

2020

ENVIRONMENTAL SCIENCE – HONOURS - PRACTICAL

Paper: DSE-A-5-1-P

Full marks: 30

The figures in the margin indicate full marks

1. Report on energy audit of domestic units (10)
2. Calculate the energy efficiency from the given data (5 +5)
3. Online viva-voce (10)

****Answer scripts and reports to be mailed in email id: ugpractexam2021@gmail.com**

2. The Department Environmental Science of Asutosh College, Kolkata has 30, 100-watts energy-saving halogen light bulbs whose lamp efficiency is 20.7 lumen/watt. The college authority is considering changing these light bulbs into compact fluorescent light (CFL) bulbs whose lamp efficiency is 60 lumen/watt.

a) What watts of the CFL bulbs should the college buy, assuming each energy-saving halogen light bulb is replaced with a CFL bulb? **(5)**

b) Assuming these light bulbs are on 24 hours a day, 7 days a week for 50 weeks of a year, how much energy/electricity will be saved in a year by switching to CFLs? **(5)**