



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)



19AST301 SPACE PROPULSION QUESTION BANK

2Mark Questions

1. Explain working principle of heat exchangers used in the Liquefaction process?
2. What is cryo-pumping?
3. List out the variables affecting Heat Exchangers
4. What is propellant stability?
5. What are the classifications of solid propellants and applications in each?
6. Explain recuperation and regeneration?
7. List out the instruments in cryogenics
8. Explain droplet combustion
9. State working principle of the ignition system.
10. List out the factors affecting burning rate.

13 &14 Marks Question

1. Write a case study on engineering applications of cryogenics
 2. What are the types of heat exchangers and explain in detail any two
 3. Explain i) Thermal Decomposition of solid propellant
 4. ii) Combustion of nitramine
 5. With neat sketch explain burning characteristics of propellant
 6. With neat sketch explain the types of cryogenic pumps
 7. Evaluate droplet combustion in unsteady environment
 8. Briefly explain the application of Cryogenics
 9. Explain in detail the types of heat exchangers
 10. Explain the recent research progress in burning rate catalyst
 11. Explain in detail the thermal decomposition of solid propellant
 12. Brief the advancements in Helium Cryogenics
 13. Explain the unsteady droplet combustion with droplet heating
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