Instructions:

- You will get 15 minutes before the start of the examination to read the instructions and questions.
- After the reading time of 15 minutes, you will be taken to the observation hall.
- The total time that you get with the telescope is 8 minutes.
- After that, you will be taken to the classrooms and will have 17 minutes to finish your answers.
- Take all of your papers to the observation hall.

OT1 (The Moon) (32 points)

You have 2 minutes 30 seconds to point and focus the telescope to the Moon. If you are not able to point it within 2 minutes 30 seconds ask the supervisor to point it for you. (6 points)

A zoomed-in view of the Moon will be shown for 90 seconds and a zoomed-out view of the Moon will be shown for next 60 seconds.

On your answer sheet:

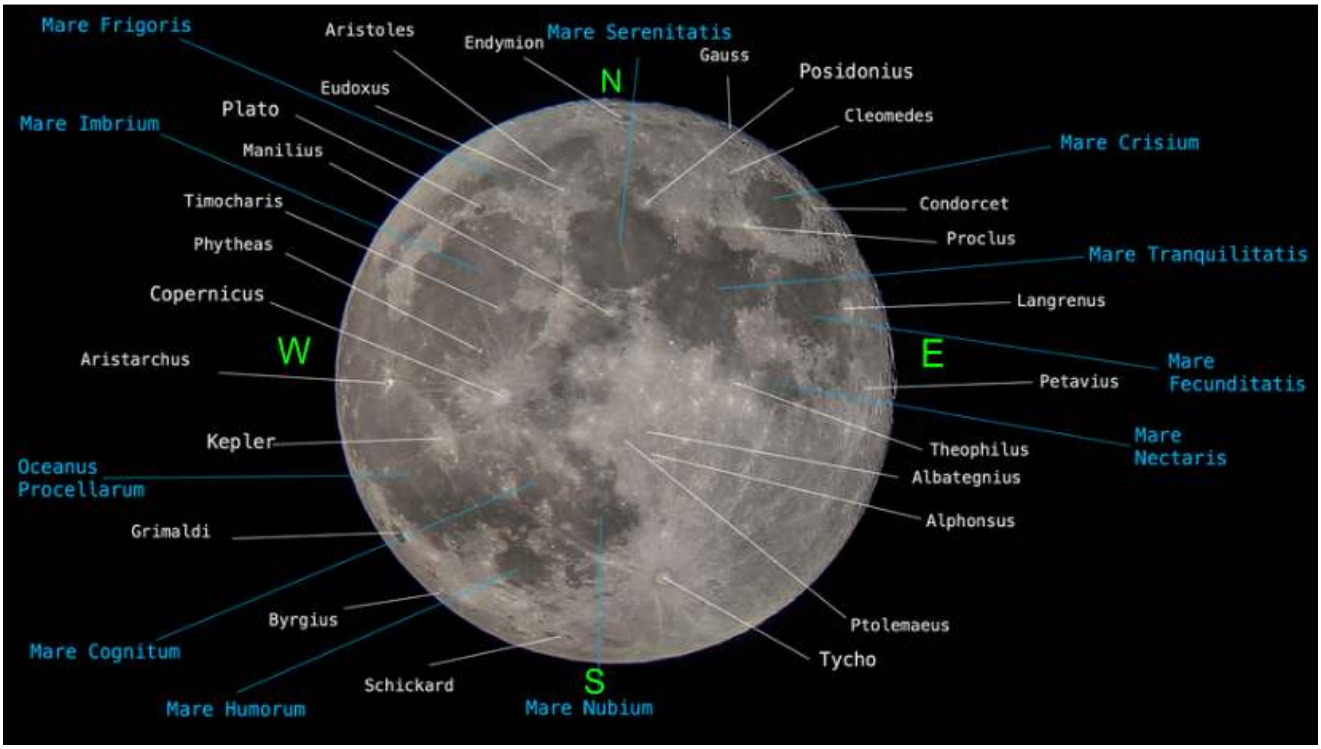
1. Draw the Moon, including the lunar terminator. (4 points)
2. Label the cardinal points on the Moon drawn. (4 points)
3. With the help of the moon chart provided on the next page, identify three visible craters and three maria and mark their positions on your drawing. (12 points)

Based on your observations, you have to complete a table of information about the moon. (6 points)

OT2 (16 points)

An animation of a planet and its moons will be displayed on the screen. The animation corresponds to a single location over a 3-day period.

1. Identify the planet shown in the images by ticking the correct option.
2. Draw initial and final positions of the moons on your answer sheet and label the moons as A, B, C, and D. E.g. if one moon is labeled as A in first drawing, the same should be labeled as A in second drawing.
3. Arrange the labels (i.e. A, B, C, D) of the observed moons according to their size from largest to the smallest.


Mare Frigoris
Aristoles
Endymion
Mare Serenitatis
Gauss
Posidonius
N
Eudoxus
Plato
Cleomedes
Mare Imbrium
Manilius
Mare Crisium
Timocharis
Condorcet
Phytheas
Proclus
Mare Tranquilitatis
Copernicus
Langrenus
Aristarchus
W
E
Mare Fecunditatis
Petavius
Kepler
Theophilus
Mare Nectaris
Oceanus Procellarum
Albategnius
Alphonsus
Grimaldi
Byrgius
Ptolemaeus
Mare Cognitum
Tycho
Schickard
S
Mare Humorum
Mare Nubium