

AGA KHAN UNIVERSITY EXAMINATION BOARD

SECONDARY SCHOOL CERTIFICATE

CLASS IX EXAMINATION

MAY 2015

General Science Paper I

Time: 40 minutes Marks: 30

INSTRUCTIONS

1. Read each question carefully.
2. Answer the questions on the separate answer sheet provided. DO NOT write your answers on the question paper.
3. There are 100 answer numbers on the answer sheet. Use answer numbers 1 to 30 only.
4. In each question there are four choices A, B, C, D. Choose ONE. On the answer grid black out the circle for your choice with a pencil as shown below.

Correct Way		Incorrect Ways	
1	<input type="radio"/> A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D	1	<input type="radio"/> A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D
		2	<input type="radio"/> A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D
		3	<input type="radio"/> A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D
		4	<input type="radio"/> A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D

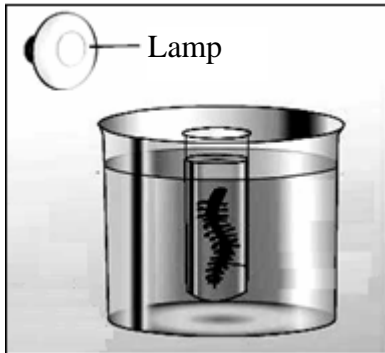
Candidate's Signature

5. If you want to change your answer, ERASE the first answer completely with a rubber, before blacking out a new circle.
6. DO NOT write anything in the answer grid. The computer only records what is in the circles.

1. Which of the following branches of science deals with land cultivation and livestock?
 - A. Biology
 - B. Geology
 - C. Agricultural science
 - D. Environmental science
2. All of the following define 'technology' EXCEPT
 - A. problem solving skills.
 - B. rote memorization of facts.
 - C. outcome of scientific knowledge.
 - D. application of scientific knowledge.
3. All of the following have made a great impact on the progress and development of science EXCEPT
 - A. use of computer.
 - B. use of energy from the sun.
 - C. making modern kitchen utensils.
 - D. discovery of sub-atomic particles.
4. Which of the following are man-made constructions to conserve water for irrigation and production of hydro-electric power?
 - A. Dams
 - B. Rivers
 - C. Pumps
 - D. Steam engines
5. When oxidation occurs, heat energy is produced. This process is called
 - A. combustion.
 - B. conduction.
 - C. convection.
 - D. radiation.
6. Which of the following gases helps in combustion?
 - A. Carbon
 - B. Oxygen
 - C. Sulphur
 - D. Nitrogen
7. In the process of photosynthesis, glucose is produced from
 - A. oxygen and water.
 - B. water and nitrogen.
 - C. carbon dioxide and water.
 - D. carbon dioxide and nitrogen.

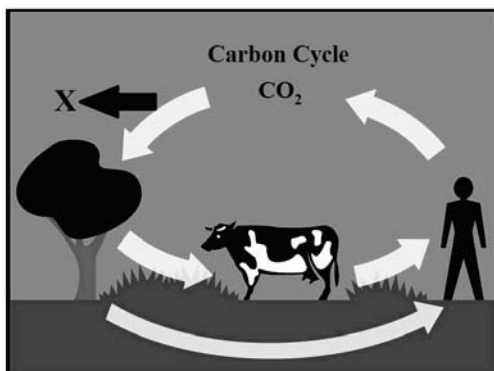
8. The given diagram shows a plant in a test tube and a source of light.

When more light is provided to the plant, it produces



- A. more bubbles of oxygen.
B. fewer bubbles of oxygen.
C. more bubbles of carbon dioxide.
D. fewer bubbles of carbon dioxide.
9. A carbon cycle is shown in the given diagram.

Which of the following processes is represented by **X** in the given picture?



- A. Digestion
B. Respiration
C. Photosynthesis
D. Decomposition
10. A condition in which leaves of plants and trees become pale due to the insufficient production of chlorophyll is called chlorosis.

Chlorosis is caused by the deficiency of

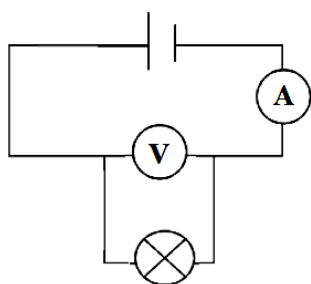
- A. nitrate.
B. sodium.
C. phosphate.
D. magnesium.

11. Enzymes can break starch molecules into sugar molecules. They are present in the human's
- A. colon.
 - B. saliva.
 - C. stomach.
 - D. large intestine.
12. Haemoglobin is formed when iron is combined with
- A. fat.
 - B. protein.
 - C. vitamin.
 - D. carbohydrate.
13. The term biotechnology relates to all of the following EXCEPT
- A. plants.
 - B. energy.
 - C. animals.
 - D. microorganisms.
14. The credit for inventing penicillin for the treatment of bacterial infections went to
- A. Ernst Chain.
 - B. Louis Pasteur.
 - C. Howard Florey.
 - D. Alexander Fleming.
15. Which of the following contains the highest concentrations of protein and iron?
- A. Meat
 - B. Bread
 - C. Citrus fruits
 - D. Fresh vegetables
16. Which of the following options CORRECTLY matches the organ with its function?

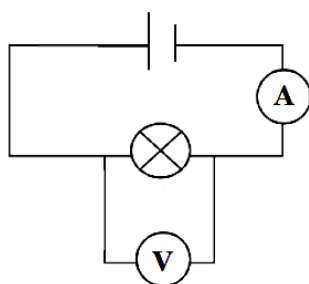
	Organ	Function
A	Liver	Absorption of amino acids
B	Mouth	Absorption of lipids
C	Stomach	Absorption of digested food
D	Large intestine	Absorption of water and salt

17. A disorder of gut 'constipation' is caused by the
- A. releasing of excess water by the small intestine.
 - B. absorption of excess water by the large intestine.
 - C. making of new organic molecules used for the growth of cells.
 - D. energy obtained by the digestion of carbohydrates in the alimentary canal.

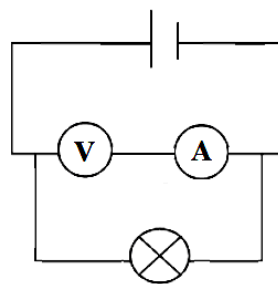
18. Which of the following processes is used to turn old and broken items into new and useful things?
- A. Rehabilitating
 - B. Revitalizing
 - C. Rebuilding
 - D. Recycling
19. Which of the following is the main source of energy on earth?
- A. The sun
 - B. Fossil fuel
 - C. Nuclear power
 - D. Hydroelectric power
20. All of the following units of energy are used for the energy consumption by the human body EXCEPT
- A. watt.
 - B. joule.
 - C. calorie.
 - D. kilojoule.
21. The basic purpose of an electric motor is to convert electrical energy into
- A. heat energy.
 - B. light energy.
 - C. potential energy.
 - D. mechanical energy.
22. Which of the following circuits can be used to measure both current and voltage?



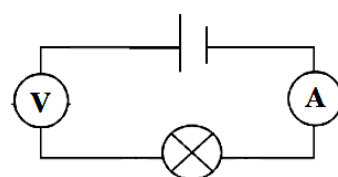
A



B



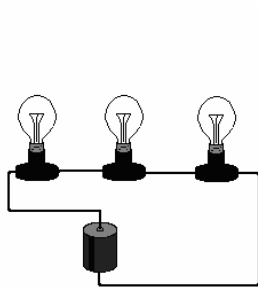
C



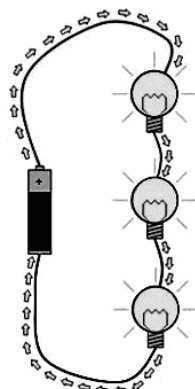
D

23. All of the following methods of producing electricity cause pollution EXCEPT
- A. solar power.
 - B. nuclear power.
 - C. thermal power.
 - D. biomass power.

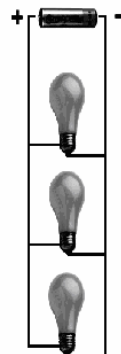
24. When a ball is thrown up in the air, after reaching a certain height it begins to fall due to
- A. wind energy.
 - B. kinetic energy.
 - C. potential energy.
 - D. chemical energy.
25. In a power station when running water moves a turbine, during this process the potential energy of the water will change into
- A. heat energy.
 - B. light energy.
 - C. sound energy.
 - D. kinetic energy.
26. The rate of flow of electric charges in a conductor is known as
- A. current.
 - B. voltage.
 - C. resistance.
 - D. capacitance.
27. All of the following are the series circuits EXCEPT



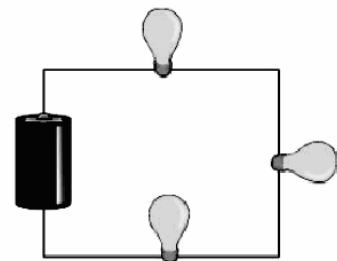
A



B



C



D

28. Which of the following electrical instruments is used for measuring current?
- A. A voltmeter
 - B. An ammeter
 - C. An ohm meter
 - D. A potentiometer
29. Which of the following electrical devices is used in a circuit to turn it on and off ?
- A. A fuse
 - B. A switch
 - C. A resistor
 - D. A capacitor

30. Earthing system is used to protect
- A. library books.
 - B. kitchen utensils.
 - C. household furniture.
 - D. electrical appliances.

END OF PAPER

Please use this page for rough work