



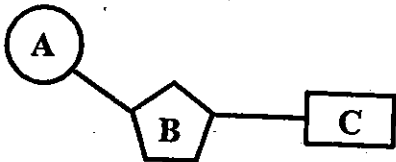
10 ශ්‍රේණිය - විශේෂ ඇගයීම (පළමු වාරය) - 2022  
தரம் 10 - முதலாந் தவணைப் பரீட்சை (முதலாம் தவணை) - 2022  
Grade 10 - Special Evaluation (First Term) - 2022

විද්‍යාව  
Science

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Two hours

Part - I

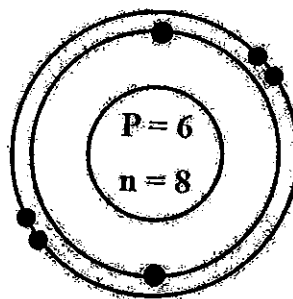
01. What is the type of polysaccharide stored in plant leaves,  
1. Cellulose 2. Glycogen 3. Starch 4. Sucrose
02. Identifying by using the Benedict solution,  
1. Starch 2. Glucose 3. Glycogen 4. Cellulose
03. The false statement regarding proteins,  
1. Consisting C, H, O and N  
2. It's a biological molecule  
3. Act as hormones  
4. Its important for storing water
04. What is the reason for chlorosis near the veins of leaves,  
1. Lack of N 2. Lack of S 3. Lack of Fe 4. Lack of P
05. The diagram illustrate the structure of Nucleotide,



Name the A, B, C accordingly,

1. Nitrogenous base, Pentose Sugar group, Phosphate group
2. Phosphate group, Pentose Sugar group, Nitrogenous base
3. Pentose Sugar group, Nitrogenous base, Phosphate group
4. Phosphate group, Nitrogenous base, Pentose Sugar group

06. The electronic configuration of an atom,



What is the true statement about the atom,

1. Atomic number is 8
2. Atomic mass number is 13
3. Electronic configuration is stable
4. Atomic number is 6

• Answer (7), (8), (9) and (10) questions by using the below mentioned periodic table.

A	B		C		D	E	F
G						H	

07. Select the Bi-valent nonmetal,

1. B
2. C
3. D
4. E

08. Select the element is having highest electron negativity,

1. A
2. E
3. F
4. G

09. Select the element is having least first ionization energy,

1. A
2. E
3. F
4. G

10. The formulae of a compound is forming between E and G,

1.  $EG_3$
2.  $E_2G$
3.  $G_2E$
4.  $GE$

11. The correct formulae of sodium carbonate,

1.  $Na_2CO_3$
2.  $Na(CO_3)_2$
3.  $NaCO_3$
4.  $Na_2(CO_3)_2$

12. Which element is using to produce milk of magnesia,

1. Na
2. S
3. Ca
4. Mg

13. Which gas used to fill-up thermometers,

1.  $O_2$
2.  $Cl_2$
3.  $N_2$
4.  $F_2$

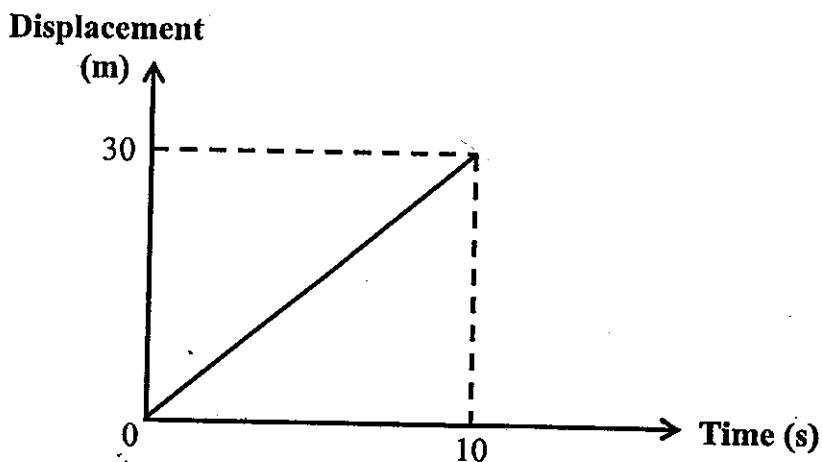
14. What is the word using for rate of changing velocity,

1. Velocity    2. Speed    3. Displacement    4. Acceleration

15. Select answer is having only vector quantities,

1. Distance  $\gamma$  Displacement    2. Speed  $\gamma$  velocity  
3. Displacement  $\gamma$  Velocity    4. Acceleration  $\gamma$  speed

16. This is a displacement – time graph for a moving object,



Select the false statement,

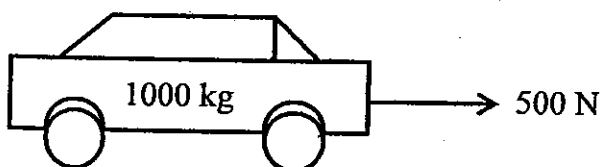
1. The object is moving with an uniform velocity.  
2. The force exerts on the object is zero.  
3. The velocity of the object increases with time.  
4. The object is having a linear motion.

17. The correct measuring unit for Accelerations,

1.  $\text{ms}^{-1}$     2.  $\text{ms}^{-2}$     3. ms    4. Nm

18. An object is moving 600 m within 2 minutes what is the speed of the object,

1.  $300 \text{ ms}^{-1}$     2.  $100 \text{ ms}^{-1}$     3.  $50 \text{ ms}^{-1}$     4.  $5 \text{ ms}^{-1}$



19. What is the acceleration of the car,

1.  $\frac{1000}{500} \text{ ms}^{-2}$

2.  $1000 \times 500 \text{ ms}^{-2}$

3.  $\frac{500}{1000} \text{ ms}^{-2}$

4.  $1000 - 500 \text{ ms}^{-2}$

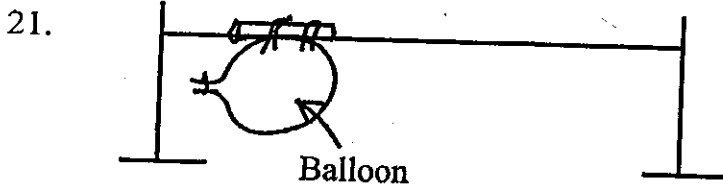
20. Due to deficiency of vitamin A,

1. Teeth decaying

2. Cetadation of houes

3. Effect for blood clotting

4. Night blindness



Which is illustrate by the above diagram,

1. Newton's 1<sup>st</sup> law

2. Newton's 2<sup>nd</sup> law

3. Newton's 3<sup>rd</sup> law

4. Momentum

22. What is the velocity of a vehicle is moving 200 m in 10 S,

1.  $2 \text{ ms}^{-1}$

2.  $200 \text{ ms}^{-1}$

3.  $20 \text{ ms}^{-1}$

4.  $0.2 \text{ ms}^{-1}$

23. Select the correct answer regarding isotopes,

1. Having different atomic numbers.

2. Having the same atomic mass number.

3. Having the same atomic of neutrons.

4. Having the same atomic protons.

24. Who was the scientist discovered cell,

1. Glyten

2. Shewann

3. Radolf

4. Robert Hook

25. What is the organelle can be observed through light microscope,

1. Nucleous

2. Golgi complex

3. Mitochondria

4. Above all

26. What is the below mentioned organelle and its function,



- |    |               |   |                       |
|----|---------------|---|-----------------------|
| 1. | Golgi complex | - | Secretion             |
| 2. | Ribosome      | - | Secretion of proteins |
| 3. | Chloroplast   | - | Serration of stevoids |
| 4. | Mitochondria  | - | Respiration           |

27. Cell wall of plant cell is build up by,

- |    |          |    |        |    |           |    |         |
|----|----------|----|--------|----|-----------|----|---------|
| 1. | Proteins | 2. | Lipids | 3. | Cellulose | 4. | Lactose |
|----|----------|----|--------|----|-----------|----|---------|

28. The non-living thing in a cell,

- |    |           |    |               |    |               |    |          |
|----|-----------|----|---------------|----|---------------|----|----------|
| 1. | Cell wall | 2. | Cell membrane | 3. | Golgi Complex | 4. | Nucleous |
|----|-----------|----|---------------|----|---------------|----|----------|

29. The energy get produce in a cell by,

- |    |          |    |              |    |              |    |               |
|----|----------|----|--------------|----|--------------|----|---------------|
| 1. | Necleous | 2. | Chloro plast | 3. | Mitochondria | 4. | Golgi Complex |
|----|----------|----|--------------|----|--------------|----|---------------|

30. Not a special characteristic of water,

- |    |                     |    |                                     |
|----|---------------------|----|-------------------------------------|
| 1. | Act as a coolant    | 2. | Having high specific heat capacity. |
| 3. | It's a good solvent | 4. | Having low boiling point            |

31. The object is situated on the ground projected vertically upwards by velocity of  $40\text{ms}^{-1}$ . What its velocity in 6 seconds?

- |    |   |    |                    |    |                    |    |                    |
|----|---|----|--------------------|----|--------------------|----|--------------------|
| 1. | 0 | 2. | $5\text{ ms}^{-1}$ | 3. | $10\text{ms}^{-1}$ | 4. | $20\text{ms}^{-1}$ |
|----|---|----|--------------------|----|--------------------|----|--------------------|

32. What is the purpose doing bi-urette test,

- |    |                      |    |                            |
|----|----------------------|----|----------------------------|
| 1. | Identifying proteins | 2. | Identifying Lipids         |
| 3. | Identifying starch   | 4. | Identifying monosaccharide |

33. The object is projected vertically upwards of the velocity of  $60\text{ ms}^{-1}$ . What is the time duration when its reaches the maximum height,

- |    |      |    |      |    |      |    |     |
|----|------|----|------|----|------|----|-----|
| 1. | 60 S | 2. | 30 S | 3. | 10 S | 4. | 6 S |
|----|------|----|------|----|------|----|-----|

34. Its not a form of Carbon,

- |    |          |    |         |    |      |    |         |
|----|----------|----|---------|----|------|----|---------|
| 1. | Graphite | 2. | Diamond | 3. | Coal | 4. | Dry ice |
|----|----------|----|---------|----|------|----|---------|

35. In which element the electronic negativity won't be considered,

- |    |    |    |   |    |   |    |    |
|----|----|----|---|----|---|----|----|
| 1. | Na | 2. | C | 3. | O | 4. | Ne |
|----|----|----|---|----|---|----|----|

36. Which element gives luminous white flame by heating?

- |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|
| 1. | Na | 2. | Mg | 3. | Ca | 4. | Al |
|----|----|----|----|----|----|----|----|

37. A - Electron negativity get increases from left to right in a period.  
B - The first group of elements are having the highest first ionization energy.  
C - Electron negativity get decreases from top to the bottom of a group.

What are the true statements,

1. A & B      2. B & C      3. A & C      4. A, B & C
38. The monosaccharide won't have sweet taste,
1. Glucose      2. Fructose      3. Galactose      4. Maltose
39. Number of H atoms are present in a  $(\text{NH}_4)_2 \text{SO}_4$ ,
1. 2      2. 4      3. 8      4. 12
40. Which element is having the density less than water,
1. Na      2. Ca      3. Mg      4. Al



**தரம் 10 - முதலாந் தவணைப் பரீட்சை (முதலாம் தவணை) - 2022**

**Grade 10 – Special Evaluation (First Term) - 2022**

**විද්‍යාව**  
**Science**

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One hours

- **Answer only 3 questions.**

01. A. i. What are the most common 04 elements in the living body. (02)
- ii. Write down 04 types of biological molecules. (02)
- iii. Write down one significance to each of these biological molecules. (04)
- iv. Write down how to identifying glucose by using the benedict solution. (02)
- v. What are the colour changes in that activity. (02)
- B. i. Write down deficiency symptoms for the each element separately.
- a. Sodium (01)
- b. Magnesium (01)
- c. Iron (01)
- ii. Write down the vitamin caused the below mentioned deficiency symptoms.
- a. Night blindness (01)
- b. Scurvy (01)
- c. Beri beri (01)
- C. Write down 02 specific properties in water for the continuation of life. (02)
02. A. i. Write down the meanings of Atomic number and atomic mass number. (02)
- ii. Draw the electronic configuration of O atom (Atomic number is 8) (02)
- iii. Atomic number of Cl is 17 and the atomic mass number is 35. Write down this data in standard form. (02)
- B. Write down the formulas for the below mentioned compounds.
- a. Sodium Oxide (01)
- b. Calcium Carbonate (01)
- c. Ammonium Sulphate (01)

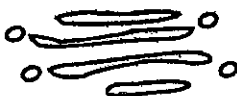
- C. i. Write down 02 physical or chemical properties of Na metal. (02)
- ii. Write down 02 uses of Na metal. (02)
- iii. How does this metal stored. (02)

- D. i. Write down the meaning of first ionization energy. (02)
- ii. Which group of periodic table is having the highest first ionization energy. (02)
- iii. What is the scale is using to measure electronic negativity. (01)

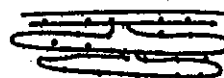
03. i. Write down 03 contents of cell theory. (02)
- ii. Explain briefly how to prepare a slide of a plant tissue by using an onion. (03)
- iii. Write down the names of the below mentioned organelles and give one function of each of them. (06)



A



B



C

- iv. What are the organelles are present in plant cell but absent in animal cell. (02)
- v. Write down 02 methods of cell division. (02)
- vi. Which division is take place when the gamates are forming. (02)
- vii. Write down 02 differences between these 02 methods. (02)

04. A. The below mentioned table indicates a motion of an object.

Time (s)	1	2	3	4	5	6	7	8	9	10
Displacement	4	8	12	16	20	20	20	20	10	0

- i. Draw the displacement - time graph for the above motion. (02)
- ii. Find the uniform velocity in first 5 second (02)
- iii. Find the uniform velocity during last 2 seconds. (02)
- iv. What is the total distance travelled in this journey? (02)

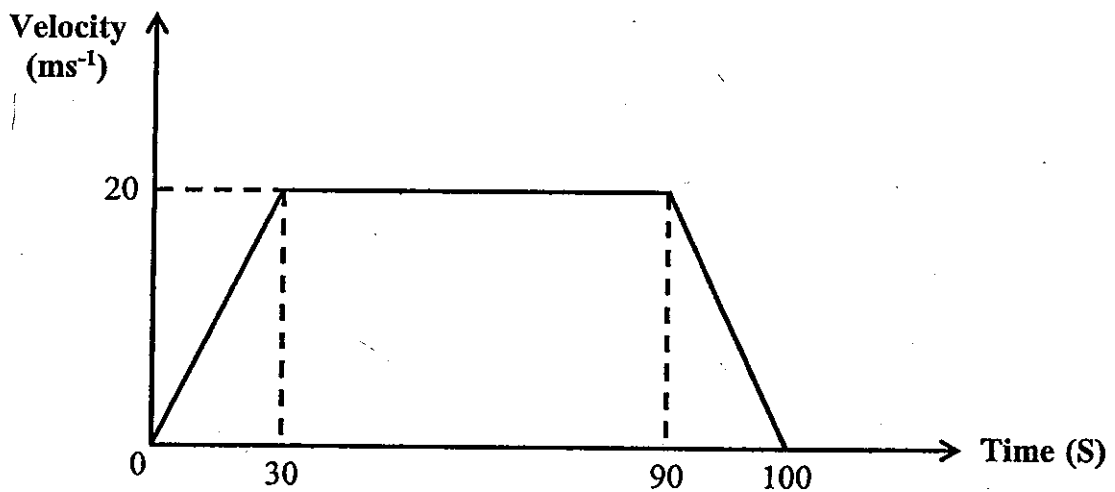


B. i. Write down the meaning of the below mentioned quantities.

a. Displacement

b. Acceleration

ii. The below mentioned velocity time graph indicate a liner motion of an object.



a. Explain the motion of the object.

(03)

b. Find the acceleration of the object

(02)

c. Find the whole displacement.

(03)