

M.M-80

Time- 3hrs

General Instructions :

1. All questions are compulsory
 2. Draw neat labelled diagrams on requirement.
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Q1. Answer the following questions. [1x10=10]

- a. What is a decibel?
- b. What name is given to the region of burning gases?
- c. When was Project Tiger launched ?
- d. Name the monomer of Polyester and nylon.
- e. Which gland is known as master gland ?
- f. Expand- APPLE
- g. Why do we classify sun as a star?
- h. On combing our hair vigorously, some hair are pulled towards the comb. Name the force acting .
- i. Which 2 organelles are not found in the plant cell?
- j. On which principle a Periscope works?

Q2. Define Biodiversity. [2]

Q3. What is a Light Year ? How many Km makes 1Light year. [2]

Q4. Why does only one side of moon always face the earth ? [2]

Q5. What are Epicentre and Siesmic Focus in context of Earthquake? [2]

Q6. Give 2-2 examples of (a) String instruments (b) Percussion instrument. [2]

Q7. List the conditions necessary for combustion. [3]

Q8. State 3 ways by which synthetic fibres are superior than natural fibre? [3]

Q9. What is Binary fission ? Show Binary fission in Amoeba with the diagram only. [3]

Q10. A Pendulum takes 0.02 second to complete 1 vibration. Find its frequency. [2+1=3]
Arrange the following fuels in increasing order of their calorific value -
Kerosene oil, Hydrogen gas, coal and wood

Q11. Define Puberty. List two changes which takes place in a male child during Puberty.

[3]

- Q12. How does Ultrasonic vibration differ from infrasonic vibration? Give two examples of animals which can hear ultrasonic vibrations. Which animal can produce ultrasonic vibration and what is it used for? [4]
- Q13. Draw a ray diagram with labelling to locate the image of an object kept at 2.5 cm in front of a plane mirror. State the laws of reflection. [5]
- Q14. Write an activity with the aim -To make a Jaltarang. [5]
- Q15. A girl weighing 50Kg is standing on pencil heels, each having an area of cross section of 1cm². And an Elephant weighing 2000 Kg is also standing on the floor, area under its one foot is 250cm². Calculate the pressure in both the case. Which of the two will exert more pressure on the floor and why? [5]
- Q16. Explain the two main defects of vision with their cause and correction. Also draw diagrams for defected eyes and their corrections. [5]
- Q17. Draw a labelled diagram of Human eye with six labellings. [3+2=5]

Now answer the following questions-

- From where does the light enter the eye?
 - Which nerve sends signals to the brain?
 - Which part regulates the amount of light entering the eye?
 - Which muscle controls the focal length of the eye lens?
- Q18. Differentiate between the following [any four] [2+2+2+2=8]
- Thermoplastic and Thermosetting plastic.
 - Musical sound and Noise.
 - Stars and constellations.
 - Regular and Irregular reflection
 - National parks and wildlife sanctuary.
 - Rapid combustion and Explosion.
- Q19. Give reason for the following- [any four] [2+2+2+2=8]
- Rayon is not truly an artificial fibre.
 - Plasma membrane is also known as selectively permeable membrane.
 - Comets have illuminated tails.
 - Goldsmith uses the uppermost zone of flame to melt metals.
 - Deep sea divers wear special suits.
 - When bees fly we hear the sound but when birds fly we cannot.