The 1st International Olympiad on Astronomy and Astrophysics

Chiang Mai, Thailand

Experimental Competition (Observation)

Sunday, 2 December, 2007

Please read this first:

1. There are 2 parts to the questions. You have to use the provided equipment to point, observe and answer where appropriate.
2. The time available is **40 minutes** in total for the experimental competition (Observation), **20 minutes for each part**.
3. In Part I, use only the provided celestial object pointer to point at the target specified in the questions. **No other pointer is allowed**. The marker (examiner) at each observation station will then mark the answers directly in the question sheet. You must not write anything in the sheet apart from your country code and student code.
4. In Part II, use the provided binoculars to observe the objects and then answer the questions by writing or drawing directly in the question sheets.
5. At the end of both parts, leave the question sheets with the marker (examiner) at each observation station. You are not allowed to take any sheets of paper out of the observation station.
6. Use only the provided pen or pencil.
7. Students given questions in English and national language can answer in any one sheet but must return both to the marker (examiner).
8. Fill the boxes at the top of each sheet of paper with your country code, your student code.

Country Code	Student Code

PART I: Use the provided celestial object pointer (total 10 points)

1.1 Move the pointer along the celestial equator. **(1 point)**

✓ ✘

1.2 Aim the pointer at the vernal equinox. **(1 point)**

✓ ✘

1.3 In the constellation of Pegasus and its vicinity there is an obvious square of bright stars (*Great Square of Pegasus*), aim the pointer at the brightest star of the square. **(2 points)**

✓ ✘

1.4 Aim the pointer at the star named alpha-Arietis (α-Ari). **(2 points)**

✓ ✘

1.5 Start from the star named Aldebaran (α-Tauri) in the constellation Taurus, turn the pointer 35 degrees northward followed by 6 degrees westward (in equatorial coordinate). Then, aim the pointer at the brightest star in the field of view. **(4 points)**

✓ ✘

Signature of Marker_____