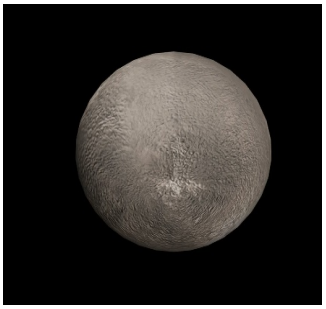
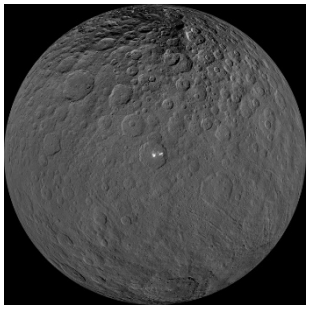
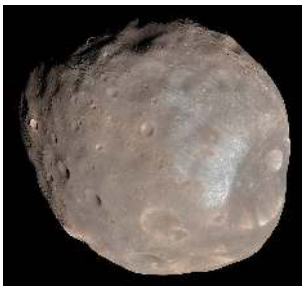
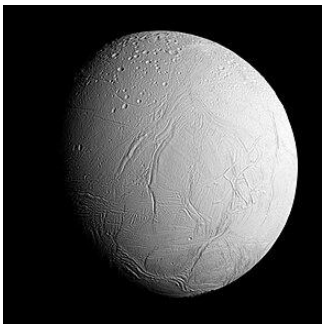
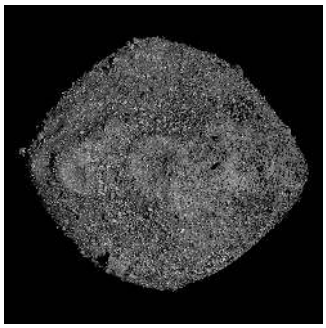
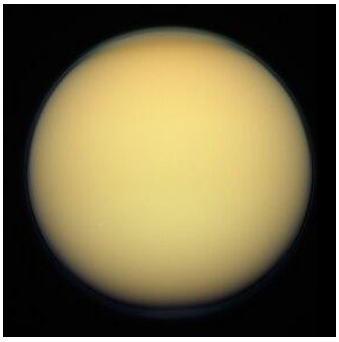
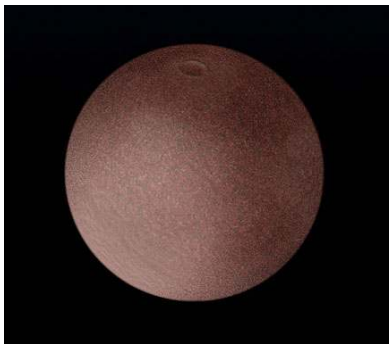
OC1 (43.5 points)

The map in the answersheet represents the sky somewhere in Nepal. The Zenith is at the center of the chart.

1. Estimate the latitude of the location from where this sky map is captured. [2.5 points]
2. Label the cardinal points(N,E,S,W) on the map and spot three planets from the Solar System in the sky map.[1x7 = 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.[1.5x3 = 4.5 points]
4. Trace 10 constellations in the sky map and label them with numbers and write the corresponding latin name of the constellations or IAU code in the table below. [1x10 = 10 points]
5. Identify and mark the 4 brightest stars in the sky map below. Number the star from 1 – the brightest, and continue with the fainter ones till number 4 for the faintest. Fill in the following table the Bayer designation or the official IAU name of the four identified stars. [1.5x4 = 6 points]
6. Mark (with a small circle) positions of the following objects and label them. [1.5x7 = 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]

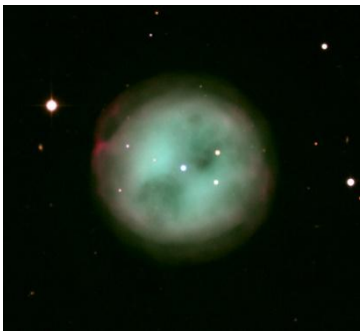
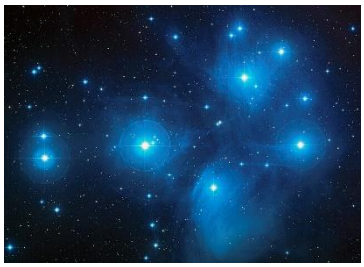
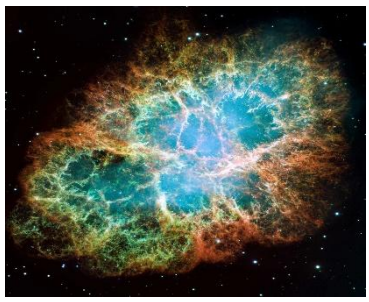
OC2 (13.5 points)

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

1. 	2. 	3. 
4. 	5. 	6. 
7. 	8. 	9. 

OC3 (18 points)

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

Object	Image	Object	Image
O1		O4	
O2		O5	
O3		O6	