



# யாழ்ப்பாணக் கல்வி வலயம்

## Science - Unit Exam - 2020

Grade - 9

Unit - 2

Time : 40 minutes

### Part - I

#### ❖ Underline the correct answer

01. Which part of the human eye controls the amount of light?

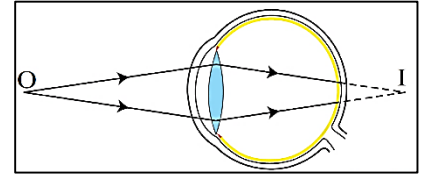
- (1) Iris (2) Ciliary muscle (3) Lens (4) Pupil

02. Which part of the eye has light sensitive cells?

- (1) Optic nerve (2) Blind spot (3) Retina (4) Sclerotic layer

03. The correct short come and remedy for the given diagram are

- (1) Shortsightedness – Concave lens  
(2) Long sightedness – Convex lens  
(3) Shortsightedness – Convex lens  
(4) Long sightedness – Concave lens



04. A cloudiness or opacity occurs in normally transparent crystalline lens of the eye. Then the lens turns in to milky colour. This disease is called?

- (1) Glaucoma (2) Cataract (3) Eye infection (4) Night blindness

05. Which part of the human ear is relative to the balance of the body?

- (1) Auditory nerve (2) Semicircular canals  
(3) Tympanic membrane (4) Ossicles

06. Which part is not included in external ear?

- (1) Ear lobe (2) External auditory canal  
(3) Tympanic membrane (4) Ossicles

07. What is the hearing range of human?

- (1) 2Hz – 20,000Hz (2) 20Hz – 2000Hz  
(3) 20Hz – 20KHz (4) 20Hz – 200Hz

08. Which part can change the focal length of the eye lens?

- (1) Iris (2) Ciliary muscle (3) Retina (4) Pupil

09. Which part helps to maintain the pressure of either sides of tympanic membrane?

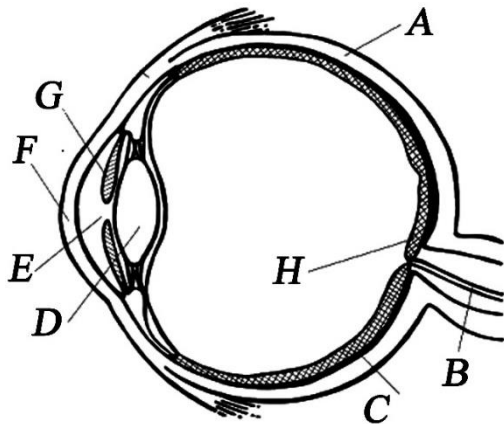
- (1) Auditory canal (2) Earlobe (3) Eustachian tube (4) Cochlea

10. When seeing a distant object, size of the eye lens

- (1) Increases (2) Decreases  
(3) Can't be changed (4) Decreases after increasing

### Structure Questions

1) (a) A longitudinal view of a human eye is given here



01. Label the parts A – H (8 Marks)

- A - .....
- B - .....
- C - .....
- D - .....
- E - .....
- F - .....
- G - .....
- H - .....

02. Write the functions of the parts A, E, F and G

- A : .....
- E : .....
- F : .....
- G : .....

(4 Marks)

03. Which cells are sensitive to light in the part C

.....(4 Marks)

04. The curvature of the eye lens changes according to the different distance. How is this process called?

.....(2 Marks)

05. In which part does the image form normally in the retina?

.....(2 Marks)

06. How is the ability called when observing a place by both eyes?

.....(2 Marks)

07. What is the reason for the disease “Glaucoma”?

.....(2 Marks)

08. Which part is transplanted when doing transplantation of eye?

.....(1 Marks)

09. There is no vision is possible in blind spot what is the reason for this?

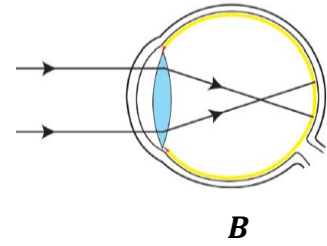
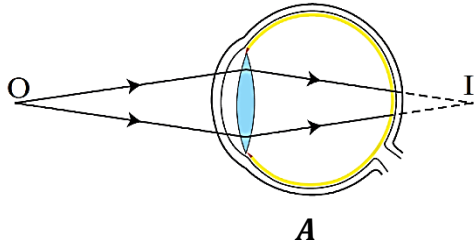
.....(2 Marks)

10. Give two ways to maintain our eyes as healthy?

.....

.....(2 Marks)

(b) Two short comes of human eyes are shown below



01. Identify both short comes A and B?

A : .....

B : .....

(4 Marks)

02. What is the reason for the short come "A"?

.....  
.....(4 Marks)

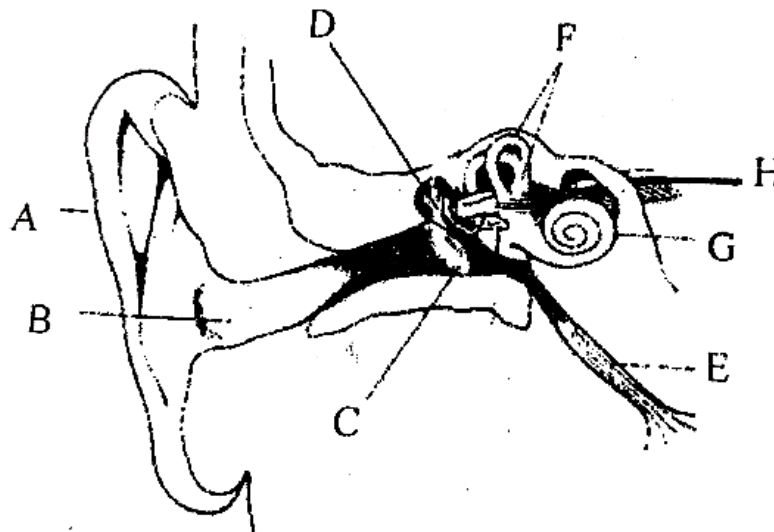
03. Which lenses are used to overcome these above short comes?

A : .....

B : .....

(2 Marks)

2) (a) A modal of the human ear is given here



01. Label the part A – H

(10 Marks)

A : .....

B : .....

C : .....

D : .....

E : .....

F : .....

G : .....

H : .....

02. Write a flow diagram to show the sound travels in ear?

.....  
.....  
.....(2 Marks)

03. Give the functions of the parts *B, E, G and H*

B : ..... E : .....  
G : ..... H : .....  
(4 Marks)

04. Which parts contribute to maintain the equilibrium?

.....  
.....(2 Marks)

05. Give the media of sound in ear?

.....  
.....(2 Marks)

06. Give the names of ossicles in an order?

.....  
.....(2 Marks)

07. Which part connects pharynx and the middle ear?

.....  
.....(2 Marks)

08. What is the reason for the losing of hearing when ageing?

.....  
.....(2 Marks)

09. Which parts are included in inner ear?

.....  
.....(2 Marks)

10. Give two ways to protect human ear?

.....  
.....  
.....(2 Marks)

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