

DAS B.E.C.E PERFORMANCE BOOSTER

SEPTEMBER, 2018

MARKING SCHEME

INTEGRATED SCIENCE

PAPER 2

QUESTION 1

- a. i. maize
ii. (i) husk
(ii) grain, seed-----2marks, 1 mark each
iii. (i) de-husking -----
(ii) shelling
iv (i) mulching, making weaving hat, food preparation
(ii) banku, flour, porridge, feeding farm animals ---2marks, 1

mark each

- (v) insect -----weevil, stem borers
Rodent-----mouse, grass cutter, etc -----2marks

Note: correct spellings to score, otherwise award zero

(b)

- i. To remove air or oxygen-----2marks
ii. To prevent air or oxygen from dissolving back into the water----
2marks
iii. To prevent water or moisture from entering the test tube-----
2marks
iv. Because oxygen or air and water were present-----
2marks
v. To show that air or oxygen and water are necessary for rusting
2marks

(c)

- i. To demonstrate the conditions necessary for germination of a
seed-----2marks
ii. Germination occurs in test tube A
No germination occurs in test tubes B,C and D-----2marks

- iii. Test tubes were not covered in order to make oxygen available for the seeds-----2marks
- iv. To prevent oxygen or air from dissolving back into the water---2marks
- v. There would be no germination in all the four test tubes

iv)

- 1. oil metal parts of the tool
- 2. keep tools at cool dry place
- 3. wash soil on the blades
- 4. sharpening blunt blades

b) (i) figure 1-----NPN Transistor

figure 2-----PNP Transistor -----2marks

(ii) x-----collector

Y-----base

Z-----Emitter-----3marks

(iii) the base pulls electrons from the emitter-----1marks

(iv) silicon-----2marks

(v) as a switch

As an amplifier

As a voltage regulator

As a rectification -----2marks

PART 2

QUESTION 2

a)

i. electronics are devices that uses the behaviour and movement of electrons in a semi-conductor, vacuum or gas-----2marks

ii.

1. transistors
2. diodes
3. inductors
4. capacitors
5. resistors-----2marks, half each, correct spellings to score

b).

(b) (i) infectious diseases are diseases caused by micro-organism which spread from person to person by agents such as air-----2 marks

ii) yawns, chicken pox, tuberculosis, bird flu, buruli ulcer etc-----, 1 1/2 marks, **correct spellings to score, otherwise award zero.**

(c) i. silicon, boron and germanium-----1/2 marks

ii. 1. They are brittle

2. They are not good conductors

3. They are better insulators than metals -----3marks

(d) 1. Provision of food

2. Feed for farm animals

3. Provision of employment

4. Raw materials for production

5. for income -----3marks

Question 3

(a) i. water

ii. Suitable temperature

iii. Oxygen

iv. Viable seed-----4marks

correct spellings to score

(b) i. a force is a pull or push on an object-----1mark

ii. (i). it cause a body to move

(ii) it can cause a body to stop moving

(iii) it can change the speed of a moving body

(iv) it can change the shape of a body-----any 3----for 3marks

(c) i. farming system refers to the ways or methods by which farming activities are carried out to produce crops or animals.-----1mark

ii. land rotation, crop rotation, mixed cropping , mixed farming etc.

(d) i rusting is the reaction between iron and oxygen in the presence of water(moisture) to produce iron oxide-----1 mark

ii. acid rain, water, oxygen -----2marks, correct spellings to score

Question 4

(a) i. a shadow is the area of total or partial darkness cast on a screen when an opaque object is place in front of a source of light whiles an image is formed when two or more rays meet-----1 mark, contrast to score

ii. (1) it used in hairdressing saloon

(2) it used in shops to detect thieves

(3) it is used in barbering shops

(4) used for making mirror periscope -----3marks

(b)

1. Distillation
2. Evaporation
3. Separation by magnetization-----**3marks, correct spellings to score**

(c) i. mulching is the method of covering the surface of the soil with dry grass or leaves.-----1 mark

ii.

1. It checks erosion
2. It keeps the soil cool
3. It keeps the soil moist
4. It improves the fertility of the soil
5. It checks weeds -----4marks

(d)

1. blood group
2. eye colour
3. baldness
4. shapes of the nose
5. height -----**4marks correct spellings to score**

Question 5

(a) I a resistor is a component of an electronic circuit that helps to control amount of current/voltage that runs through it----2marks

ii.

1. It controls current in a electronic device
2. It prevents an electronic device from damaging
3. It prevents the overloading of current
4. It can also prevent fire outbreak -----3 marks

(b)

1. fire outbreak
2. fumes and dust
3. falling objects
4. toxic
5. falling objects -----5marks

(c)

1. it provides water to plants
2. it is the home micro-organisms
3. it provides the plant firmly
4. it helps to provide nutrients to plants-----2marks, half each

(d)

i. respiratory system is the organs that living organisms use to break down complex food substances such as glucose to release energy.-----1mark

ii.

1. Lungs is the main organ for gaseous exchange
2. Trachea acts as a passage through which inhaled air gets to the lungs—
2marks

Question 6

(a)

- i. CO_2
- ii. $CaCl$ ($CaCl_2$)
- iii. MgO -----**3marks, correct to score**

(b) i. element of weather is the conditions used to describe the weather of a place -----**2marks**

li

1. Rain gauge

2. Anemometer
3. Barometer
4. Wind vane
5. Etc.-----**4marks, correct spellings to score**

(c) (i) fertilizer is a substance which is apply to the soil or plant to supply nutrients needed for plant growth-----2marks

(ii)

1. broadcasting
2. Drilling
3. Spraying
4. Placement
5. Side dressing
6. Ringing-----**4marks, correct spellings to score**

(d)

1. the heart
2. the blood vessel
3. the blood
4. the lungs -----**4 marks, correct spellings to score**

PAPER 1
OBJECTIVE

1. D
2. D
3. B
4. A
5. B
6. A
7. D
8. A
9. C
10. D
11. C
12. B
13. B
14. B
15. C
16. A
17. A
18. B
19. B
20. B
21. A
22. B
23. C
24. A
25. C
26. A
27. D
28. B
29. B
30. A
31. D
32. B
33. B
34. B
35. A
36. A
37. C
38. A
39. C
40. B