

### Work for Home

All Students of B.Sc. Part-I Physics (Hons.) (2019-20) are directed to complete their Home work for Physics Paper-I i.e. complete the answer of following question and send it with Name & Roll No. on my email [id-mir.abbas.hu@gmail.com](mailto:mir.abbas.hu@gmail.com).

1. Obtain an expression of doppler's effect for the propagation of relativistic light wave. What are explain doppler's shift.
2. Define elastic constants and obtain the relation between them. What is the limiting value of Poisson's ratio.
3. What is Principal of virtual work? Obtain application of virtual work to surface Tension.
4. What do you mean by modulus of rigidity? Explain with theory a method of determining the value of modulus of rigidity of a flat spiral spring.
5. Setup the compressive wave in one dimension and give its simple harmonic solution. What are phase velocity and group velocity?
6. What is meant by reverberation? Define reverberation time and establish Sabine' formula for this.

Note : Any question by the students may ask on my personal What's no. 9431494003 instead of group What's no. from 10:30am to 3:00 PM. Using Video Calling is best for you.

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H.O.D. Physics

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