

- 8 (a) Explain why, for the photoelectric effect, the existence of a threshold frequency and a very short emission time provide evidence for the particulate nature of electromagnetic radiation, as opposed to a wave theory.

.....

.....

.....

.....

.....

..... [4]

- (b) State and explain two relations in which the Planck constant h is the constant of proportionality.

1.

.....

.....

.....

2.

.....

.....

..... [6]