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TELEGRAM AND JOIN US.



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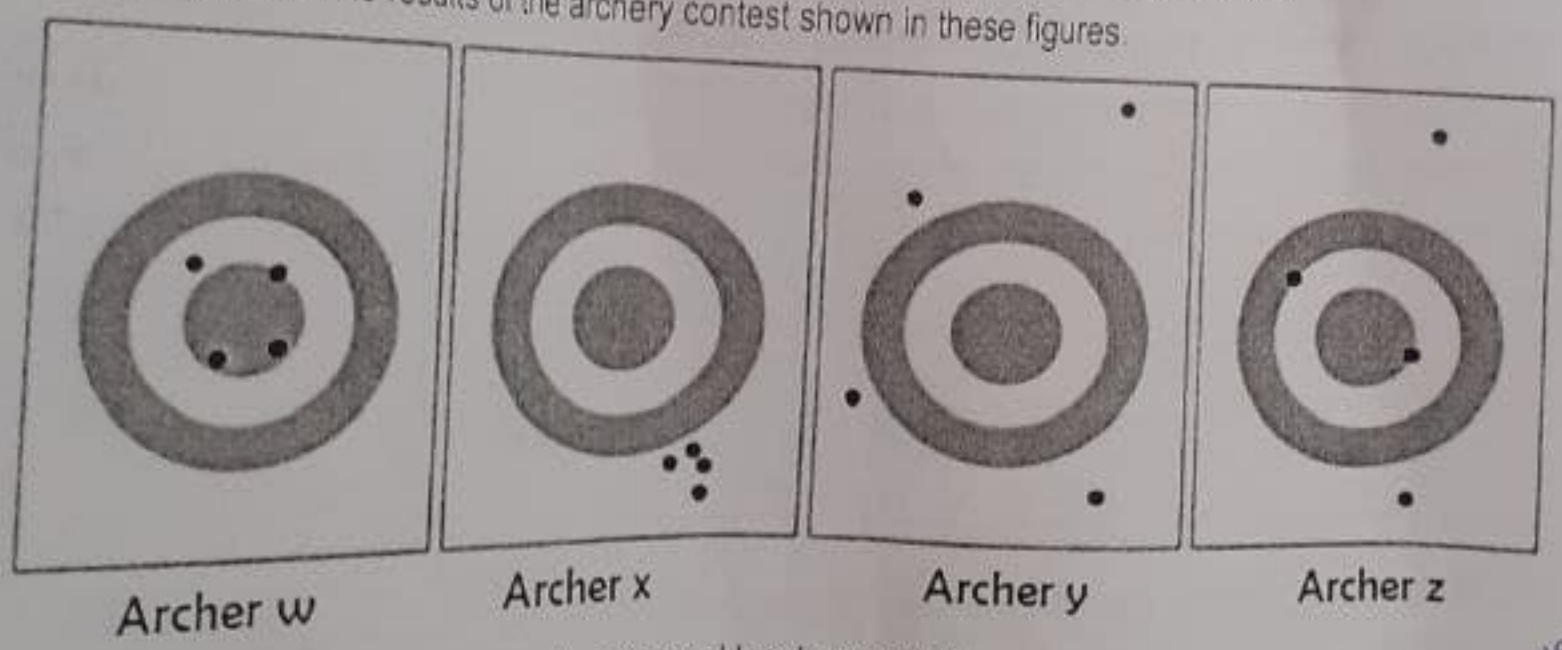
ON TELEGRAM

@keleme_2013

I. Chose the best letter among the alternatives (0.5 each)

1. How many chromosomes do you expect to find in normal human body cells?
   A) 23 B) 50 C) 84 D) 46
2. Which one of the following statement is true about cell division?
   A) In mitosis, no genetic variety is introduced whereas the reverse in meiosis
   B) Both type of cell division used to replace old and worn out cells
   C) Identical cells known as clones are formed in both cell division processes
   D) Mitosis and meiosis involved asexual reproduction
3. One of the following compounds is the waste product of anaerobic respiration in yeast.
   A) Sugar B) Water C) Oxygen D) Carbon dioxide
4. Which one of the following characters (condition) is inherited from parents?
   A) Malaria B) Albinism C) Anaemia D) HIV/AIDS
5. The basic unit of inheritance is:
   A) Gene B) Chromosome C.) DNA D) RNA
6. A nerve impulse crosses a synapse by means of:
   A) Electrical conduction B) vibration C) Light rays D) Chemical transmitter
7. Of the following alternatives, one is not a reflex action.
   A) Eye blinking B) Walking C) Moving hands away from hot plat D) Sneezing
8. Which is the correct order of bones in the middle ear, from the ear drum inward?
   A) Hammer, anvil, stirrup
   B) Anvil, hammer, stirrup
   C) Anvil, stirrup, hammer
   D) Stirrup, hammer, anvil
9. One of the following endocrine gland secret a hormone that directly controls the metabolic rate of the body.
   A) Pancreas B) Ovaries C) Testes D) Thyroids
10. Gases move in and out of a plant through:
    A) Cuticle B) Stomata C) Epidermis D) Root
11. One of the following components is not needed for photosynthesis to take place.
    A) oxygen B) Carbon dioxide C) Chlorophyll D) Light
12. Water is taken up through the roots of plants by a process known as:
    A) Diffusion B) Evaporation C) Active transport D) Osmosis
13. Which of the following chemical (gas) has caused the formation of "Ozone hole"?
    A) So_2 B) Co_2 C) CFCs D) NO

14. Of the following alternatives, one is not a way to conserve natural resources
A) Massive fire charcoal production C) Re-forestation and afforestation
B) Protection of natural resources D) Sustainable farming
15. Which of the following statement is true about **Dr. Gabissa Ejeta?**
A) He is a renowned biologist who synthesis snail killing soapberries.
B) He has developed vaccine against cattle disease
C) He is a known plant genetic researcher
D) He developed new, high yielding and drought resistant sorghum strains
16. _____ is also known as the power house of a cell.
A) Nucleus B) Cell membrane C) Chromosome D) Mitochondria
17. Which of the following molecules are the building blocks of protein?
A) Amino acid B) Glycerol C) Fatty acid D) Monosaccharides
18. Activity of an enzyme does not affected by one of the following factors
A) PH B) Temperature C) Surface area of reactant D) Light
19. Glucose + Oxygen = $Co_2 + H_2O +$ _____?_____.
A) ADP B) CO C) ATP D) Gas
20. What main role the platelets play in our blood?
A) Clotting B) Oxygen carriage C) CO_2 Carriage D) Antibody production
21. Consider the results of the archery contest shown in these figures.



Which archer is both least precise and least accurate?
A. Archer w B. Archer x C. Archer y D. Archer z
22. Many medical laboratory tests are run using 5 µL blood serum. What is this volume in milliliters?
A. 5 B. $5x10^{3}$ C. $5x10^{-3}$ D. $5x10^{-6}$

34. Which one of the following expressions is correct for the rate law of reaction given below:

$$5Br^-(aq) + BrO_3^-(aq) + 6H^+(aq) \longrightarrow 3Br_2(aq) + 3H_2O(l)$$

A. $\frac{\Delta[Br^-]}{\Delta t} = 5\frac{\Delta[H^+]}{\Delta t}$

B. $\frac{\Delta[Br^-]}{\Delta t} = \frac{5}{6}\frac{\Delta[H^+]}{\Delta t}$

C. $\frac{\Delta[Br^-]}{\Delta t} = \frac{6}{5}\frac{\Delta[H^+]}{\Delta t}$

D. $\frac{\Delta[Br^-]}{\Delta t} = 6\frac{\Delta[H^+]}{\Delta t}$

35. The reaction between alcohol and carboxylic acids is called:
A. esterification B. hydrolysis C. saponification D. dehydration

36. Conversion of ethanol into ethanoic acid is an example of:
A. reduction B. addition C. oxidation D. hydration

37. Carboxylic acids of low molecular mass are soluble in water due to:
A. hydrogen bonding B. dissociation into ions C. dimer formation D. hydrolysis

38. When 'tella' is kept for some time, it becomes sour due to the formation of:
A. Ethanol B. Ethanoate C. Ethanal D. Acetic acid

39. Balance the following equation, using the lowest possible whole number coefficients:

$$2\,Cu + 4\,HNO_3 \rightarrow 1\,Cu(NO_3)_2 + 2\,NO_2 + H_2O$$

The sum of the coefficients is
A. 8 B. 12 C. 10 D. 7

40. A battery is "dead" if:
A. reactants and products reach their equilibrium concentrations
B. E_{cell} is equal to zero.
C. ΔG is equal to zero.
D. all of the above.

41. Intervention strategies for malaria include
A. Insecticide treated bed bet
B. Indoor residual spraying with DDT
C. Removal of mosquito breeding sites
D. all
E. A &C

42. The cycle of symptom is shortest for which of the following sub type of rhalaria
A. Falciparum
B. Vivax
C. Ovale
D. Malariae
E. Knowlesi

23. As a health care provider, you are preparing for an experiment. you require 25 g sample. The only container readily available is a 150-mL Erlenmeyer flask. Is it large enough to contain the sample, whose density is 1.83 g/mL?

A. Yes B. No C. We can't determine.

24. The molarity of 193 g of cholesterol, $C_{27}H_{46}O$, in 0.1 L of serum is

A. 0.5 M B. 19.3 M C. 5 M D. 1930 M

25. Assume an FM radio station found at DMU is at a frequency of 30 MHz. What is the wavelength of this radio wave in meter?

A. 0.1 m B. 10 m C. 1×10^{13} m D. 1×10^{7} m

26. The eyes of certain reptiles pass a single visual signal to the brain when the rods receptors are struck by photons. If a total energy of 6.63×10^{-14} J is required to trip the signal, what is the wavelength of photons that strike the receptor?

A. 3×10^{-12} m B. 10 m C. 1×10^{12} m D. 1×10^{7} m

27. The pOH of 0.01 M HCl solutions at 25 °C is:

A. 12 B. 2 C. 10^{2} D. 10^{12}

28. Which type of electromagnetic wave has the highest energy?

A. Visible light B. Ultraviolet C. Radio waves D. Gamma rays

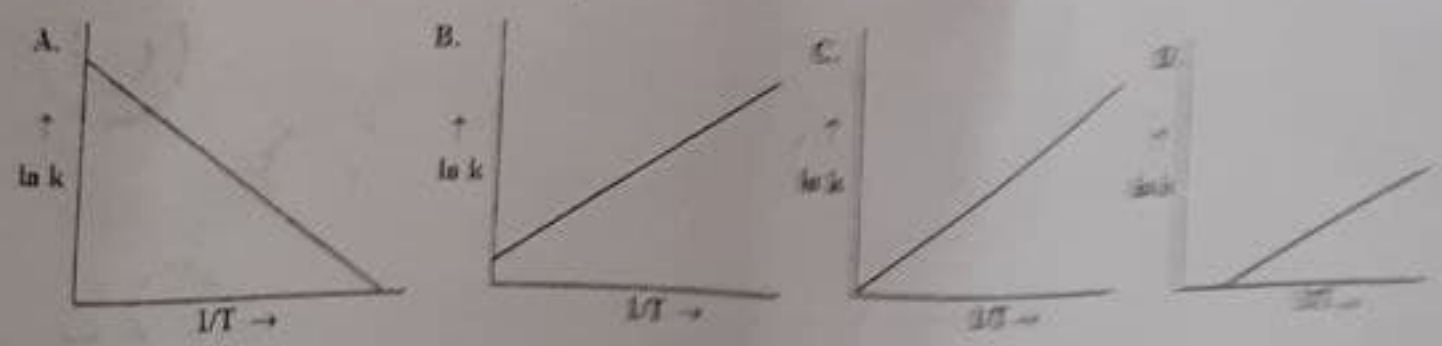
29. The water free from all ions (cations and anions) is referred as

A. heavy water B. distilled water C. demineralized water D. mineral water

30. For a cyclic process, the change in internal energy of the system is

A. positive B. negative C. zero D. infinity

31. According to Arrhenius equation rate constant, $k = Ae^{-E_a/RT}$. Which of the following options represents the graph of $\ln k$ vs $\frac{1}{T}$?



32. In gas masks, the poisonous gases are adsorbed by activated charcoal. The activated charcoal acts as

A. adsorbate B. adsorbent C. catalysis D. adsorption agent

33. If 0.11 L of a 0.36 M C_3H_7OH solution is diluted to a concentration of 0.22 M, what is the volume of the resulting solution?

A. 0.18 L B. 0.72 L C. 0.36 L D. 0.09 L

50. You successfully completed your medical training and get assigned to a hospital where staff and clients are not happy about most thingsthe hospital. The medical staff complain about shortage of medications and cleanliness of the rooms that provide services. They don't seem to take responsibility. The team doesn't go along together (don't stand each other) – there is a lot of argument and disagreement. Most are waiting for the right moment to leave the facility. Patients complain too about the way they are treated and the long waiting hours to get the service. Which one is not expected from you if you are given the managerial position?

A. I will create harmony between teams
B. I will be annoyed
C. I will use my own leadership skill and manage the problem
D. I will believe it is expected and will find solution

51. Diet planning for person with Diabetes Mellitus involves

A. calculating the amount of sodium
B. a consistent amount of carbohydrate intake daily
C. measuring fluid intake
D. giving insulin with meals

52. 52. During the cardiac cycle the opening of the aortic valve takes place at the :

A. Beginning of systole
B. End of isovolumetric contraction
C. End of diastole
D. End of diastasis

53. Assume you are a year one health student. While passing by the hospital, you see a person who looks like from the rural area. He is confused, doesn't know where to go holding a piece of paper – most likely a referral note. You are busy preparing for your exam, each minute counts for you.What do you do about this person?

A. I don't want to give concern, because I have exam and busy
B. I feel sorry and I will left him
C. I will stop my exam and support the confused man
D. I will look a person around who might support him.

54. As health personnel, you should encourage an individual to prevent constipation through

A. Attempt to defecate each evening
B. Exercise a regular basis
C. Decrease his fiber consumption
D. Drink at least six glasses of fluid daily

55. The junction between the axon of one neuron and dendrite is called

A. a joint
B. a synapse
C. constant bridge
D. junctional point

43. Ebola virus epidemics occurs in
A. Central Africa
B. South Asia
C. Central America
D. all of the above
E. A &B

44. The human system with the greatest diversity of bacterial species is
A. Gut
B. Vagina
C. Lung
D. Skin
E. Eye

45. When we migrate from dark to light ,we fail to see for some times but after a time visibility become normal. It is an example of
A. Adaptation
B. Mutation
C. Phosphoperiodism
D. Accomudation

46. Ovulation in the human female normally takes place during the menstrual cycle
A. At the mid secretary cycle
B. Just before the end of the secretary cycle
C. At the beginning of proliferative phase
D. At the end of proliferative phase

47. A 46 years old man injured from car accident and brought to the emergency room where you are the attending to a health care provider. You do a quick assessment of the victim and realized he bled massively and required blood transfusion. After taking to the person in the blood bank, you learned there was small blood in blood bank. A donor is required and has no family who accompany him to donate blood. The person who is the stranger to the victim is not willing to give blood. Of the following which one should not be parts of the solution?
A. I will provide my own blood
B. I will look another guy who is voluntary for transfusion
C. I will let him for others to find solution
D. I will bring to other hospital where there is access of blood

48. A Red blood cell was kept in a solution for a few minutes where it was burst. The solution taken was
A. Hypotinic
B. Hypertonic
C. Isotonic
D. concentrated sugar solution

49. As the first aide provider you should
A. be aware of your own limit
B. move the person
C. give the person fluid
D. perform any necessary measures to save life

56. according to the accepted concept of hormone action , if receptor molecule are removed from target organ, the target organ
A. not respond to the hormone
B. continue to respond to the hormone but will require higher concentration
C. continue to respond to the hormone but will in the opposite way
D. continue to respond to the hormone without any difference
57. What does HIV-positive mean?
A. Either antibodies against HIV or the virus particles themselves are present in the blood
B. You have been tested for HIV
C. Your white cell count is high
D. You have been informed about HIV
58. HIV attacks a certain kind of cell in the immune system. Which is it?
A. Red blood cell
B White blood cell called T cell
C. platelets
D. Epithelial cell
59. While jogging early in the morning out of the school compound, you happen to observe a young boy on the ground surrounded by people including policemen. When you pay a closer look, you see injury marks and conclude he was hit by a car. He looks he is dead but you can't tell because the police officers are there not allowing any one to touch the body. The only thing the policemen are concerned about is not interfering with criminal evidence. They tell they have already called for an ambulance and are waiting. No one knows how long the victim has been in that situation, no one is giving any life support and no one has confirmed if he is alive or dead. You know time is racing against the victim.What do you do for this situation? How do you interact with the police?
A. I don't interfere on the decision of the policeman, because it legal issue
B. I will convince the policeman and tries to save the victim
C. I will left the victim for the policeman
D. I will left him for the people around the victim
60. Assume a critically ill patient was brought to the hospital you are working. After providing the emergency care, you decided the patient to stay in the hospital for some days to investigate further. However, the nurse said there is no vacant bed to keep the patient. You know if you send the patient back home, he is not going to make it. In the meantime, the nurse insisted she can't have him. How do you communicate with the nurse?
A. I will ignore the nurse and bring the patient to stay in the bed
B. I will talk to the hospital manager
C. I will effectively communicate with the nurse for the betterment of the patient's safety
D. I will inform the issue to patient's relatives