# SSC PUBLIC EXAMINATIONS: JULY-2020 GENERAL SCIENCE – PAPER- I & II MODEL PAPER (English Medium)

Time: 3.15 Hrs. Max. Marks: 100 Marks

### **Instructions:**

- 1. This paper consists of Part-A & Part-B.
- 2. Part-A Contains questions from Physical Science and Part-B consists from Biological Science
- 3. Part-A & Part-B contains 4 sections each
- 4. There are 33 questions in the paper.
- 5. There is internal choice in Section-IV of Part –A and Part-B.
- 6. Write all the questions visibly & legibly.
- 7. 15 minutes are given for reading the question paper.



#### **SECTION - I**

**Note:** 1. Answer all the Questions

2. Each Question carries 1 Mark

6x1 = 6

- 1. The focal of the symmetrical convergent lens is 25cm. What is the radius curvature of the lens
- 2. VSEPRT theory was proposed by
- 3. Define p<sup>H</sup> scale
- 4. Statement 1: The electronic configuration of carbon is  $1S^22S^22P^2$

Statement 2: Carbon valence is 4

Write the correct answer of the following in your answer booklet

- A) Both Statements are correct
- B) Statement 1 is only correct
- C) Statement 2 is only correct
- D) Both Statements are wrong
- 5. Where do we place an object in front of convex lens in order to get virtual, erect and magnified image?
  - A) At  $F_2$
- B) At C<sub>2</sub>
- C) Between F<sub>2</sub> and C<sub>2</sub>
- D) Between 2F<sub>2</sub> and Optic centre

6. Write any one use of alloys

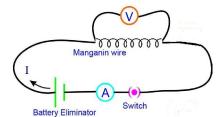
## **SECTION - II**

**Note:** 1. Answer all the Questions

2. Each Question carries 2 Marks

4x2 = 8

7. Identify the mistake in the diagram and redraw the correct diagram in your answer booklet



- 8. Write any two questions to understand the formation of mirage
- 9. Assume and write the shape of the molecule whose sp<sup>3</sup> hybridisation and bond angle is 104<sup>0</sup>31<sup>1</sup>
- 10. Which chemicals are required to conduct esterification reaction in laboratory?

**Note:** 1. Answer all the Questions

2. Each Question carries 4 Marks

4x4=16

11. Observe the table and answer the questions

| Element | Electronic configuration |
|---------|--------------------------|
| A       | $1s^22s^2$               |
| В       | $1s^22s^22p^63s^2$       |
| С       | $1s^22s^22p^23s^23p^3$   |
| D       | $1s^22s^22p^6$           |

- a) Which are the elements coming within the same period?
- b) Which are the elements coming within the same group?
- c) Which is the noble gas element?
- d) To which group and period does the element 'C' belong?
- 12. Student 'Ammalu' conducted an experiment and find the focal length of symmetric convex lens.

| Object distance(u) | Image distance(v) |
|--------------------|-------------------|
| 60 cm              | 20 cm             |
| 30 cm              | 30 cm             |
| 25 cm              | 37.5 cm           |
| 20 cm              | 60 cm             |

- a) What is the focal length of the convex lens?
- b) What is the radius of curvature of the lens?
- c) Find the magnification of the lens when object is kept at 20cm?
- d) What are the characteristics of the image when object is placed at 30cm
- 13. Define the following
- a) Magnetic flux density
  b) Right hand rule
  14. How do you appreciate the role of p<sup>H</sup> scale in classifying the substances into acids, bases and neutral?

## **SECTION - IV**

**Note:** 1. Answer all the Questions

2. Each Question carries 8 Marks

2x8 = 16

15. Write short notes on froth floatation process.

(OR)

Rainbow is an example for continuous spectrum-explain

16. How do you find experimentally the refractive index of material of a prism

(OR)

Suggest an experiment to prove that the rate of evaporation of a liquid depends on its surface area and vapour already present in surrounding air.

M.SRINIVASA RAO, SA(PS) AFC SCHOOL(AGKMHS) **GUDIVADA** PH: 9848143855

Visit: srini science mind