

# KEYS EDUCATIONAL AND STATIONERY SERVICES (KESS)

## KESS PLATFORM

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# STANDARD SEVEN FIRST JOINT ASSESSMENT - 2022

## SUBJECT: SCIENCE AND TECHNOLOGY

**TIME: 1:30 HOUR** **FRIDAY 18<sup>TH</sup> MARCH, 2022**

### INSTRUCTIONS

- ❖ This paper consists of forty-five (45) questions with sections A and B.
- ❖ Answer all the questions in all sections.
- ❖ Read all the given instructions in the special answer sheet (OMR).
- ❖ Fill all the required information in the OMR form and the page with question number 41 - 45 in the question paper.
- ❖ Write your Examination Number and then shade the digits of the number in the respective place in your answer sheet (OMR).
- ❖ Shade the letter of the correct answer for each question in the answer sheet provided (OMR) for questions number 1 – 40. For example, if the correct answer is A shade as follows:  

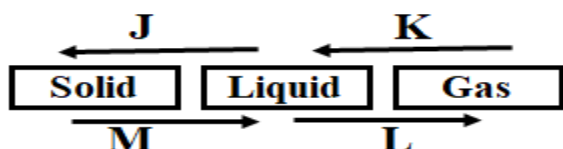
[A]	[B]	[C]	[D]	[E]
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- ❖ If you have to change your answer, you must rub out the shading very neatly before shading the new one. Use a clean rubber.
- ❖ Use HB pencil only for questions 1 - 40, and a blue or black ink ball pointed pen for question number 41 – 45.
- ❖ Cellular phones are not allowed in the examination room.

## SECTION A (40 Marks)

Answer ALL questions in this section.

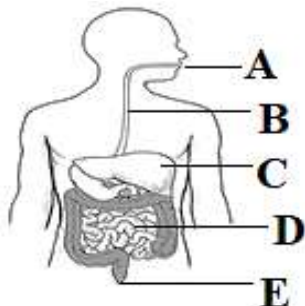
Choose the correct answer and **shade its corresponding letter** in special answer sheet (OMR) provided.

1. Growth is one of the characteristics of living things. Which of the following is **not** one of the essential needs for plant growth?  
 A. Sunlight                      B. Air                      C. Water                      D. Carbohydrate                      E. Temperature [     ]
2. Which tissue is used to transport water and nutrients from the roots to stem and leaves of a plant?  
 A. Stomata                      B. Vein                      C. Xylem                      D. Chlorophyll                      E. Phloem [     ]
3. A science teacher was explaining to pupils about invertebrates. Which of the following examples would the teacher use to make the pupils understand well that concept?  
 A. Lizard, fish, bat and frog                      C. Millipede, ant, butterfly and snail                      E. Worm, bat, snake and lizard  
 B. Snail, crab, fish and grasshopper                      D. Grasshopper, millipede, butterfly and lizard [     ]
4. Standard five pupils were taught about two types of metamorphosis; which are complete and incomplete metamorphosis. Complete metamorphosis has how many stages?  
 A. Two                      B. Three                      C. Six                      D. Four                      E. Five [     ]
5. The agricultural expert was advising the farmers of Shaurimoyo village on the ways to control soil erosion. Which of the following ways were the farmers advised to adopt?  
 A. Monoculture, use of manure and over cultivation                      D. Cultivating by terracing, intercropping and monoculture  
 B. Terracing, mulching and the use of industrial fertilizers                      E. Deforestation, contour ploughing and mulching  
 C. Cultivating by terracing, contour farming and strip farming [     ]
6. Isabela ignored to take the required precaution when she was using a toilet cleaning detergent with the irritant sign. Which of the following would be the possible effect that she would face?  
 A. Electric shock                      C. Skin rashes                      E. Vomiting and diarrhoea [     ]  
 B. Fire accident                      D. Stains on her clothes
7. Sango was complaining about the frequent damage of his electrical appliances such as TV, Radio and refrigerator that has been caused by fluctuations in electric current. Which of the following devices would you advise him to use in order to solve that problem?  
 A. Earth wire                      B. USB cable                      C. Ammeter                      D. Resistor                      E. Electrical stabilizers [     ]
8. A science teacher asked standard six pupils to prepare some materials in order to generate biogas. Which of the following materials were prepared by the pupils?  
 A. Faeces, animal dung and food remains                      C. Wire, bulbs and Oxygen                      E. Water, kerosene and wire  
 B. Water, Carbon dioxide and Oxygen                      D. Water, bottle and Oxygen [     ]
9. What is the angle between the plane mirror and the light reflected from the object in the periscope?  
 A. 15°                      B. 35°                      C. 30°                      D. 90°                      E. 45° [     ]
10. It was sunny day and Tatu wanted to make fire but she had no a match box. Which device among the following would you advise her to use?  
 A. Concave lens                      B. Convex lens                      C. Periscope                      D. Plane mirror                      E. Thermometer [     ]
11. What will happen to an electric current in a series circuit when resistors are added?  
 A. The voltage will increase                      D. The electric current will increase in the circuit  
 B. The voltage will decrease                      E. The electric current will decrease in the circuit [     ]  
 C. There will be no drop of voltage across the device
12. A child was playing with iron nails at the kitchen. Unfortunately, she dropped some iron nails into a basket containing rice. Which of the following tools would be used to separate the iron nails from the rice?  
 A. Magnet                      B. Computer                      C. Mirror                      D. Lens                      E. Periscope [     ]
13. What is the purpose of fixing magnets on the opening edges of a freezer and the doors of some cabinets?  
 A. To expel heat                      C. To remove the iron nature                      E. To prevent rusting [     ]  
 B. To warm the area inside                      D. To make the doors stick properly
14. The diagram below shows changes in the states of matter. Which two processes require an increase in temperature?  
 A. L and M  
 B. K and L  
 C. J and K [     ]  
 D. J and M  
 E. K and M



15. Which of the following changes of matter is a physical change?  
 A. Rotting of a plant                      C. Souring of milk                      E. Rusting of iron [     ]  
 B. Burning of charcoal                      D. Vapourisation of water

16. What is the normal blood pressure of an adult human being?  
 A. 120/80mmHg      B. 160/90mmHg      C. 90/60mmHg      D. 100/50mmHg      E. 100/120mmHg [      ]
17. Neema was wondering why many pregnant women in her village were going to the dispensary every day while they were not sick. The following are the reasons as to why pregnant women should attend clinic, **except**:  
 A. To make checkups on the development of the baby      D. To get advice on how to avoid infections [      ]  
 B. To get advice on appropriate foods      E. To get advice on how to breastfeed a child  
 C. To get advice on how to take care of the pregnancy
18. When you exhale into a test tube containing lime water, it turns milky in colour. What do these results mean?  
 A. The air we exhale has high level of carbon dioxide      D. The air we inhale has high carbon dioxide  
 B. There is no any change withing lime water      E. The tube will have air bubbles only [      ]  
 C. Lime water changes to milky liquid only
19. Standard three pupils were taught about various sources of electricity. Which of the following is not among the sources of electricity that they have learnt?  
 A. Battery      B. Dry cell      C. Magnet      D. Bulb      E. Generator [      ]
20. Mr. Chambo, a science teacher at Miembeni primary school was preparing a lesson about the third-class lever. Which of the following tools would he use as a teaching aid to make his lesson well understood by the pupils?  
 A. Wheelbarrow      B. Pair of scissors      C. Claw hammer      D. Beam balance      E. Broom [      ]
21. Siwema has a problem of bleeding gums and poor healing of wounds. Which type of vitamins among the following would you advise her to consume in large quantity so as to solve that problem?  
 A. B12      B. E      C. B2      D. C      E. A [      ]
22. Standard seven pupils of Kweulasi primary schools wanted to make a simple electric circuit as a part of their lesson. Which materials among the following would they use?  
 A. Bulb, wire and switch      C. Dry cell, fuse and circuit breaker      E. Dry cell, wire and bulb  
 B. Switch, earth wire and fuse      D. Fuse, wire and earth wire [      ]
23. Mainda measured a stone with the weight of 180 newtons. What will be the up-thrust force when the stone will be immersed in a fluid which measures 160 newtons?  
 A. 340N      B. 10N      C. 80N      D. 20N      E. 100N [      ]
24. A health officer of Maendeleo village advised the villagers to eat fruits and green vegetables. Why should the villagers adhere to that advice?  
 A. To build their bodies      C. To get energy      E. To strengthen their muscles  
 B. To strengthen their body immunity      D. To give their bodies heat [      ]
25. The weight of Kopo is 50kg who sits 2cm from the fulcrum. Then Kope sits 4cm from the fulcrum. What will be the weight of Kope in order to balance with Kopo?  
 A. 200kg      B. 25kg      C. 36.2kg      D. 2.5kg      E. 250kg [      ]
26. When the pupils visited the laboratory room, they were given a device that helped them to observe very small objects that they could not see them by their naked eyes. Which device were the pupils provided with?  
 A. Microscope      B. Periscope      C. Telescope      D. Eye glasses      E. Camera [      ]
27. The diagram below represents the parts of a human digestive system. Which letter indicates the part that is responsible for the absorption of food?



- A. B  
 B. C  
 C. E [      ]  
 D. A  
 E. D

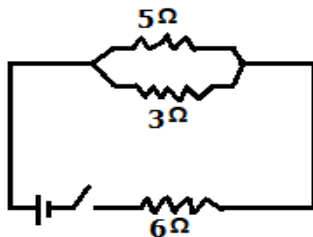
28. Why is water not used to extinguish the fire caused by petrol or kerosene?  
 A. It does not support combustion      C. It has no oxygen gas      E. It is colorless [      ]  
 B. It contains inflammable substances      D. It spreads the flammable substances
29. Sudi decided to burn all worn out clothes and pieces of papers that were found around his home in order to make the environment clean. The fire that was caused by the burning of such materials belongs to which class of fire?  
 A. Class D      B. Class C      C. Class A      D. Class F      E. Class E [      ]
30. What is the name of a rectangle formed by the intersection of columns and rows in a worksheet?  
 A. Active cell      B. Rows      C. Workbook      D. Insert tab      E. File tab [      ]

31. Which group among the following represents the main types of antenna?  
 A. Wire antenna, array antenna, microstrip antenna and reflector antenna  
 B. Yagi uda antenna, loop antenna, horn antenna and conical horn antenna [ ]  
 C. Array antenna, aperture antenna, yagi antenna and horizontal antenna  
 D. Vertical antenna, horizontal antenna, feeder antenna and cable antenna  
 E. Microstrip antenna, loop antenna, Pyramidal antenna and Home antenna
32. Apart from the hardware protection devices, computers must also be protected against programmes that can attack them. What are the programmes that can attack computers called?  
 A. Computer viruses  
 B. Computer hardwares  
 C. Computer software  
 D. Uninterruptible Power Supply [ ]  
 E. Antiviruses
33. The file tab of a workbook is part of the menu bar that contains a list of ribbon commands. Which of the following words does not appear in the file menu?  
 A. Back  
 B. Close  
 C. Save as  
 D. Insert  
 E. Share [ ]
34. Which feature of Gmail account stores controversial e-mails that the browser has deemed as coming from hackers?  
 A. Draft  
 B. Outbox  
 C. Spam  
 D. Address  
 E. Starred [ ]
35. Which part of the blood circulatory system transports deoxygenated blood from the body parts to the heart?  
 A. Pulmonary artery  
 B. Aorta  
 C. Renal vein  
 D. Renal artery  
 E. Vena cava [ ]
36. Standard seven pupils conducted an experiment whereby, they put a bowl and a coin in the basin filled with water. The result showed that the coin sank and the bowl floated. Why did the coin sink?  
 A. The weight of a coin is less than water  
 B. Has large shape and less space  
 C. The density of a coin is greater than the density of water  
 D. The coin has no pointed shape  
 E. A coin has space inside [ ]
37. Which method can be used to express and present the researched and analyzed data in a scientific experiment?  
 A. Conclusion  
 B. Interpretation  
 C. Graphs  
 D. Hypothesis  
 E. Investigation [ ]
38. Class five pupils have learnt about various epidemic diseases. Which of the following is **not** among the diseases that they have learnt?  
 A. COVID-19  
 B. Tuberculosis  
 C. Dengue fever  
 D. Ebola  
 E. Marasmus [ ]
39. Mr. and Mrs. Juma have four years old daughter called Salma. One day, Salma had a fever and headache, which were accompanied with vomiting and later on she started bleeding from the nose, mouth and ears. Which diseases was Salma suffering from?  
 A. Tuberculosis  
 B. Whooping cough  
 C. Dysentery  
 D. Sickle cell  
 E. Ebola [ ]
40. Ammonia is an excretory product that is produced when excess protein is broken down. Which organ in the human body is responsible for removing ammonia?  
 A. Liver  
 B. Kidney  
 C. Skin  
 D. Lung  
 E. Heart [ ]

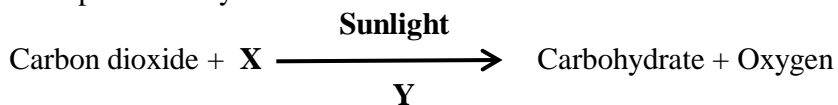
### SECTION B (10 Marks)

For questions 41-45, write your answer in the space provided in the special form (OMR) by using a blue or black ink pen.

41. What is the difference between a website and a webpage?
42. The electrical engineer connected a circuit as shown by the diagram below. Calculate the total resistance



43. The following equation shows the process of photosynthesis in plants. Complete it by writing the raw materials which are represented by letter X and Y



- (a). X represents \_\_\_\_\_  
 (b). Y represents \_\_\_\_\_
44. A tailor has realized that the moving parts of his sewing machine have got rust and are not running smoothly. What advice would you give the tailor to avoid such a problem?
45. What is the major function of the bacteria and fungi which live in the soil?