PART-II

Q. No. 2. Discuss the contribution of Muslim scientists in the development of Astronomy, Algebra and Trigonometry. (10) (3, 3 1/2, 3 1/2 each)

Q. No. 3. Give brief answers to the following questions: (2 each) (10)
(a) Why do we bring our hands close to our mouth while shouting across to someone far away?
(b) Why do we lean forward while climbing a hill?
(c) Why does a swimming pool appear less deep than it actually is?
(d) Why cannot petrol fire be extinguished by water?
(e) Why do Australians celebrate their Christmas during summer?

Q. No. 4. Differentiate between: (2 each) (10)
(a) Hypoglycemia and Hyperglycemia
(b) Renewable and Non-renewable energy resources
(c) Lava and Magma (d) Mist and Fog (e) Lunar Eclipse and Solar Eclipse

Q. No. 5. Briefly explain the working principle of the following: (5 each) (10)
(a) Radar (b) Microwave Oven

Q. No. 6. Give brief explanations for following phenomena: (2 each) (10)
(a) While watching a cricket match we see the ball struck a moment before we hear the sound of the bat hitting the ball.
(b) A ship though made largely of steel, which is heavier than water, floats in water.
(c) The colour of the same cloth when seen in electric light appears different from the colour when seen in day light.
(d) Glass when heated cracks while metal does not.
(e) Although each eye perceives a separate image, we do not see everything double.

Q. No. 7. Write short NOTES on the following: (5 each) (10)
(a) Environmental effects of Fertilizer use. (b) Global Warming.

Q. No. 8. Differentiate between: (2 each) (10)
(a) Smog and Smoke (b) Radiotherapy and Chemotherapy
(c) Diastolic and Systolic blood pressure (d) Infection and Allergy
(e) Conductors and Insulators

Q. No. 9. Briefly explain the function of following in human body: (2 1/2 each) (10)
(a) Kidneys (b) Lymphatic system
(c) Thyroid gland (d) Pituitary gland

***************