

nvision

Celestial Inquisition 3

Problem Statement

A (Messier object) is a galaxy. This galaxy resides in constellation **B**. Recently; astrophysicists have been receiving some interesting information about **A**.

They have recorded some facts about **C**.

1. Object **C** has been sending out radiation which relates to nothing else in the universe.
2. It does not look like a supernova radiation or from a black hole.
3. **C** appears to be moving very fast (apparently faster than speed of light!).
4. **C** resembles a celestial object formed when a giant massive star explodes and starts 'eating' or 'swallowing' the gas of surrounding stars.

B has a famous asterism which is confused with **B** itself. This asterism is used for purpose similar to that of magnetic needles.

Hint-(Asterism is a group of recognizable stars which are a part of a constellation).

Find **A**, **B**, **C**. Each of **A**, **B**, **C** carries 10 marks. Explain what is different in its radiation when compared to supernova radiation. Also, if able, try to explain why objects like '**C**' are rarely found in our Milky Way.