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Education for life
CBSE AFF:3330247 CODE:10485

HALF YEARLY EXAMINATION (2018-19)

Class : X Student's Name: …… Roll. No. ……

Subject : Science Date : 10/10/2018 Max. Marks : 80 Time : 3 Hrs.

Invigilator's Name:……Sign:……

General Instructions:

- **The first 15 minutes have been allotted for reading this question paper. These 15 minutes have to be used by the candidates for thorough silent reading of the question paper. During this period, the students will not write any answer on the answer- book and the question paper. The students should start writing on the next stroke of the bell.**
- **Write in neat and clean handwriting. All questions are compulsory.**
  Q .1 and Q.2 carry 1 mark each.
  Q.3 to Q.5 carry 2 marks each.
  Q.6 to Q.15 carry 3 marks each.
  Q .16 to Q.21 carry 5 marks each.
  Q.22 to Q. 27 carry 2 marks each.

SECTION – A **[68]**

Q.1. Name the receptor present in tongue. **(1)**

Q.2. Give one example of Saprophytic nutrition. **(1)**

Q.3. Draw the diagram to show the process of photosynthesis. **(2)**

Q.4. What is bone marrow? Write its functions. **(2)**

Q.5. What is meant by heating effect of current? Give two applications of the heating effect of Current. **(2)**

Q.6. Why does the stain of curry on white cloth becomes reddish brown when soap is scrubbed on it and It turns yellow when cloth is washed with plenty of water? **(3)**

Q.7. Decomposition of a compound takes place with the help of heat, light or electricity. Give one example of each type of decomposition mentioned above. **(3)**

Q.8. (a)Write a short note on corrosion. **(3)**

(b) Balance the equation. $Ca(OH)_2 + HCl$ --------- $CaCl_2 + H_2O$

Q.9. State any four characteristics of good source of energy. **(3)**

Q.10. Why is series arrangement not used for connecting domestic electric appliances in a circuit? **(3)**

Q.11. What will be the resistance of a metal wire of length 2m and area of cross section. 55×10^{-6} m^2 if the resistivity of the metal is 2.8×10^{-8} ohm m ? **(3)**

Or

Show how you would connect three resistors each of resistance 6 ohm so that the combination has resistance of (a) 9 ohm (b) 4 ohm.

Q.12. Name the different plant hormones. State one function of each of them. **(3)**

Q.13. What is neuron ? Explain the importance of synapse. **(3)**

OR

Explain different types of neurones and their associated functions.

Q.14. What is reflex action and reflex arc? Give the flow chart of spinal reflex arc. **(3)**

Q.15. Which hormone **(3)**

(a) prepares the body for action.

(b) controls the amount of glucose in blood.

(c) gives boys a deep voice.

Q.16. (a)Write thechemical name of plaster of paris. How is it possible to attach half a molecule of water to $CaSO_4$. **(2)**

(b) What are the products formed when electricity is passed through aqueous solution of sodium chloride? Name this process and why is it called so. **(2)**

(c) Give the use of $NaHCO_3$ **(1)**

Q.17. Give reason for the following. **(5)**

(a) sodium is stored in kerosene.

(b) Gold and silver are used for making jewellery.

(c) Metals conduct electricity.

(d) Nitrogen is used in packing food items.

(e) You keep your gate/ grills made of Iron painted.

Q.18. (a) On what factors, resistance of a conductor depends? **(5)**

(b) An electric bulb is connected to a 220V power supply line. If the bulb draws a current of 0.5 A, calculate the power of the bulb.

OR

(a) State Fleming's right hand rule.

(b) Draw a labelled diagram of electric generator and explain its working.

Q.19. With the help of a neat labelled diagram explain the working of biogas plant. **(5)**

Q.20. Explain the reactions takes place during aerobic and anaerobic respiration. State the difference between them. **(5)**

Q.21. State the function of the following hormones. **(5)**

(a) Thyroxine

(b) Adrenaline

(c) Growth hormone.

SECTION – B **[12]**

Q.22. When an iron road is kept dipped in copper sulphate solution for sometime, a brown coating is formed on the iron road. Explain why. What change do you observe in the Colour of the solution? **(2)**

Q.23. Five solutions A, B, C, D and E when tested with universal indicator showed pH as 4,1, 11, 7 and 9 respectively. Which solution is **(2)**

(a) neutral (b) strongly alkaline (c) strongly acidic (d) weakly acidic

(e) weakly alkaline

Q.24. Two circular coil A and B are placed close to each other . If the current in the coil A is changed, will some current be induced in the coil B? Give reason for your answer. **(2)**

Q.25. What happens when Barium chloride solution is mixed with sodium sulphate solution? Name the type of reaction shown here. **(2)**

Q.26. If the length of conductor is doubled by pulling it,what will happens in the resistance of the conductor? **(2)**

Q.27. Explain the term double circulation. **(2)**

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