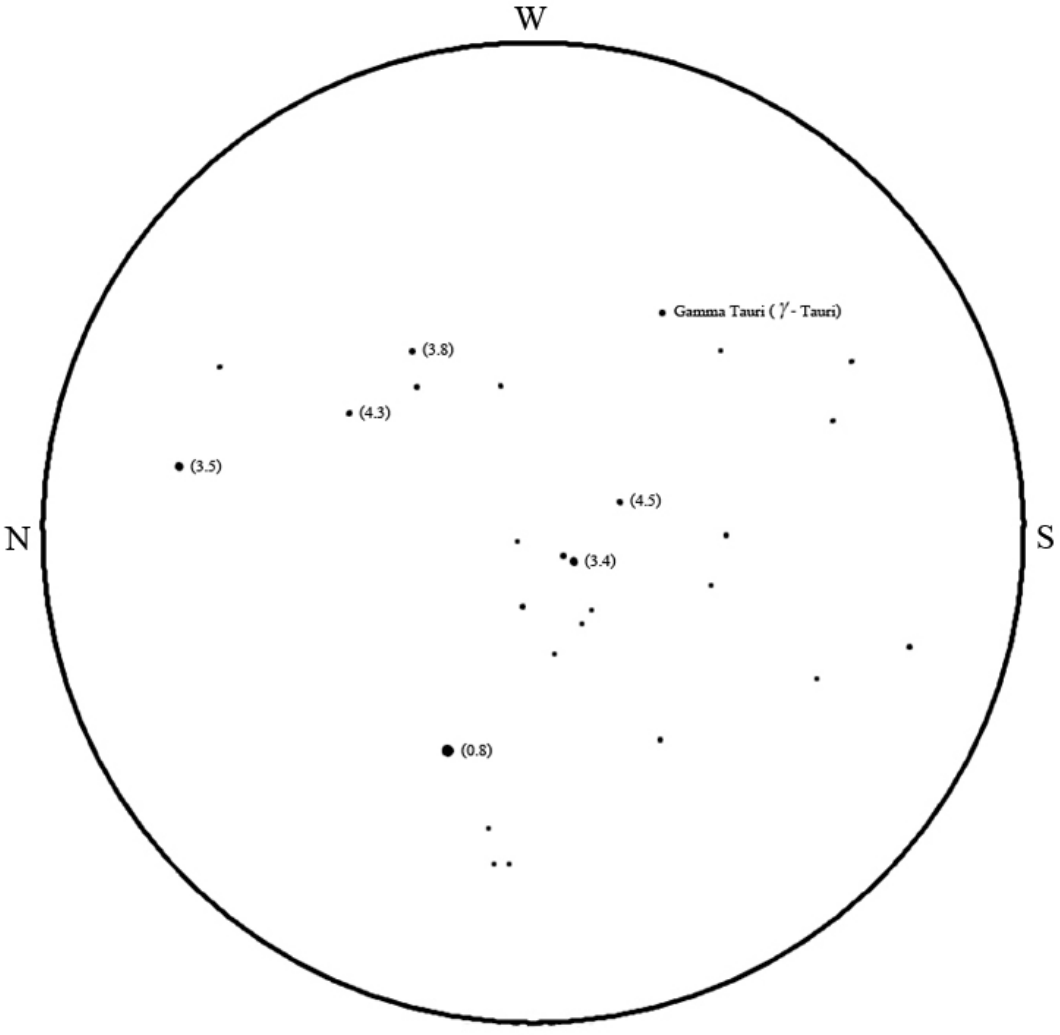
Marking Scheme for Observation Part II

PART II : Use the provided binoculars

2.1 The open star cluster "Hyades" in constellation Taurus is one of the nearest clusters to us, being only 151 light years away. From the provided chart with brightnesses of some stars indicated by the apparent magnitude in parentheses, please estimate the brightness (in apparent magnitude) of the star Gamma-Tauri (γ-Tauri) to the nearest first decimal digit. (5 points)



7 X 50 Binocular FOV

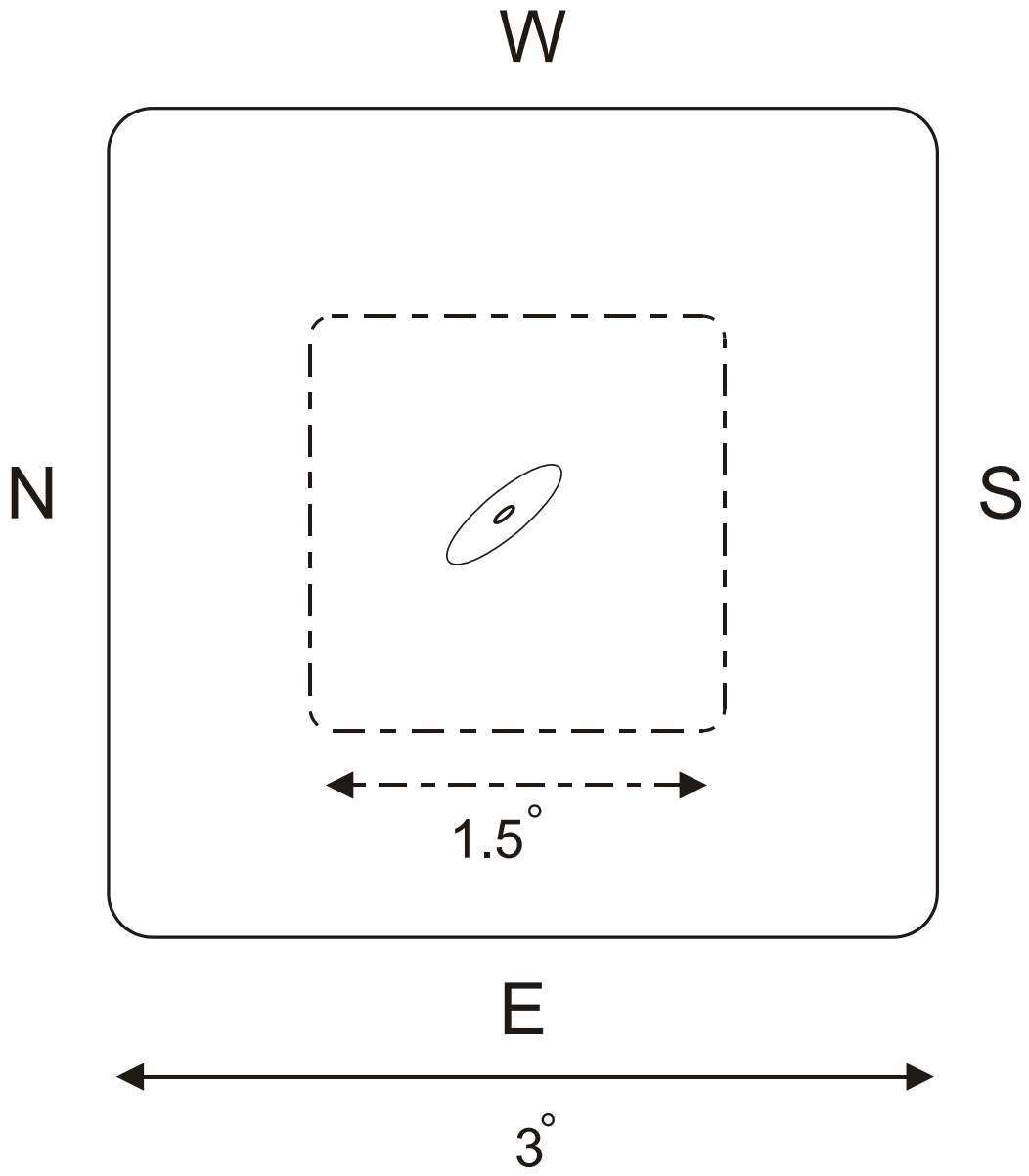
Answer : The correct value of brightness of γ-Tauri = 3.6

If the answer is 3.5, 3.6 or 3.7 (5 points)

If the answer is 3.3, 3.4, 3.8 or 3.9 (3 points)

If the answer is none of the above (0 point)

2.2 Observe the Andromeda Galaxy (M31) then draw the approximate shape and size of the galaxy that you see through the binoculars in the frame below with correct orientation. (5 points)



Correct shape and size (between 0.5 to 1 degree) – 3 points

Correct orientation (within 23 degrees of the picture) – 2 points