1) Compare Geostationary Satellites and Sun synchronous satellites.

Ans) Artificial satellites can be classified into two as geostationary and sun synchronous satellites.

Geostationary Satellites

These are the satellites that move in accordance with the earth's rotation.

- They orbit the earth at an elevation of about 36000 kilometres above the earth.
- One third of the earth comes under its field of view.
- As the movement of these satellites corresponds to the speed of rotation of the earth, it says constantly above a specific place on the earth.
- This helps in continuous data collection of an area.
- It is used in telecommunication and for weather studies.
- The INSAT series launched by India are geostationary satellites.

Sun synchronous satellites

Sun synchronous satellites are the artificial satellites that revolve around the earth along the poles. Compared to the geostationary satellites, they travel at a lower elevation. The features of these are as follows:

- The orbit of these satellites is about 900 kilometres below the earth's surface.
- The field of view is less than that of the geostationary satellites.
- Repetitive data collection is possible.
- Used data for collection on natural resources, land use, groundwater, etc.
- These satellites are mainly used for remote sensing purposes.
- Those in the IRS series are Geostationary satellites.

2) Which are the remote sensing satellites that India has launched? Find out with the help of internet.

Satellite	Launched Date	Launching vehicle
1. GSAT -31	Feb -06-2019	Ariane-5VA - 247
2. GSAT - 7A	Dec - 19-2018	GSLV -FII
3. GSAT -11	Dec- 05- 2018	Ariane-5VA-246
4. GSAT -29	Nov - 14 - 2018	GSLVMk III- D2
5. GSAT -6	Mar- 29-2018	GSLV - F08
6. IRNSS-11	April - 12-2018	PSLV - C41
7. GSAT -17	June - 29 - 2017	Ariane -5VA-238
8.GSAT - 19	June - 05 - 2017	GSLVMk III- D1
9. GSAT -9	May - 05 - 2017	GSLV - F09
10. GSAT -18	Oct - 06-2016	Ariane -5VA-231
11. IRNSS - 1E	20 - Jan-2016	PSLV - C 31
12. IRNSS - 1F	Mar - 10- 2016	PSLV - C32
13. IRNSS - 1G	Apr - 28-2016	PSLV - C 33
14. Cartosat - 2c	June-22-2016	PSLV - C 34
15. GSAT -15	Nov - 11 - 2015	Ariane - 5VA-227
16. GSAT -6	Aug - 27-2015	GSLV - D6
17. IRNSS-10	Mar - 28-2015	PSLV- C- 27
18. GSAT - 16	Dec - 07 - 2014	Ariane - 5VA-221
19. GSAT -14	Jan - 05-2014	GSLV - D - 5
20. IRNSS - 1C	Oct - 16 - 2014	PSLV - C - 26
21.GSAT - 7	Aug - 30 - 2013	Ariane - 5VA-215
22.IRNSS-1A	July - 01-2013	PSLV-C22
23. GSAT -10	Sept - 29-2012	Ariane - 5VA-209
24. GSAT -12	July-15-2011	PSLV - C-17
25. GSAT -8	May 21- 2011	Ariane - 5VA-202