

Department of Aerospace Engineering
19AST301– SPCE PROPULSION

Question Bank for IA-1

I. 2 Mark Questions

1. What is propellant Grain?
2. Define effective exhaust velocity.
3. List out advantages & disadvantages of solid propellant.
4. Define progressive and regressive Burning?
5. Explain the function of injector?
6. Name the hardware components of solid rockets..
7. State any two properties of solid rocket propellant
8. Write any two application of hybrid rocket propellant?
9. Distinguish between direct and indirect extrusion.
10. Define TVC.

II. Big Questions

1. With a neat sketch explain the different types of propellant grain structures used in solid Rocket motors.
2. Write the working principle of solid propellant rockets with neat sketch.
3. Explain the Principle and operation in Liquid propellant rockets with neat sketch.
4. Draw the sketch of Hybrid rocket propellant with their advantages and disadvantages.
5. State the application, Advantage, Disadvantage of Liquid Rocket propellant.
6. How do you classify solid propellant rockets? Write down the desired properties of a solid propellant rockets
7. With a neat diagram Explain solid propellant grain and grain configuration.
8. Describe the working principle of solid propellant rockets with advantage, disadvantage and its application.
9. With neat sketch explain the operation of Gas pressure feed systems and Turbo pump feed system employed in Liquid propellant rockets.
10. Discuss about the cooling methods in liquid rocket propellant.
11. Enumerate the important hardware components of solid and the selection criteria of solid propellants.
12. Explain the Thrust Control in Liquid Propellant.