Observational Problem

Main Telescope (Total Duration: 20 minutes)

1. Point your telescope to NGC 6475 (M7)
   RA (J2000): 17h 53m 54s
   Dec (J2000): -34° 49'

   Show the object to your telescope assistant. If you fail to find the object in the first 10 minutes, ask the assistant to help, but you will lose the mark. (23 points)

2. Write down the cardinal directions (North, South, East and West) on Chart 1 in the answer sheet. (10 points)

3. Three stars of M7 are missing from the Chart 1. Mark the position of the missing stars with crosses (x). (21 points)

4. The apparent magnitudes of comparison stars A, B and C are 7.6, 7.2, and 5.6 respectively. Estimate and write down the apparent magnitudes of the missing stars beside respective cross marks. (21 points)

5. Estimate the FOV of the instrument, using the given stopwatch. Show your calculation in the answer sheet. (25 points)

Main Telescope Answer Sheet

Chart 1

Chart size: 1° x 1°

