

# Zonal Education Office, Thenmaradchy

Grade 09

Unit - 2 Science

Time- 40 minuts

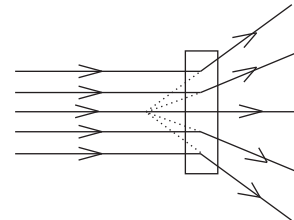
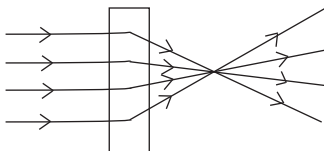
Answer all Questions

## Part - I

01. Underline the most suitable answer.

01. Number of eye muscles which fixed eye inside the orbit in the human skull is,  
1. 3                                      2. 6                                      3. 9                                      4. 10
02. Part of eye which is responsible to maintain the spherical shape of the eye is  
1. Aqueous humour      2. Cornea                                      3. vitreous humour      4. Sclerotic layer
03. Part of the eye, which controls the amount of light entering the eye is,  
1. Ciliary muscle      2. Pupil                                      3. Iris                                      4. Lens
04. Eye disease which is believed to be caused by ultraviolet rays from the sun,  
1. Glucoma                                      2. Cataract                                      3. Colour blindness      4. Eye infections
05. Animal has a broader range of binocular vision is,  
1. Human                                      2. Dog                                      3. Cattle                                      4. Tiger
06. Reason for the defect long sight is,  
1. Eye ball being too short  
2. Elongation of the eye ball  
3. Inability to reduce the curvature of the eye lens  
4. Non of the above

07.



A and B are respectively,

1. Convex lens, convex mirror                                      2. Concave lens, Concave mirror  
3. Convex lens, Concave lens                                      4. Concave lens, Convex lens
08. Part of the ear which does not involved in hearing function?  
1. Cochlea                                      2. Pinna  
3. Semi - Circular Canal                                      4. Auditory nerve
09. Which one is a part of the middle ear?  
1. Cochlea                                      2. auditory nerve                                      3. Semi - Circular Canal                                      4. Ossicles
10. Function of Eustachian tube is  
1. Passes the Sound waves towards cochlea  
2. Controls the pressure on either sides of the tympanic membrane  
3. Passes the auditory senses towards auditory nerves  
4. Non of the above

02. Complete the following statements by using the giving words.

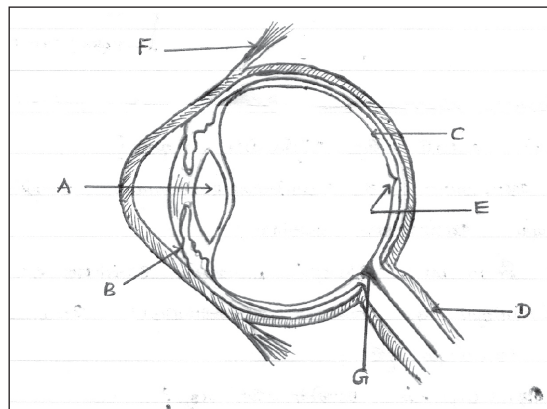
- 01. Part which supplies blood to the eye is .....
- 02. .... is a transparent biconvex lens.
- 03. Rod cells and cone cells are located in .....
- 04. The defects of loosing the transparent nature of the eye lens is .....
- 05. Disease of increase in blood pressure inside the eye is .....
- 06. .... direct the sound to tympanic membrane.
- 07. .... transmits the autitory sense to auditory nerve.
- 08. Hardening of assicles cause .....
- 09. .... is used to correct the short sight.
- 10. .... is used to correct the long sight.

(Retina, Concave lens, Convex lens, Glucoma, Cochlea, Cataract, eye lens, defect of ear, choroid layer, external auditory cannal)

10x2=20 Marks

### Part - II

01. Sensory organs perceive the changes that occur in our environment. Eye is the optical sensory organ in our body. Answer the following questions about human eye.



1. Name the parts A, B, C, and D?

.....  
.....

6 Marks

2. a. Which part changes its curvature to see the near and far objects?

.....

2 Marks

b. Name the muscle facilitate to do the above changes?

.....

2 Marks

3. Give reason for “when light is focused in G, no vision is possible?”

.....  
3 Marks

4. Give the functions of the parts B and D?

.....  
.....

5. Give one eye defect and one eye disease?

.....  
.....

6. a. “A boy sees nearby objects clearly while distant objects appear blurred”. Name this eye defect? 3 Marks

.....  
2 Marks

b. Draw the ray diagram for rectifying the above mentioned defect?

7. Name the ability of human to maintain visual focus on an object with both eyes creating a single visual image?

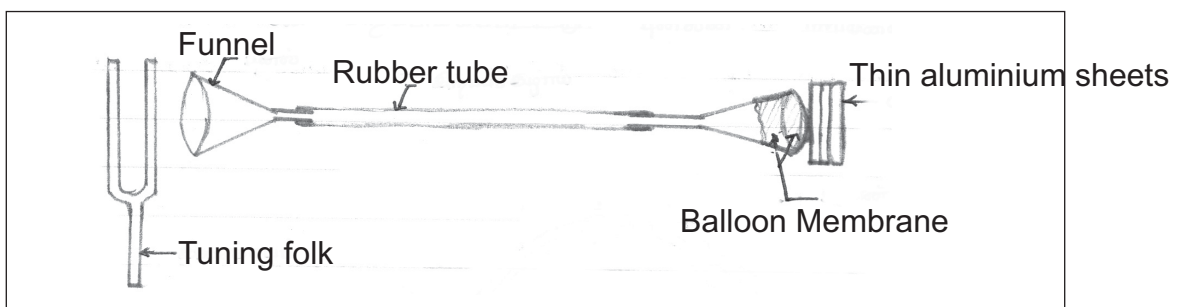
.....  
2 Marks

8. Give two practices should he followed to maintain the eyes healthy?

.....  
.....

2 Marks

02. Audio sensory organ of the body is the ear. Tuning folk was vibrated, to produce sound, The sound was felt the end of the funnel.



1. Balloon membrane is compared to which part of the eye?

.....  
2 Marks

2. Three aluminium sheets are compared to which part of the eye? Name the three parts orderly?

.....  
.....

4.5 Marks

3. Give the path where the sound enters into the ear transmitted to the brain?

.....  
.....  
.....

6 Marks

4. Within the ear sound is transmitted through 3 medium. Name them orderly?

.....  
.....  
.....

4.5 Marks

5. Which part of the ear contributes to maintain the balance of the body?

.....

2 Marks

6. a. Name the part of the ear which connect the meddle ear to pharynx?

.....

2 Marks

b. Give the function of the part mentioned in 6 a.

.....

1 Marks

7. What is the audibility range of the human ear.

.....

2 Marks

8. Give two ear defects?

.....

.....

3 Marks

9. Give two pratices adopted to maintain the ear healthy?

.....

.....

3 Marks