

05.02.2020 EVERWIN MATRIC.HR.SEC.SCHOOL Time: 40mins.
Std: IX (G-L) T.T SCIENCE Marks: 25

I. Answer all the questions: 5x1=5

1. The sound waves travel faster _____.
a) in liquids b) in gases c) in solids d) in vacuum
2. The maximum speed of vibrations which produce audible sound will be in _____.
a) sea water b) ground glass c) dry air d) human blood
3. A phenomenon in which an element exists in different modification in same physical state is called _____.
a) Isomerism b) Allotropy c) Catenation d) Crystallinity

4. Graphene is one atom thick layer of carbon obtained from _____.
a) Diamond b) Fullerenes c) Graphite d) Gas Carbon

5. Buckminster fullerene contains _____ carbon atoms.

II. Answer any five in brief: 5x2=10

6. Name the physical quantity whose SI units is Hertz and define it.
7. Through which medium sound travels faster-Iron or water? Give reasons.
8. Define compression.
9. Define rarefactions.
10. Differentiate between graphite and diamond.
11. Define Allotropy.
12. Write all possible Isomers of C_4H_{10} .
13. Define Isomerism.

III. Answer in detail: 2x5=10

14. Describe with diagram how compression and rarefactions are produced.

(or)

15. Explain the Bell Jar experiment.

16. Define the following terms:

- a) Amplitude b) Wavelength

(or)

17. What are the chemical reactions of carbon?

05.02.2020 EVERWIN MATRIC.HR.SEC.SCHOOL Time: 40mins.
Std: IX (A-F) T.T ENGLISH Marks: 25

I. Choose the most appropriate synonym of the words: 3x1=3

1. infinite
a) joy b) boundless c) commence d) start
2. significant
a) important b) useless c) cunning d) hurry
3. unkempt
a) real b) clean c) attitude d) messy

II. Choose the most appropriate antonym of the words: 3x1=3

4. delight
a) happy b) sorrow c) big d) giant
5. initiate
a) trouble b) convenient c) circulate d) conclude
6. Conjecture
a) fact b) opinion c) commence d) guess

III. Quote from memory: 1x4=4

7. Write four lines of the poem "The Comet"

From: Bigger -----

To: ----- force.

IV. Rewrite as directed: 2x2=4

8. Change the following sentence into active voice

Coffee is made by him.

9. Change the following sentence into passive voice.

Someone stole my bike.

10. Complete the following sentence using suitable connector:

1x1=1

I will stay _____ you need me.

- a) as well b) as long as c) meanwhile

V. Answer any five of the following questions in brief: 5x2=10

11. What did the Indian mathematician Bhaskara prove?
12. Where did Ramanujan do his mathematical problems?
13. Which university granted him a fellowship of ₹ 75 a month?
14. Who discovered a rare mathematical genius in Ramanujan?
15. What did Ramanujan send to G.H.Hardy?
16. Why was Ramanujan sent back to India?
17. What disappointed Ramanujan's father?