1. Definewavemotion.
2. Definetransversewavemotion.
3. Definelongitudinalwavemotion.
4. Defineprogressivewave.
5. Defineamplitudeofawave.
6. Definewavelengthofawave.
7. Defineperiodofwavemotion.
8. Definefrequencyofawave.
9. Definevelocityofsoundwave.
10. Definestationarywave.
11. Definefreevibrations.
12. Defineforcedvibrations.
13. DefineResonance.
14. Stateanyoneofthelawsoftransversevibrationsinstretchedstrings.

15. Whatistheuseofasonometer?
16. What is an echo?
17. What is reverberation?
18. What is reverberation time?
19. Writesabine'sformula.
20. Defineco-efficientofabsorptionofsoundenergy.
21. DefinePoleStrength.
22. Definemagneticinduction.
23. Defineintensityofmagneticfield.
24. Definepermeability.
25. Definemagneticmomentofamagnet.
26. Defineintensityofmagnetisation.
27. DefineHysteresis.
28. DefineRetentivity
29. Definecoercivity
30. Definemagneticsaturation.
31. Explaintransversewavemotion.
32. Explainlongitudinalwavemotion.
33. Explainstationarywave
34. Explainthelawsoftranversvibrationofstretchedstring
35. What are the important factor of good acoustics
36. Explain noise pollution
37. Explain resonance
38. ExplainHysterisis
39. Writetheusesofhysteresisloop.

Part – C

1. Explaintransversewavemotion andlongitudinalwavemotion.
2. Distinguishbetweentransverseandlongitudinalwavemotion.
3. Explainthelawsoftransversevibrationsinastretched stringandobtaintheexpressionforthefre-quency of vibration.
4. Describehowthefrequencyofatuningforkisdeterminedusingasonometer.
5. Writeanoteonacousticsofbuildings.
6. Explain noise pollution and the methods of controlling industrial noise.
7. Describethemethodofdrawinghysteresisloopofaspecimenusingasolenoid.
8. Explain anduses of hysteresis loop.

1. Asonometerwireof0.5mlonggivesvibrationsof256Hzwhenstretchedwithaloadof5kg.Find thelineardensity ofthe materialof thewire.
2. Findthefrequencyofsoundproducedbyastring25cmlongstretchedbyloadof5kg.Thelinear densityofthewireis4.9×$10^{-3}$$kgm^{-1}$
3. Astring75cmlongandweighing15gproducesanoteoffrequency100cyclespersecondon plucking.Whatisthetensioninthe string?

Ans: 450 N

4. Awireof50cmlongandofmass6x10^{-3}kgisstretchedsothatitmakes60vibrationspersecond. Findthetensioninthewire.

Ans: 43.20 N

5. The vibrating length of 0.75 m of a sonometer wire is unison with a tuning fork when stretched byweight of 5 kg. The linear density of the wire is 0.5 x 10^{-3}kg m^{-1}. Calculate the frequency of thetuning fork.

Ans:209Hz

6. 6.Awire50cmlongandofmass0.6x10^{-3}kgisstretchedbyatensionof4kg.wt.When sounded,itis foundtovibrate in2 loops.Calculatethe frequencyofthe noteemitted bythewire.

Ans: 361.Hz

7. 7.Awire0.5mlongvibrates100timesasecond.Ifthelengthofthewireisshortenedto0.4mandthestretching forceisincreasedto4timesitsoriginalvalue,whatwillbethenewfrequency?