



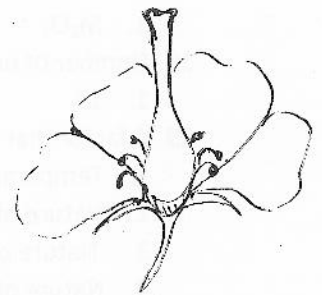
De Mazenod College - Kandana

Grade 11 - First Term Test - 2016

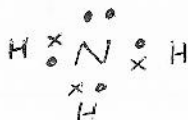
Science Part I

Answer all questions.

1. Which is not a biological molecule?
 1. carbohydrates
 2. Proteins
 3. Water
 4. lipids
2. Storage polysaccharide in animals
 1. Cellulose
 2. Starch
 3. Glycogen
 4. Glycerol
3. Elements that are always present in proteins .
 1. C,H,O
 2. C,H,O,N
 3. C,H,O,S
 4. C,H,O,P
4. Enzymes and hormones are made up of .
 1. Proteins
 2. Carbohydrates
 3. Lipids
 4. acids
5. Select the false statement about digestive end products.
 1. Lipids → fatty acids and glycerol
 2. Proteins → amino acids
 3. Starch → glucose
 4. Galactose → lactose
6. Which is not an importance of DNA?
 1. Store genetic information
 2. Inheritance of genetic material
 3. Control cellular activities
 4. Protein synthesis
7. What is the "power house" in a cell?
 1. Nucleus
 2. Chloroplast
 3. Mitochondria
 4. Golgi bodies
8. Release of egg cell form a single ovary occurs in .
 1. Per 14 days
 2. Per 28 days
 3. Per 56 days
 4. Can not say
9. Select the method of pollination of the given flower .
 1. Self pollination
 2. Cross pollination
 3. Self pollination or cross pollination
 4. Can not say
10. Which occurs in follicle phase.
 1. Development of primary follicle in to graffian follicle
 2. Release the egg cell by rupturing the graffian follicle
 3. Degeneration of corpus luteum
 4. Degeneration of uterine wall



11. Which is not a feature of fungi?
1. Possess organized nucleus
 2. Cell wall possesses chitin
 3. All are unicellular
 4. All are heterotrophs
12. Select endothermic animal phyla
- | | | |
|--------------|--------------|-------------|
| A. Pisces | C. Reptilian | E. Mammalia |
| B. Amphibian | D. Aves | |
1. A and B
 2. B and C
 3. C and D
 4. D and E
13. Another characteristic feature of a plant that possess trimerous floral parts.
1. Tap root system
 2. Reticulate venation
 3. Unbranched stem
 4. Naked seeds
14. Which is not a feature of bacteria
1. Possess organized nucleus
 2. Found in all environments
 3. Heterotrophs or autotrophs
 4. Reproduce by budding
15. Following is a bond structure of ammonia molecule. How many lone pairs are there in the given molecule.

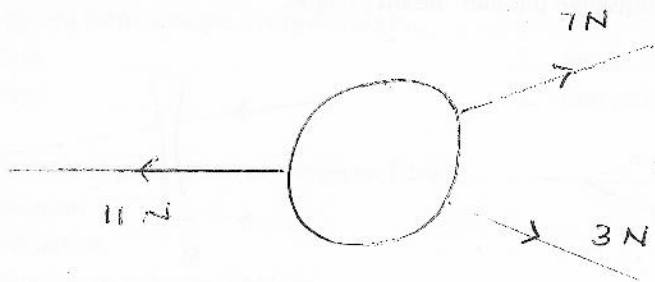


1. One
2. Two
3. Three
4. Four

Answer the question 16, 17 and 18 using the given information about element 'M'. 'M' is not a standard symbol. ${}^{27}_{13}\text{M}$.

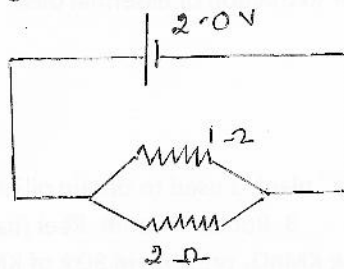
16. Find the period and the group of the given element 'M'.
- | | |
|--------------|--------------|
| 1. 2 and III | 3. 3 and II |
| 2. 3 and III | 4. 3 and VII |
17. Formulae of the oxide of the element 'M'
- | | | | |
|---------------------------|---------------------------|---------------------------|-------|
| 1. M_2O_2 | 2. M_2O_3 | 3. M_3O_2 | 4. MO |
|---------------------------|---------------------------|---------------------------|-------|
18. Number of neutrons present in element 'M'.
- | | | | |
|-------|-------|-------|-------|
| 1. 13 | 2. 14 | 3. 15 | 4. 27 |
|-------|-------|-------|-------|
19. A factor that does not affect on solubility.
1. Temperature
 2. Nature of the solvent
 3. Nature of the solution
 4. Nature of the solute

20. Method which is not used for extraction of essential oils.
1. Solvent extraction
 2. Steam distillation
 3. Heating of alcohol
 4. pressure
21. Which part of the 'Savandara' plant is used to obtain oil?
1. Stem
 2. Leaves
 3. Roots
 4. Peel (bark)
22. Find the mass fraction of 16 g KMnO_4 present in 80 g of KMnO_4 solution .
1. $16/80$
 2. $80/16$
 3. $16/80 \times 100$
 4. $18/16 \times 100$
23. Find the required volume of HCl which is needed to prepare 250 ml of 1/50 (v/v) solution.
1. 1 ml
 2. 5 ml
 3. 10 ml
 4. 50 ml
24. Find the required mass of NaOH to prepare 500 ml of 8 gdm^{-3} NaOH solution .
1. 8 g
 2. 4 g
 3. 2 g
 4. 1 g
25. Which of the following emits from the top of the fractional distillation tower?
1. L.P. gas
 2. Petrol
 3. Diesel
 4. Kerosene
26. Which of the following substances releases the O_2 when it is heated?
1. K_2CO_3
 2. MgCO_3
 3. KNO_3
 4. KNO_2
27. An iron nail which was in CuSO_4 solution turned in to red colour. What should be the reason for the red colour in the iron nail?
1. Iron oxide is formed
 2. Copper oxide is form
 3. Deposition of copper
 4. Deposition of iron
28. Which of the following possesses the equal number of electrons to Mg^{2+} ?
1. F^-
 2. Cl^-
 3. Be^{2+}
 4. Ca^{2+}
29. If resultant force of 3N and 7N forces is 5N acts towards the direction of 11N force , find the resultant force of all three forces.



1. 0 N
2. 6 N
3. 4 N
4. Can not say

Answer the question 30 and 31 using the given circuit .



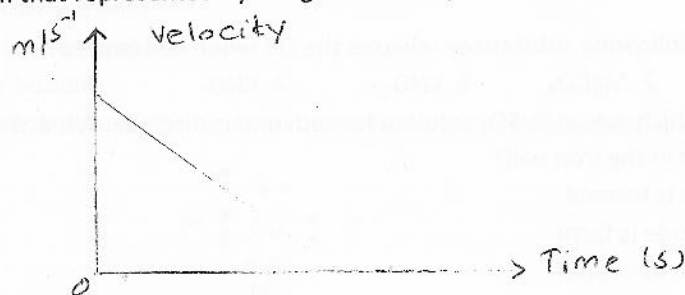
30. Select the correct statement about current that passes through the circuit.

1. Maximum amount of current passes through the battery
2. Maximum amount of current passes through the 1Ω resistor
3. Maximum amount of current passes through the 2Ω resistor
4. Equal amount of current is passing through the circuit

31. What is the current that pass through the circuit?

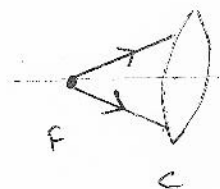
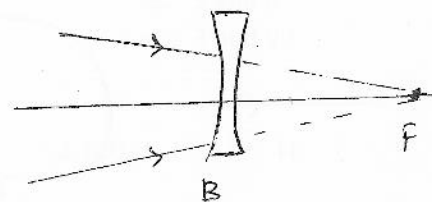
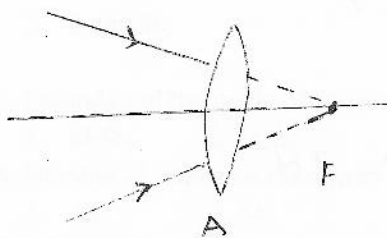
1. $2/3$ A
2. $4/3$ A
3. 3A
4. 5A

32. Select the motion that represented by the given velocity – time graph.



1. Hydrogen balloon released from rest.
2. Movement of coconut released from plant
3. A train comes to rest which was travelling
4. A bicycle travels in slope

33. Which of the followings give parallel beam of light.

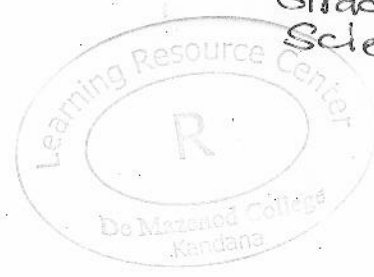


1. A and B
2. A and C

3. B and C
4. A, B and C

34. Select where total internal reflection of light is not used .

1. Endoscopic instruments.
2. Telecommunication
3. Internet connection
4. Break kidney stones



35. Select the false statement .
1. As the length of wire increases pitch increases.
 2. As the tension of wire increases pitch increases
 3. As the length of air column increases , pitch increases
 4. As the tension of membrane increases pitch decreases
36. Which is not a use of micro waves.
1. Radar system
 2. Mobil phones
 3. Micro wave cookers
 4. Surgeries.
37. Recently it has discovered that petroleum fuels (gases) deposits are available in the Sri Lankan sea .select the component gas that could be present in it.
1. Nitrogen
 2. Neon
 3. Methane
 4. Sulphure dioxide
38. Which of the following incident has the highest risk during the lightning.?
1. Use of telephones connected by cables
 2. Use of mobile phones
 3. Travelling by bus
 4. Use of radio with out an antenna.
39. Select the false statement about bio diversity conservation.
1. Biodiversity conservation is not important for the existence of organisms ✓
 2. Biodiversity conservation is important for the existence of organisms
 3. Biodiversity conservation does not affect on formation of new varieties
 4. Biodiversity conservation should be carried out by man
40. Dynamic nature of science is explained by
1. Atomic theory of Dolton
 2. Archimidies' principle
 3. Ohm 's law
 4. Flemming's Right hand law.