

**Questions (INJSO 2009)**

**Section A:** Questions 1 to 60 are multiple choice with every correct answer carrying 1 mark and every wrong answer carrying -0.25 mark.

**SECTION A**

**Q1.** Which one of the following expressions has the same units as power?

- a) Force x distance
- b) Work x time
- c) Force x acceleration
- d) Force x velocity

**Q2.** Suppose you are given three resistances of values 2, 4, 6 ohms. Which of the following value is not possible to get by arranging resistances in various combinations?

- a) Less than 2
- b) Equal to 4.4
- c) Equal to 7.33
- d) Equal to 6.75

**Q3.** Green leaf is placed in a dark room is illuminated by red light. The leaf will appear to be

- a) Green
- b) Red
- c) Yellow
- d) Black

**Q4.** The coil of the heater is cut into two equal halves and only one of them is used in the heater. The ratio of the heat produced by the original coil to the halved coil is

- a) 2:1
- b) 1:2
- c) 4:1
- d) 1:4

**Q5.** In a very heavy lorry moving on the road with slightly flattened tyres

- a) only rolling friction is involved.
- b) both rolling and kinetic friction are involved.
- c) only kinetic friction is involved.
- d) the type of friction depends on the speed of the lorry.

**Q 6.** Which of the given velocity: time graphs

(see box in the next page)

matches the given acceleration: time graph which you see at the right?

(Time is plotted along the horizontal axis in all cases.)

