Standard Operating Procedure (SOP)
Ph.D. Admission Online Test using remote monitoring, April/May 2023

I. **Instructions about devices required for the online test:**

A. You will require two devices:

   1. A Primary smartphone (with SAFE App installed)
   2. A secondary device (a laptop with a webcam, or a desktop with a webcam and microphone, or another smartphone with a camera.)

B. You should connect both devices to the internet. Both devices should have sufficient charge (or UPS) to run for at least 2.5 hours without a regular power supply and sufficient disk space to store recording, as mentioned below.

C. The primary smartphone will be used for the SAFE App on which the exam is to be conducted. The secondary device will be used for proctoring.

D. SAFE App should be downloaded and installed on the primary smartphone from Google Play Store or Apple Store. The exam will be conducted using SAFE. More instructions about the app and the procedure have been provided in the instructions document.

E. The secondary device must have:
   1. A webcam application
   2. A screen recording application
   3. A video-conferencing application installed.

F. Recommended screen capture application for the secondary device:
   1. On all platforms: Screen Recorder Chrome Extension should be the first preference.

   2. Alternate options for screen recorder applications:
      a) Linux: Use the Cheese app (preinstalled on Ubuntu).
         Kazam, Recordmydesktop (Make sure it can record audio also)
      b) Windows: Screen Recorder Pro.
      c) Mac: QuickTime Player

   3. For smartphones activate the screen recorder application, which is available on both, android and iOS, by default.

Test the screen recorder you install and your system by recording your screen and microphone audio for 2.5 hours and save the file. This trial is to ensure that you do not lose the recording during the exam. You will be asked to upload the recording if you qualify for the interviews.

II.   General Instructions for the test:

A.   Find a convenient place to take the exam (area should be well lit, be quiet, nobody should be moving around in the background, etc.)

B.   Keep your Government-issued ID Card handy to record your identity at the time of taking the examination. This will be used to verify your identity.

C.   Keep a sufficient number of blank papers for rough work while writing your examination.

D.   Keep a pen, paper, water bottle, on your table within easy reach. All of these items should be visible from the laptop webcam. *(For this, you should be seated at a sufficient distance away from the laptop.)*

E.   You are not permitted to get up from your seat, go to the washroom, etc., during the test.

F.   You should not approach the laptop computer or do anything on it after the start of the recording until the end of the exam.

III.   Full-View Proctoring Instructions before Start of Exam:

A.   The secondary device should be connected to the internet and kept at a suitable distance from you. It should be facing you so that your face, hands, answer papers, and primary smartphone are visible. Part of the surrounding area near you should also be seen on camera.

B.   Ensure that the time on the secondary device is correct and shown somewhere on the screen. The screen recorder software would then also record the time displayed on the screen.

C.   Start the screen recording application on the secondary device.

D.   Connect the secondary device to the Physics Department's meeting link on the day of the exam. The secondary device's camera should be ON. Your video should be shown in ***nearly full-screen size***. No other application or tab should be open on the secondary device.

E.   To preserve bandwidth, switch off incoming video on web-conferencing software.

F.   Turn the volume of the secondary device to low. Make sure that your secondary device microphone is not accidentally muted. The microphone must remain active for the entire duration of the exam.

G. The screen recording application will automatically record your video being displayed on your screen.

H. In case of any internet disruption, immediately turn on the laptop's webcam application to show your video on the screen. DO NOT turn off your screen recorder in any scenario.

IV. **Full-View Proctoring Instructions at the Start of Exam:**

A. After sitting down at the place from where the exam will be taken, login into the SAFE app using the Primary smartphone. Connect to the page name shared with you. The registration code will also be provided in advance.

B. SAFE may ask to take a selfie. Take a photo that clearly shows your face.

C. From your seat, show your Government-issued ID card to the laptop webcam running the meeting. Next, show the screen of your smartphone running SAFE app to the laptop webcam.

D. The exam will start at the specified time. You are allowed to use blank papers for rough calculations.

E. You will need to select the correct options on the SAFE App itself.

F. NOTE THAT ALL THIS SHOULD BE DONE IN ONE SESSION WHILE SITTING.
No breaks are allowed for any reason, and getting up from your seat or leaving the exam location may be construed as indulging in unfair practice.

G. You can also not stand up from the spot and leave the meeting and/or turn off screen recording and webcam before the prescribed exam time is over, even if you submit your answers on the SAFE App before time.

V. **Full-View Proctoring Instructions after Submission of Exam Paper:**

A. End recording of screen on your laptop computer. Save the recording video file on your hard disk.

B. Upload the video file on a file share portal (onedrive/dropbox/google drive, etc.)

C. Submit the link to download the file when asked before the interview(s).

D. The file must be maintained at the link provided by you until the results are announced if you qualify for the interview(s).

VI. **Disruption of the Internet during Full-View Proctoring Exam:**

A. Immediately turn on your webcam app and get it to display your video if your video feed stops in the video conferencing application.

B. The recording of the screen on your laptop computer with your video feed will permit us to review the entire exam session after you have uploaded it. The file can be uploaded after the internet has been restored.

C. Don't worry if there is disruption of internet on your smartphone while submitting the answer paper. The answer sheets (photographs) taken using SAFE will be locally stored and then uploaded on the server as and when the internet is re-established. Even if that happens after the end of exam time, as long as the paper was submitted using SAFE within time, the paper will be counted as submitted on time.

D. If the SAFE app shuts down unexpectedly, just open it again and resume the exam from where you left.