Question Bank for PG Course
অঙ্ক (Mathematics)
দশম (খ ২) পত্র (Paper - XB(ii))
Magnetohydrodynamics : PGMT-XB(ii)
(OLD SYLLABUS)

1.   What is the current continuity equation ?

2.   What is the differential form of the Biot-Savarat law?

3.   When the thrust of MFD submarine is obtained from Lorentz force?

4.   What is time, for a conducting liquid, for which the flux of the magnetic field through a closed circuit of a fluid particles move with fluid?

5.   What is statement of Faraday's Law?

6.   What is the behaviour of the normal component of electric displacement and tangential component of electric field across the interface?

7.   Which one of the following statement is true?

   P.   Alfven waves are transverse waves and are propagated in incompressible fluids

   Q.   Alfven waves are longitudinal waves and are propagated in incompressible fluids

8.   Name the flow for steady laminar flow of a viscous conducting liquid between two horizontal parallel plates in a transverse magnetic field.

9.   What is the expression of the Hartmann number M ?

10.   What is the expression of magnetic Reynolds number ?

11.   What is expression of magnetic mach number?

12.   Which one of the following statement is true?

   P: For a gas, if the Mach number(M) is less than 1, its flow is said to be subsonic. &

   Q: For a gas, if the Mach number(M) is greater than 1, its flow is said to be supersonic.

13.   What is the expression of magnetic Prandtl number?

14.   What is the behaviour of magnetic lines of force in the fluid?

15.   Which one is magnetic field In the case of magnetohydrodynamics Couette flow?