



Second Exam

Name: _____
 Subject: Physics.

Grade: 11
 Date: _____

Question One: ((10 marks))

Write true or false beside each of the following sentences, if the sentence is false correct it?

- (1) Focal length is the distance between the optical centre and the principal focus. ()

- (2) Image at infinity when the object distance from converging lens at $2f$. ()

- (3) When the object at a distance less than f , the image is upright. ()

- (4) A ray passing through the optical centre is not deviated. ()

- (5) Converging lenses are thicker at the centre than at the edge. ()

- (6) All electromagnetic waves can be reflected and refracted. ()

- (7) All electromagnetic waves are longitudinal waves. ()

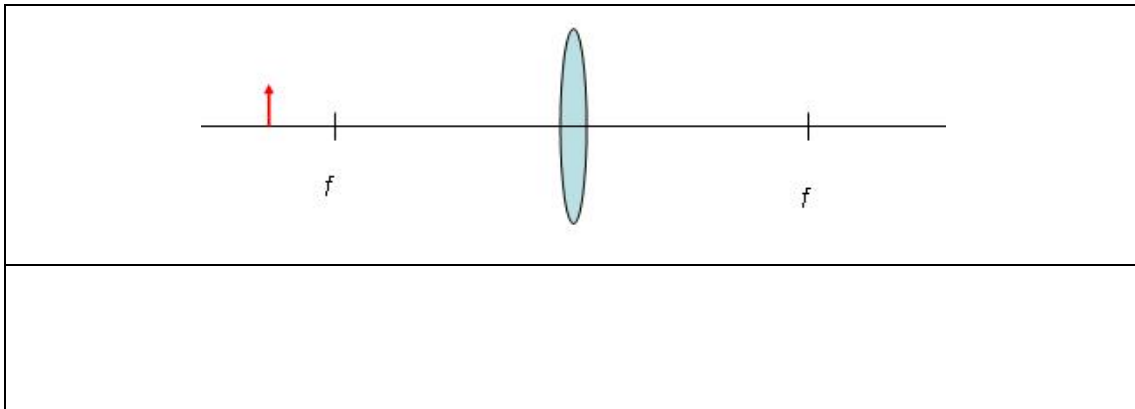
- (8) The relation between wavelength and frequency is inverse relation. ()

- (9) Radio waves have the largest wavelength. ()

- (10) Gamma rays have the largest frequency. ()

Question Two: ((4 marks))

- (a) Complete the following figure?
- (b) Describe the image formed?



**Question Three:****((4 marks))**

Complete the following table:

| Electromagnetic waves | Sources | Applications |
|-----------------------|----------------------|--------------------------|
| | Oscillating circuits | Radio/TV |
| Infrared rays | | IR lamp |
| Visible light | | |
| | X-ray tube | Taking pictures of bones |
| | Co-60 | |
| | | Microwave oven |

Question Four:**((2 marks))**

If the wavelength of green light is 532nm, and the speed of light is 3×10^8 m/s, what is the frequency of the green light?

Best wishes
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