue the behavior
- End examination, if warranted
- Submit an incident report
- Inform the Executive Chief Proctor (ECP) of the incident

Submit an incident report and include...

- The time the incident occurred
- The specific nature of the incident/behavior
- If the incident occurred during the exam or a break
- How long the behavior was going on
- Location of unauthorized items
- Specifics of the communication with the examinee (proctor and examinee responses)
- Specific steps you took to address the issue and outcomes/findings

End Exam Session

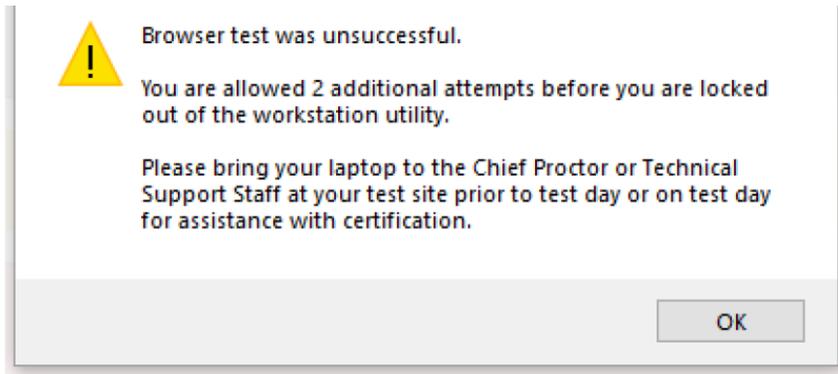
- When all examinees are complete, follow the instructions on **pages 33-37** of the Web-based Chief Proctor's Manual or **pages 31-33** in the IFOM Chief Proctor's Manual to end the exam session.
- Each examinee should notify the chief proctor via chat or cell phone that he/she has completed the examination. Once contact has been established with the chief proctor, each examinee should be directed to rip up his/her examinee instruction sheet/notes (if the instruction sheet was printed) in the chief proctor's site before ending the conferencing/testing session.
- End the video conference session (Zoom, Webex, Microsoft Teams)

Troubleshoot Problems

See **pages 47-53** of the Web-based Chief Proctor's Manual or **pages 41-48** in the IFOM Chief Proctor's Manual for troubleshooting pre-test day and test day issues. **Exceptions for remote proctoring are noted below:**

Recording Program detected during Workstation Certification Prior to Test Day

Examinees will be instructed to bring their laptop to the Chief Proctor or Technical Support Staff for certification (as shown in the screenshot below) if either of the following occurs.



- **A recording application or process is detected on the examinee's personal laptop**
- **The examinee is locked out of the laptop certification utility**
 - ▶ If a recording application or process is detected on the examinee's personal laptop three or more times within a 28 day period, the laptop certification utility will lock, preventing the examinee from running it again for 28 days until the lock expires. This lock is a security feature by the NBME, designed to prevent examinees from continually trying to circumvent the system.

Exception for remote proctoring: Since examinees cannot bring their laptop onsite to IT staff to run the Technical Staff version of the Workstation Utility and identify the recording program, advise examinees not to take further action and that the issue will be identified and resolved when they launch the exam on test day. Do not attempt to access the examinee's computer remotely to troubleshoot. The Secure Browser will detect the remote application as a recording program.

Closing the Secure Browser

Instruct examinees to close the Secure Browser by holding **CTRL+Shift+Q** before attempting to troubleshoot any problems remotely. This will also prevent the examinee from losing testing time.

Handling Technical Interruptions during the Test Session

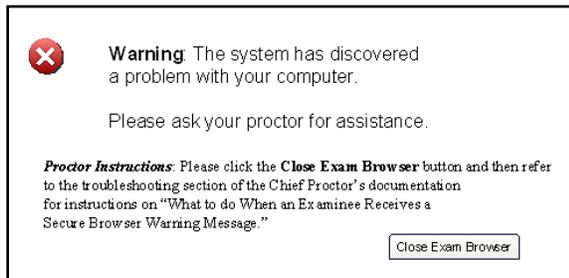
If you need examinees to perform any troubleshooting actions on their device, they will first need to exit the Secure Browser by holding down **CTR+Shift+Q** on their keyboard. Using this key sequence will prevent examinees from losing testing time while you or your IT staff engage in troubleshooting problems. See **page 3** "Communicating with Examinees during the Session".

For non-technical interruptions, follow the instructions for taking “**Unscheduled Breaks**” on **page 3**.

Recording Program detected Prior to Exam Launch on Test Day

If a recording program is detected on the examinee’s computer on test day the examinee and the Chief Proctor will see the messages below:

Warning Message on Examinee Screen:



Warning Message on Chief Proctor Monitor Screen:



To disable a detected recording process:

1. Instruct examinee to click the **Close Exam Browser** button on their screen to log out of the **Secure Browser**.
2. Provide the name of the recording application/process detected to the examinee privately via Chat.
3. Instruct the examinee to disable the recording application as follows:
 - *Windows:* Open **Task Manager**, press **CTRL+ALT+DELETE** on the keyboard, and then click **Task Manager**. Click the **Processes** tab and select the running process from the list. Click **End Process** to disable the running process.
 - *Mac:* Open **Activity Monitor**, select the **Go** menu from the desktop and click **Utilities**. Click **Activity Monitor** and select the running process from the list. Click **Quit Process** and then **Quit** to disable the running process.
 - Once the process is successfully disabled notify the Chief Proctor. You will be provided with a new **Examinee Start Up Code**. Once you receive the new code, launch the browser <http://wbt.nbme.org/exam>, enter the Examinee Start up Code and click on **New Examinee** to proceed with launching the exam.
4. Record the Incident in the **Test Administration Report**.
5. If another process is detected, repeat the above steps to disable the detected process.

Losing Web Conferencing Visibility of an Examinee

If an examinee is testing and their video feed goes dark or you lose video conferencing visibility, call or text the examinee and advise that they stop the clock and close out of the exam by holding down **Ctrl+Shift+Q**. Once the examinee is out of the exam, instruct the examinee to reconnect to the video conference session and follow the instructions on **page 11** for approving a restart.

Approving Restarts

If an interruption occurs during the exam that requires the examinee to restart:

1. Advise the examinee to close the web browser by holding down **Ctrl+Shift+Q** (see entry “Communicating with Examinees during the Test Session)
2. Text the **Examinee Start up Code** to the examinee’s cell phone (or communicate the code via chat with instructions to document the code on the back of the Examinee Instructions)
3. The examinee will launch the Secure Browser <http://wbt.nbme.org/exam>, enter the Examinee Startup Code and select Restart Examinee.
4. When the examinee enters the Examinee Start-Up Code and the biographic information requested, you will be prompted to click the **Approve** link in the Action column on the Chief Proctor screen to approve the examinee’s request to restart the exam.

If the **Approve** link does not appear, click the **Refresh** icon. The examinee will restart from the point of interruption in the exam.

Troubleshooting Home Firewall and Bandwidth Issues

Please coordinate with your institution’s IT staff to work with examinees to troubleshoot home firewall and bandwidth issues.

On test day, if the examinee reports bandwidth issues such as repetitive screen freezes, extreme slowness during testing, or test items failing to fully load on screen, instruct the examinee to close the exam browser by holding down **CTR+ Shift+Q**.

If the examinee has access to another computer, ask the examinee to try restarting their exam on a back-up computer. If the problem persists, consider rescheduling the exam for this examinee or ask your IT staff to attempt the troubleshooting steps below remotely:

1. Go to <http://readiness.nbmesr.programworkshop.com> and select the **Bandwidth Check**. The examinee’s upload speed should be 0.256 Mbps or higher.
2. Check the examinee’s computer for processes taking up excessive CPU usage such as Adware or Spyware programs and disable any browser plug-ins.
3. Temporarily disable any virus checkers, personal firewalls or browser toolbars or plugins.
4. Contact the Chief Proctor when your remote session is complete to approve the examinee as a restart.

Black Screen

If the examinee reports seeing a black screen at the end of the exam, instruct the examinee as follows to exit the Secure Browser:

Mac OS: reboot your computer

Windows OS:

1. Press **Control+Alt+Delete**
2. Click **Sign Out**.
3. Log back on to your computer or try rebooting if you encounter problems with the above steps.

Appendix

Examinee Read Aloud Instructions

Be sure you have a count of all examinees prior to beginning the exam session.

Read Aloud Instructions Prior to Beginning the Examination

Exam Timing

The time allotted for your exam will be displayed in the *Overview of Your Test* screen upon starting the exam.

Test Day Rules

Your work area must be private and exclude all others.

Ensure unauthorized personal items and/or devices are not in your work area. These items include, but are not limited to the following:

- Headphones and earbuds
- Beverages or food of any type
- Secondary monitor
- Coats, outer jackets, or headwear
- iPads/tablets
- iPods/media devices
- Watches with alarms, computer or memory capability
- Calculators
- Paging devices
- Recording/filming devices
- Reference materials (book, notes, papers)
- Backpacks, briefcases, or luggage

Cell phones are only permitted for use when communicating with a proctor. Prohibited use of a cell phone may result in disciplinary action by your medical school and by NBME.

Talking to anyone other than a proctor during the examination is prohibited. Reading test questions aloud during the examination is also prohibited.

Your face (chin to forehead) must be in camera view when you are taking the examination.

Breaks

Taking an unscheduled break during the examination is discouraged, but if you need to take an unscheduled break to use the restroom, notify the proctor via phone that you will be taking a break and notify the proctor when you have returned from the break.

CBSE & CCSE include one scheduled break between sections 2 & 3. Examinees must notify the proctor via phone prior to taking their scheduled break and upon returning from their scheduled break.

You are not permitted to access personal belongings during unscheduled or scheduled breaks.

Scratch Paper

You may use one piece of scratch paper and a pencil or pen to make calculations and notes during your examination. You must show your blank sheet of paper, front and back, to the proctor prior to starting the exam. You may not begin to make notes until the exam has started. Notations including the proctor's phone number and start-up code are acceptable.

Upon completing the final/last test question you are required to notify the proctor via phone that you are ready to shred/tear your note paper while the proctor is viewing. Be sure the proctor has responded and via phone and is watching before shredding your note paper.

Communicate with the Proctor

If you need to communicate with your proctor for any reason during the examination, send a message via phone for assistance.

Exam Integrity

Any attempt to capture, copy, transmit, or communicate test content by any means before, during, or after an administration is strictly prohibited. If anyone is observed attempting to reproduce exam content during the examination, your exam will be stopped immediately. The proctor will notify school officials and NBME which may result in an investigation and in disciplinary action.

Are there any questions?