

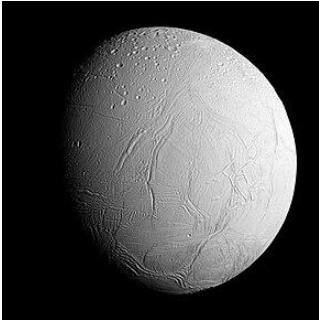
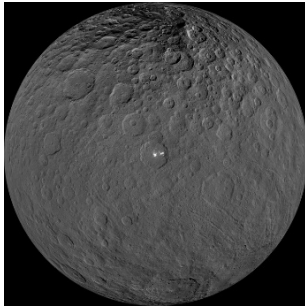
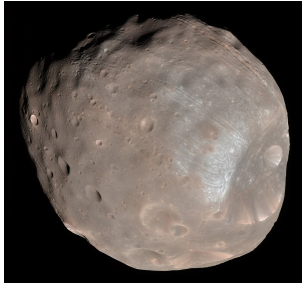

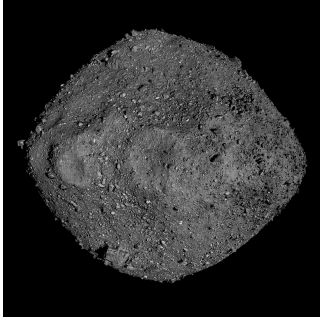
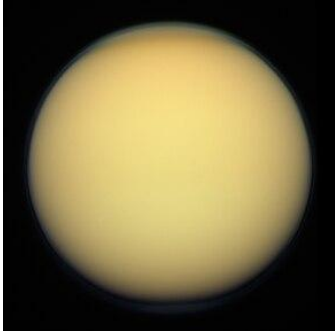
OC1 (45 points)

The map in the answersheet represents the sky in azimuthal equidistant projection. The Zenith is at the center of the chart.

1. Estimate the latitude of the location from where this sky map is captured. [4 points]
2. Label the cardinal points(N, E, S, W) on the map and mark the three planets from the Solar System in the sky map with a small square around each of them. [7 points]
3. Draw on the map with continuous lines the celestial equator (EQ), the ecliptic (EC), and the local meridian (ME) and label them. [4.5 points]
4. Trace 10 constellations in the sky map and label them as C1, C2,.....,C10 and write the corresponding latin name of the constellations or IAU code in the table below. [10 points]
5. Identify and circle the 4 brightest stars in the given sky map. Label the star from S1 – the brightest, and continue with the fainter ones till number S4 for the faintest. Fill in the following table the Bayer designation or the official IAU name of the four identified stars. [6 points]
6. Mark (with a small circle) positions of the following objects and label them. [10.5 points]
 - M42
 - M81
 - M41
 - M31
 - γ Ori
 - α Per
 - α Cyg
7. Estimate the equatorial coordinates of the star Aldebaran (α Tau). [3 points]




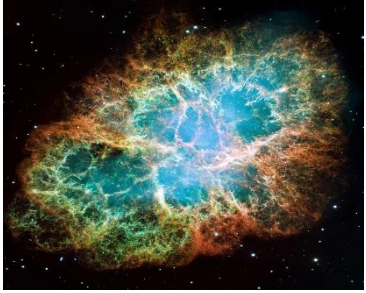

OC2 (9 points)

In the table given in the answersheet, fill in the numbers of the pictures as per their category.

1. 	2. 	3. 
4. 	5. 	6. 

OC3 (18 points)

Complete the table given in the answersheet regarding the objects below:

Object	Image	Object	Image
O1		O4	
O2		O5	
O3		O6	