



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)



19AST301 SPACE PROPULSION QUESTION BANK

2Mark Questions

1. What you meant by cryogenics?
2. Name the important critical components of gas liquefaction systems
3. What is super conductivity? And notify examples
4. What is Type I and Type II superconductors?
5. Discuss any three applications of cryogenics in space technology.
6. Write a short note on liquid level gauges.
7. Explain the various properties of Helium IV?.
8. Explain the application of cryogenics in the field of electronics industry
9. Distinguish between Ortho Hydrogen and Para Hydrogen
10. Explain two applications of superconductivity

13 &14 Marks Question

1. Explain with neat sketch with limitation merits, demerits
(i) Nuclear propulsion system (ii) Solar sail.
2. Explain rocket performance analysis coefficients with formulae
3. Explain the various features of cryogenic fluid transport system
4. With neat sketches explain the functions of the different components of a typical Dewar vessel
5. Analyze the different types of insulations used in cryogenic equipments
i) Gas filled powder and fibrous materials
ii) Solid foams.
6. With neat sketches, explain any one liquefaction system for hydrogen.
7. Explain rocket performance analysis coefficients with formulae.
8. Explain with neat sketch with limitation merits, demerits
(i) Nuclear propulsion system
(ii) Solar sail
9. With a neat sketch explain the functions of different components of a typical Cryogeni liquid storage vessel
10. Explain the features of cryogenic fluid transfer systems
11. Analyze in detail the different types of insulations used in cryogenic equipments with neat sketches.
12. Illustrate the working of a simple cascade gas liquefaction system