KENDRIYA VIDYALAYA SANGATHAN, HYDERABAD REGION
SAMPLE PAPER 03 FOR PERIODIC TEST-II (2017-18)

SUBJECT: SCIENCE (086)

BLUE PRINT FOR PERIODIC TEST-II: CLASS X

<table>
<thead>
<tr>
<th>Chapter</th>
<th>VSA (1 mark)</th>
<th>SA – I (2 marks)</th>
<th>SA – II (3 marks)</th>
<th>LA (5 marks)</th>
<th>Practical Based Questions</th>
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<td>Carbon and its compounds</td>
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MARKING SCHEME FOR PERIODIC TEST-II

<table>
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<tr>
<th>SECTION</th>
<th>MARKS</th>
<th>NO. OF QUESTIONS</th>
<th>TOTAL</th>
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<td><strong>GRAND TOTAL</strong></td>
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KENDRIYA VIDYALAYA SANGATHAN, HYDERABAD REGION
SAMPLE PAPER 03 FOR PERIODIC TEST-II (2017-18)

SUBJECT: SCIENCE
MAX. MARKS : 40
CLASS : X
DURATION : 1½HRS

General Instructions:
1. All questions are compulsory.
2. The question paper comprises of two Sections, A and B. You are to attempt both the sections.
3. All questions of Section-A and Section-B are to be attempted separately.
4. Question number 1 to 2 in Section-A are one mark question. These are to be answered in one word or in one sentence.
5. Question numbers 3 in Section-A is two marks questions. These are to be answered in about 30 words each.
6. Question numbers 4 to 8 in Section-A are three marks questions. These are to be answered in about 50 words each.
7. Question numbers 9 to 11 in Section-A are five marks questions. These are to be answered in about 70 words each.
8. Question numbers 12 to 14 in Section-B are questions based on practical skills and are two marks questions.

SECTION – A

1. Write the general formula of hydrocarbon alkene. Write the name of simplest alkene.

2. What is the magnification of the images formed by plane mirrors and why?

3. How is the strength of magnetic field near a straight current-conductor (a) related to the strength of current in the conductor? (b) is affected by changing the direction of flow of current in the conductor?

4. What is meant by:
   (a) Displacement reaction
   (b) Reduction reaction
   (c) Combination reaction.
   Write balanced chemical equation for each reaction:

5. What is meant by homologous series of carbon compounds? Classify the following carbon compounds into two homologous series and name them.
   \[ \text{C}_2\text{H}_4, \text{C}_3\text{H}_6, \text{C}_4\text{H}_8, \text{C}_5\text{H}_8, \text{C}_6\text{H}_{10} \]

6. Draw a diagram of human respiratory system and label on it: (a) Diaphragm (b) Larynx

7. Define ‘hormones’. Name the hormone secreted by thyroid. Write its function. Why is the use of iodised salt advised to us?

8. If the image formed by mirror for all positions of the object placed in front of it is always virtual and diminished, state the type of the mirror. Draw a ray diagram in support of your answer. Where are such mirrors commonly used and why?

9. (a) What is pollination? How does it occur in plants?
   (b) How does pollination lead to fertilisation? Explain.
   (c) Draw a diagram showing germination of pollen on stigma of a flower.

Prepared by: M. S. KumarSwamy, TGT(Maths)
10. (a) Define corrosion.
(b) What is corrosion of iron called?
(c) How will you recognise the corrosion of silver?
(d) Why corrosion of iron is a serious problem?
(e) How can we prevent corrosion of iron?

11. Deduce the expression for the equivalent resistance of the parallel combination of three resistors $R_1$, $R_2$ and $R_3$.

Consider the following electric circuit:
(a) Which two resistors are connected in series?
(b) Which two resistors are connected in parallel?
(c) If every resistor of the circuit is of $2 \, \Omega$, what current will flow in the circuit?

SECTION – B

12. Magnetic field lines are shown in the given diagram. A student makes a statement that magnetic field at X is stronger than at Y. Justify this statement. Also redraw the diagram and mark the direction of magnetic field lines.

13. Tooth enamel is one of the hardest substances in our body. How does it undergo damage due to eating chocolates and sweets? How do toothpastes prevent this damage?

14. Name the passage in sequence through which urine passes from kidneys to the outside in humans. How is urine prevented from flowing back into the ureters?