CHINMAYA INTERNATIONAL RESIDENTIAL SCHOOL
COIMBATORE

SAMPLE PAPER – 2010

CLASS : 11 CBSE SCIENCE **SUBJECT: PHYSICS**

01. A radioactive element 'P' emits an alpha particle, and then emits a beta particle along with gamma rays. The element 'Q' thus obtained will be

A. $^{Z-4}Q_{A-1}$
B. $^{Z+4}Q_{A-1}$
C. $^{Z-4}Q_{A+1}$
D. $^{Z+4}Q_{A+1}$

ANSWER

02. In the circuit diagram shown below, both the bulbs are similar and have the same rating. What will happen if the circuit is rewired as shown in Fig. 2?

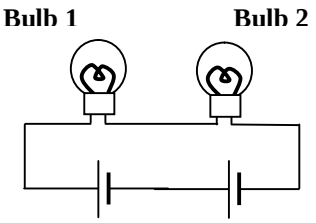

Fig. 1

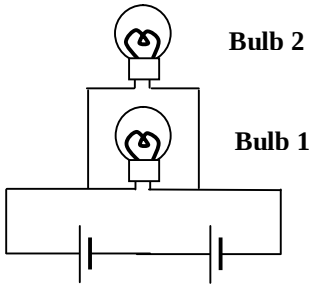

Fig. 2

A. There will be no change in the brightness of the bulbs
B. Bulb 1 and 2 will glow dimmer
C. Bulb 1 and 2 will glow brighter
D. Bulb 2 will not glow at all

ANSWER

03. A battery is connected first across one bulb and then a second bulb is connected in series with the first. If both the bulbs are identical having the same power rating, then the brightness of the first bulb

A. increases
B. decreases
C. remains the same
D. indicates insufficient information

ANSWER

04. An isotope of Iodine, $^{131}I_{53}$ is given. What are its number of protons and neutrons respectively?

A. 53 and 78
B. 78 and 53
C. 53 and 131
D. 131 and 78

ANSWER

05. A stone is thrown straight upwards with a speed of 10 m/s. When it comes back to its initial height, what will be the magnitude of the stone's velocity and acceleration?

A. 0 m/s and 0 m/s^2 respectively
B. 10 m/s and 0 m/s^2 respectively
C. 0 m/s and 10 m/s^2 respectively
D. 10 m/s and 10 m/s^2 respectively

ANSWER	

06. If a light ray is incident on a glass block along the normal to the surface, what will be its angle of refraction?

A. can't say: data is insufficient
B. 0^o
C. 90^o
D. 180^o

ANSWER	