Report on TA work carried out

External

(I)

Place of Work Department of Physics, Hijli College, Kharagpur
Nature of Work Lectures as a Teacher
Description I have taught the Nuclear physics course on semester-4 in Hijli College following their structured syllabus. This includes- Nuclear Forces & Stability of Nuclei, Radioactivity, Conservation, Fission & Fusion. I have taught a few classes for the M.Sc entrance test exam in the same relevant topic.
This class was of 1.5 hours in every week.
Dates (TA Duration) 1st March 2022 - 4th July 2022

(II)

Place of Work Department of Physics, Hijli College, Kharagpur
Nature of Work Lectures as a Teacher
Description I am teaching Particle physics Course and also topics related to Detector for Nuclear Radiations, Interaction of Nuclear Radiation with matter on semester-5 in Hijli College, and I am also taking classes on the M.Sc entrance test exam in the same relevant topic.
This class is of 1.5 hours in every week.
Dates (TA Duration) 8th August 2022 - Ongoing

Internal

(I)

Place of Work Dept. of Physics, IIT Kharagpur
Nature of Work I was the teaching assistant for the experiment "Transverse and Longitudinal Wave" in the B.Tech 1st year laboratory course (subject code PH19003).
Description I conducted demonstration classes on this topic once a week, followed by live demonstration in the laboratory once a week for one semester of the 2021-2022 session. I prepared MS Powerpoint slides on the theory of Transverse and Longitudinal Wave. I demonstrated students how to conduct the experiment of finding out the phase velocity of the stationary wave produced in an ordinary string, and determining the velocity of sound wave in air for longitudinal wave.
Each laboratory class was of 3 hours in every week.
Dates (TA Duration) December 2021 - March 2022

(II)

Place of Work Dept. of Physics, IIT Kharagpur
Nature of Work I was the teaching assistant for the Computational Physics Lab Course (subject code PH39209).
Description Here I have demonstrated the numerical computation such as Gauss seidel method, ODE, RK, Euler, linear interpolation, Trapezoidal, Simpson-1/3 method etc, using Python. I have also checked their assignments every week, conducted weekly viva-voice, and evaluated their Final exam code.
This laboratory class was of 3 hours in every week.
Dates (TA Duration) September 2022 - November 2022

(III)

Place of Work Dept. of Physics, IIT Kharagpur
Nature of Work Presently, I am the teaching assistant again for the experiment "Transverse and Longitudinal Wave" in the B.Tech 1st year laboratory course (subject code PH19003), in current semester of the 2022-2023 session.
Description I have started demonstrating the experiment in the same way I did in the last year *(mentioned above).*
Each laboratory class is of 3 hours in every week.
Dates (TA Duration) November 2022 – Ongoing (Tentative-February 2023)

Janima Mondal
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(Signature of the Fellow)