PrepsNG

Learning Center

# UNIVERSITY OF MEDICAL SCIENCE

## POST UTME PAST QUESTIONS FOR SCIENCE

# UNIVERSITY OF MEDICAL SCIENCES, ONDO [UNIMED] POST UTME PAST QUESTIONS

## UNIMED 2015 POST UTME QUESTIONS

**Section 1: English**

**Read the passage below and answer questions that follow**

The rich countries of the world, Europe and North America in particular, became rich for several reasons. They were developing at a time when there were still large areas of unexplored and sparsely inhabited land in the world they discovered; and they then began to exploit whatever resources they found.

At the same time, at home, the industrial revolution was going on and the raw materials obtained from the countries they colonised were useful in developing new industries. The products of these industries provided an incentive for people in the mother country to invent more and work harder. The products, for example guns, were used in subduing the peoples of other parts of the world, or in enticing them into the economic orbit of the industrialising countries.

The people of the countries of the world now called developing countries were impressed by the technology of the Europeans. Not without some justification, they connected the wealth of Europeans with their technology alone, being unaware of the other factors contributing to their progress. North America developed, riding on the back of European industrialisation and colonisation. Today America and Europe have forged ahead, so that the per capita income in the USA may be ten times that in the poorer countries.

The latter now tend to feel that their way of development and future economic sufficiency must be along the same route as that taken by the wealthier countries. This may not necessarily be so, as the circumstances in which they are developing are very different. Explain the meaning of the following words in the passage

1. An incentive
A. A case to handle
B. A motive for them
C. Reason for working harder
D. Something to remind them

2. Enticing
A. Forcing
B. Allowing
C. Begging
D. Persuading

3. Orbit of
A. Sphere of influence
B. Usual progression
C. Revolving round
D. Member of

4. What figure of speech is used in "riding on the back of"
A. Simile
B. Metaphor
C. Personification
D. Irony

5. In the writer's opinion the way to development of the poorer countries must _____ as that taken by wealthier countries.
A. Be along the same route
B. Take a different route
C. Should walk side by side
D. Should rely on their resources

**Read the following passage and select the best option that fills the corresponding gap in the text.**

With the decline in sales of manufactured goods at home and abroad, widespread __6__ is likely to affect many firms. The motor trade employs the largest sector of the working __7__ and will probably be first affected. The government has therefore set up a __8__ to examine ways and means of

__9__ new industries in areas where previously labour was not available. Unemployment is the most serious of all __10__ problems

6. A. promotion
B. redundancy
C. surplus
D. abundance

7. A. population
B. congregation
C. crowd
D. denomination

8. A. commitment
B. profession
C. committee
D. commune

9. A. searching
B. evolving
C. developing
D. growing

10. A. industrious
B. industrial
C. employment
D. workers

**INSTRUCTION: Fill the gaps in the sentences below by choosing the word which is most nearly opposite in meaning to the one underlined in each sentence, and which also best completes the sense of the whole.**

11. Before he started playing football, he used to be overweight for his age and height; now he is actually ____
A. Light-weight
B. Underweight
C. light
D. under-balanced

12. Last week it was doubtful if Kola would recover from his illness, but now it is almost____ that he will.
A. Assured
B. Factual
C. Genuine
D. Certain

13. The questions in this exercise require _____ answers, but the answers to the composition questions have to be approached subjectively.
A. Objective
B. Factual
C. Opposite
D. Realistic

14. His invention may work in theory but it is not _____
A. Application
B. Effective
C. Practical
D. Convenient

15. At first, they thought the car belonged to the enemy, but to their relief it had already been captured by their _____
A. Comrades
B. Associates
C. Collaborators
D. Allies

16. I can't believe Femi would throw the ring into the river deliberately .He must have done it _____
A. Incidentally
B. Spontaneously
C. Accidentally
D. Crazily.

17. The government is going to ____ all the old buildings in this area and have new ones erected.
A. Abolish
B. End
C. Terminate
D. Demolish

## ANSWERS TO SECTION 1: ENGLISH LANGUAGE

1. C 2. D 3. A 4. B 5. B 6. B 7. A 8. C

9. C 10. B 11. B 12. D 13. A 14. C

15. D 16. C 17. D

**Section 2: General paper**

18. Simplify $\sqrt{27} \times \sqrt{50}$
A. $8\sqrt{5}$
B. $15\sqrt{6}$
C. $8\sqrt{6}$
D. $15\sqrt{5}$

19. Given that log 2 = 0.30103 and log 3 = 0.47712, without using tables, calculate log 6.
A. 0.09062
B. 0.60206
C. 0.77815
D. 0.14363

20. 6 notebooks cost ₦300.00; how many books can be bought with ₦450.00.
A. 8
B. 7
C. 9
D. 10

21. Factorize $5m^2 - 80$
A. $5(m + 4)^2$
B. $5(m^2 - 16)$
C. $5(m + 4)(m - 4)$
D. $16(m^2 - 5)$

22. Without using tables or a calculator, calculate 12.9 X 0.54
A. 5.966
B. 6.966
C. 6.968
D. 5.968

23. Express 2.4 Kg in g
A. 240
B. 2400
C. 24
D. 480

24. Which of the following is a non-luminous object?
A. Sun
B. Moon
C. Stars
D. Lighted candle

25. If the velocity of light in air is $5.0 \times 10^8 ms^{-1}$, find the velocity of light in a medium whose refractive index is 2.0
A. $1 \times 10^{-9}$ $ms^{-1}$
B. $2.5 \times 10^8$ $ms^{-1}$
C. $2.5 \times 10^{-8}$ $ms^{-1}$
D. $1 \times 10^9$ $ms^{-1}$

26. In which medium do sound waves have the greatest speed
A. Vacuum
B. Air
C. Water
D. Steel

27. What is the kinetic energy of a boy of mass 50kg running with a velocity of $3ms^{-1}$?
A. 7500 J
B. 150 J
C. 225 J
D. 450 J

28. What is the potential energy of a swimmer of mass 65 kg at a height of 15 m above the swimming pool? ($g = 9.8$ $ms^{-1}$)
A. 9408 J
B. 9555 J
C. 4777.5 J
D. 4704 J

29. Convert 200 Kelvin to °C.
A. 70 °C
B. 73 °C
C. -70 °C
D. -73 °C

30. Why does water wet its glass container and mercury does not?
A. Water is a more viscous liquid than mercury.
B. Mercury is a more viscous liquid than water.
C. The adhesive forces between water and glass molecules is more than the cohesive forces between water molecules
D. The adhesive forces between mercury and glass molecules is more than the cohesive forces between mercury molecules.

31. When a brass metal is heated, it expands because its molecules
A. Vibrate with smaller amplitude
B. Vibrate with greater amplitude
C. Increase their speed of random motion
D. Decrease their speed of random motion.

32. When oxygen gas is heated, it expands because its molecules
A. Vibrate with smaller amplitude
B. Vibrate with greater amplitude
C. Increase their speed of random motion
D. Decrease their speed of random motion.

33. Why do leaves of plants appear green?
A. Leaves use green light in photosynthesis
B. Leaves absorb green light
C. Leaves reflect green light
D. Leaf thickness is smaller than the wavelength of green light

34. How much NaCl would be required to prepare normal saline (0.9% NaCl) in a 250 ml volumetric flask?
A. 1.8 g
B. 13.2 g
C. 2.25 g
D. 9.0 g

35. A sample of grape juice has pH of 3.80. What is the molar concentration of hydrogen ion in the juice?
A. $1.58 \times 10^{4}$
B. $1.58 \times 10^{2}$
C. $1.58 \times 10^{-2}$
D. $1.58 \times 10^{-4}$

36. Which of the following are products of hydrolysis of lactose?
A. Glucose and fructose
B. Glucose and galactose
C. Glucose and mannose
D. Glucose and maltose

37. At 40°C, the volume of a gas was 1.2 $m^3$, at what temperature will the gas occupy a volume of 2.5 $m^3$ when heated under constant pressure?
A. 313K
B. 652K
C. 320K
D. 330K

38. In a 500 ml volumetric flask, what quantity of $Na_2CO_3$ would be required to prepare a 2.5M solution? [Na = 23; C = 12; O = 16].
A. 106 g
B. 212 g
C. 265 g
D. 132.5 g

39. The relationship between Gibbs' free energy (G), enthalpy (H), and entropy (S) is represented as follows
A. $\Delta H = T\Delta S - \Delta G$
B. $\Delta G = T\Delta S - \Delta H$
C. $\Delta G = \Delta H - T\Delta S$
D. $\Delta S = T\Delta H - \Delta G$

40. Which of the following signifies that a reaction is at equilibrium
A. Positive $\Delta G$
B. Negative $\Delta G$
C. Positive $\Delta S$
D. Zero $\Delta G$

41. 7.8g of $NaNO_3$ was dissolved in 100 ml of water at 25°C. Calculate the solubility of the salt in mol $dm^{-3}$. [Na = 23; N = 14; O = 16].
A. 0.918
B. 0.0918
C. 22.94
D. 273.46

42. Which of the following can be regarded as the strongest bonds between atoms
A. Covalent bonds
B. Electrostatic bonds
C. Hydrogen bonds
D. Van der Waals forces

43. A gas occupies a volume of 30 $cm^3$ at a temperature of 26°C and a pressure of 75cmHg. What volume will it occupy at 70°C and pressure of 120cmHg.
A. 16.34 $cm^3$
B. 31.20 $cm^3$
C. 50.48 $cm^3$
D. 21.51 $cm^3$

44. Which of the following is not a function of the human blood
A. Defence
B. Transport
C. Haemostasis
D. Cellular respiration

45. Which is these cell organelles is responsible for cellular respiration
A. Golgi bodies
B. Nucleus
C. Mitochondria

D. Ribosomes

46. In blood transfusion a universal donor has the following blood group
A. AB negative
B. AB positive
C. O negative
D. O positive

47. The following animal has a heterodont dentition
A. Tilapia
B. Toad
C. Sheep
D. Lizard

48. The following is not a plant hormone?
A. Gibberellins
B. Ethylene
C. Cytokines
D. Abscisic acid

49. Which of the following is not a communicable disease
A. Tuberculosis
B. Measles
C. Diabetes
D. Common cold

50. The following hormone is responsible for lowering blood glucose levels
A. Glucagon
B. Thyroxine
C. Insulin
D. Adrenaline

## ANSWERS TO SECTION 2: GENERAL PAPER

18. B 19. C 20. C 21. C 22. B 23. B

24. B 25. B 26. D 27. C 28. B 29. D

30. C 31. B 32. C 33. C 34. C 35. D

36. B 37. B 38. D 39. C 40. D 41. A

42. A 43. D 44. D 45. C 46. C 47. C

48. C 49. C 50. C

# UNIMED 2016 POST UTME QUESTIONS [DAY 1]

1. A car travels 90m due north in 15s. then the car turns around and travels 40m due south in 5s. what is the magnitude of the average velocity of the car during this 20s interval?
A. 2.5m/s
B. 5.0m/s
C. 6.5m/s
D. 7.0m/s

2. A worker uses a rope to pull a cart; the worker's pull on the handle of the cart can best be described as a force having
A. Magnitude only
B. Direction only
C. Both magnitude and direction
D. Magnitude or direction

3. When a neutral metal sphere is charged by contact with a positively charged glass rod, the sphere
A. Loses electrons
B. Gains electrons
C. Loses protons
D. Gains protons

4. Sound travels in air as:
A. longitudinal waves
B. transverse waves
C. electromagnetic waves
D. matter waves

5. Which of the following is a scalar quantity?
A. the braking force needed to stop a car
B. the effort needed to hammer a nail into wood
C. the heat needed to boil some water Ans
D. the thrust needed to lift a rocket off the ground

6. Using a stopwatch, which of the following is correct to determine the time for one oscillation of a pendulum?
A. Time for 20 oscillations and divide by 20
B. Time for 20 oscillations and multiply by 20.
C. Time for one oscillation.
D. None of the above.

7. What does Newton's third law of motion say?
A. Acceleration is a result of resultant force acting on a body.
B. Resultant force is always equal but opposite to the force acting on a body.
C. For every action there is an equal but opposite reaction.
D. The forces acting on a body are always equal and opposite

8. An object Q is moving in a circle around a point R. A force F keeps it moving in the circle. If the force F suddenly disappears, Q will_____
A. goes off in a straight line.
B. moves towards R.
C. moves away from R.
D. moves away in a curved path.

9. A heater marked 50W boils water for 50s, if the specific latent heat of evaporation is $5 \times 105 J\ kg^{-1}$ the mass of water that evaporates is
A. 50 kg
B. 0.005 kg
C. 0.1 kg
D. 0.05 kg

10. The input voltage of a transformer with 300 turns of wire in the primary coil is 100V, if the output voltage of the transformer is 10V, what is the number of turns in the secondary coil?
A. 10
B. 30
C. 20
D. 15

11. The speed of light in air is $3 \times 10^3 ms^{-1}$, if its speed in glass is $1.82 \times 10^8\ ms^{-1}$, the refractive index of the glass is
A. 1.82
B. 3
C. 1.65
D. 6

12. What is the latent heat of fusion of ice if the heat required to change 10kg of ice at

0°C into water at the same temperature is 800J?
A. 8 $kg^{-1}$
B. 10 $kg^{-1}$
C. 80$Jkg^{-1}$
D. 800$Jkg^{-1}$

13. It is easier to turn a tight nut and bolt by using a longer spanner because a longer spanner gives
A. more weight.
B. more friction
C. bigger turning moment.
D. bigger pressure.

14. All the following metals are solid except _____
A. Cadmium
B. Lead
C. Mercury
D. Sodium

15. Carbon has _____ allotropes
A. One
B. Two
C. Three
D. Four

16. The catalysts for Contact process and Haber process are _____ and _____ respectively
A. Iron and Nickel
B. Iron and Vanadium oxide
C. Vanadium oxide and Iron Ans
D. Nickel and Iron

17. An example of acidic salt is _____
A. NaCl
B. $KH_2PO_4$
C. Zn(OH)Cl
D. $KCr(SO_4)2.12H_2O$

18. In a sample containing 100 atoms of X, 70 were found to be 9X while 30 were 11X isotopes. Determine the average relative atomic mass
A. 6.3g
B. 9.6g
C. 10.4g
D. 3.3g

19. The electrode in which metallic radicals migrate to during electrolysis is termed _____
A. anode
B. cathode
C. glass electrode
D. selective ion electrode

20. A part of an organic compound that determines it chemical property is called_____
A. homologues series
B. empirical formula
C. functional group
D. isomerism

21. The scope of organic Chemistry does not include
A. carbon and its compounds
B. animal products
C. transition metals
D. plant products

22. The reaction $2C_2H_2 + 5O_2$ is an example of _____
A. oxidation reaction
B. addition reaction
C. combustion
D. oxidation process

23. The degree of unsaturation of edible oil can be known by its _____
A. saponification value
B. acid value
C. iodine value
D. esterification value

24. The identification of various species present in a mixture of species without bothering on the quantity is called_____
A. analysis
B. quantitative analysis
C. qualitative analysis
D. proteolysis

25. Preliminary test involves all the followings except
A. physical appearance
B. chemical reaction
C. solubility test
D. flame test

26. A solution does not change the colour of red litmus paper when dipped in it. The solution must likely be _____
A. acidic

B. basic
C. neutral
D. acidic or neutral

27. Heterotrophic mode of life with extracellular digestion is a feature of
A. Lichen
B. Fungi
C. Algae
D. Cyanobacteria

28. Lack of structures to represent the leaf, stem and root are unique to
A. Liverwort
B. Moss
C. Algae
D. Mycorrhiza

29. Which of these transports water and minerals salts in pteridophytes
A. Phloem
B. Rhizoid
C. Root
D. Xylem

30. Seed producing plants are collectively called
A. Gymnosperm
B. Spermatophyte
C. Angiosperm
D. Pteridophytes

31. Which of the following shows highest evolutionary advancement
A. Moss
B. Fern
C. Spirogyra
D. Pine

32. Complete metamorphosis occurs in one of the following insects
A. Cockroach
B. Butterfly
C. Beetle
D. Aphid

33. The reverse process of this equation $6CO_2 + 6H_2O$ _____ $C_6H_{12}O_6 + 6O_2$
A. Translocation
B. Digestion
C. Respiration
D. Nutrition

34. One of these is not a fat-soluble vitamin
A. Vitamin A
B. Vitamin C
C. Vitamin E
D. Vitamin K

35. Benedict's solution is used to test for
A. Starch
B. Proteins
C. Fats
D. Reducing sugars

36. The cell structure located near the nucleus used in cell division is
A. Centriole
B. Lysosome
C. Endoplasmic reticulum
D. Ribosome

37. The building up biological process is called
A. Catabolism
B. Isomerism
C. Anabolism
D. Metabolism

38. The knot of capillaries in the Bowman's capsule is called
A. Cortex
B. Medulla
C. Glomerulus
D. Pelvis

39. Which of the following organisms moves with the aid of flagella?
A. Amoeba
B. Paramecium
C. Trypanosome
D. Hydra

40. The portion of the blood cells responsible for blood clotting is
A. Erythrocytes
B. Leucocytes
C. Platelets
D. Monocytes

**Read the passages below and answer the questions that follow**

Nigeria has a troubled power sector which is however undergoing reforms that, hopefully,

should usher in era of private sector dominance in terms of ownership and management of generation and distribution. In this transitory phase, it is crucial to lay a foundation for local sourcing of vital inputs and make it the norm for the industry. That is the only way to prevent a replication of the trend in the oil and gas sub-sector, where capital flight is as much as $16 billion per annum, as revealed by the Petroleum Technology Development Fund.

The PHCN could legitimately insist on quality and standards in its procurement of equipment and materials, but what is playing out is an institutional orientation, evinced in several pursuits of the PHCN that are contemptuous of Nigeria's aspiration for local content development. In 1998, the defunct National Electric Power Authority defied a directive by the then Minister of Power and steel, Alhaji Bashir Dalhatu, to source its cost able components from Nigerian foundries, some of which are of high standards. Actuated by a realization of idle capacity in the foundries and the need to conserve foreign exchange, the Minister applied appropriate pressure on the management of NEPA but found his efforts frustrated.

The acute shortage or inefficiency in the metering programme originated from the fact that the only local manufacturer then, the Federal Government-owned electricity Meter Company in Zaria, Kaduna State, established in 1976,
but sold to Dantata Investments Limited in December 2002, is not performing.
*(Adapted from The Punch, Wednesday, May 25, 2011. Pg. 18)*

41. Why is there shortage of meter?
A. Non-performance of PHCN
B. Non-performance of NEPA
C. Non-performance of the Federal Government-owned electricity meter company
D. Non-performance of Dantata Investment Ltd.

42. According to the passage, the solution to the problem in the power sector lies in:
A. Sourcing for materials locally
B. Getting cost-able components
C. Obeying the minister
D. Getting $16 billion per annum

43. A suitable title for this passage is
A. Nigeria and her problems
B. NEPA versus PHCN
C. Electricity meter
D. Problems in the power sector

**Choose the interpretation that you consider most appropriate for these sentences:**

44. Ladies and gentlemen, the worse may be over, but we are not out of the woods yet. This means that we are
A. still in the forest
B. not yet ready to celebrate our success
C. likely to encounter more difficulties
D. not sure of ourselves

45. Surprisingly, Musa turned _____ the job offer Choose the word or group of words that best completes the following sentence:
A. away
B. in
C. out
D. down

**Choose the word or group of words that best completes the following sentence:**

46. We have no choice _____to do what they demanded.
A. except
B. than
C. unless
D. but

**Choose the options that are nearest in meaning to the words underlined:**

47. In this matter, we must be prepared to tolerate human <u>frailty</u>.
A. inquisitiveness
B. weakness
C. profligacy
D. innovation.

48. I detest his <u>lackadaisical</u> attitude.
A. carefree

B. lazy
C. supercilious
D. disloyal.

**Choose the options that are opposite in meaning to the words underlined.**

49. Peter always approaches issues optimistically.
A. realistically
B. pessimistically
C. carelessly
D. unrealistically.

50. Why should Dixon be evasive in answering the question?
A. indirect
B. direct
C. guessing
D. sure.

# ANSWERS TO 2016 QUESTIONS [DAY 1]

1. A 2. C 3. A 4. A 5. C 6. A 7. D 8. A

9. B 10. B 11. C 12. C 13. C 14. C 15. B

16. C 17. B 18. B 19. B 20. C 21. C

22. C 22. C 23. C 24. C 25. B 26. D

27. B 28. C 29. D 30. A 31. D 32. B

33. C 34. B 35. D 36. A 37. C 38. C

39. C 40. C 41. D 42. A 43. D 44. C

45. D 46. D 47. B 48. A 49. B 50. B

# UNIMED 2016 POST UTME QUESTIONS [DAY 2]

1. How far will a brick starting from rest fall freely in 3s?
A. 15 m
B. 29 m
C. 44 m
D. 88 m

2. If the sum of all the forces acting on a moving object is zero, the object will
A. Slow down and stop
B. Change the direction of its motion
C. Accelerate uniformly
D. Continue moving with constant velocity

3. Focal length of plane mirror is:
A. zero
B. one
C. infinity
D. depends upon quality of the mirror

4. The device used for measuring potential difference is:
A. voltmeter
B. ammeter
C. galvanometer
D. thermometer

5. Which of the following is measured using a micrometre?
A. current
B. length
C. resistance
D. weight

6. What is the correct unit for density?
A. $m^3/kg$
B. $kg^3/ m^2$
C. $kg/ m^3$
D. $kg/ m^2$

7. Frictional force is necessary for
A. a ball to bounce offs a wall.
B. a car to accelerate.
C. a rocket to be launch.
D. a spring to vibrate.

8. Which statement about frictional force is true?
A. It is required to start a motion.
B. It acts in the direction of the motion.
C. Its value is equal to the force producing the motion.
D. It can be reduced by increasing the force producing the motion.

9. If the maximum resistance and current of an electric iron is 62.5Ω, 4A. The electric iron is rated_____
A. 40W, 220V
B. 160W, 250V
C. 1000W, 250V
D. 400W, 120V

10. Two lamps rated 220V each are connected in series. If the total power dissipated in both lamps is 80W. What is the rated power of the lamps?
A. 10W
B. 20W
C. 80W
D. 40W

11. A machine gun with a mass of 5kg fires a bullet at a speed of $100ms^{-1}$. The recoil speed of the machine gun is $1ms^{-1}$, what is the mass of the bullet?
A. 5g
B. 50g
C. 10g
D. 20g

12. If the current in each of the three 5Ω resistors connected in parallel is 12A, what is the potential difference applied across the combination?
A. 40V
B. 120V
C. 60V
D. 24V

13. Which of the following is not a transverse wave?
A. light waves
B. string waves
C. electromagnetic waves
D. sound waves

14. Which of the following metals react reversibly with steam?
A. Sodium

B. Iron
C. Calcium
D. Aluminium

15. Which ion below has a noble gas electron configuration?
A. $B^{2+}$
B. $Be^{2+}$
C. $Li^{2+}$
D. $N^{2-}$

16. Which of the following metals cannot be extracted by electrolysis?
A. sodium
B. calcium
C. tin
D. magnesium

17. _____ described that atom is built of three sub particles which are proton, electron and neutron
A. John Dalton
B. Lord Rutherford
C. Michael Faraday
D. J.J. Thompson

18. When the energy of product of a reaction is greater than that of reactant of the reaction, the reaction is said to be _____
A. isothermic
B. endothermic
C. exothermic
D. octothermic

19. A change that has a tendency to occur without needing to be driving by an external influence is ----------
A. non-spontaneous
B. enthalpy
C. spontaneous
D. entropy

20. The carbon atom in propyne is _____ hybridization
A. $sp^3$
B. sp
C. $sp^2$
D. $sp^4$

21. The final product in the halogenation and substitution of methane is
A. monochloromethane
B. tetrachloromethane
C. chloroform
D. dichloromethane

22. All these are organic compounds/molecules except
A. carbon (IV) oxide Ans
B. methanol
C. marsh gas
D. olefin

23. The process of combining dicarboxylic acids and diols to form polyester is called _____
A. addition polymerization
B. condensation polymerization
C. aldol condensation
D. free radical polymerization

24. A solid substance is dissolved with a mineral acid in a test tube and the test tube is warmed when touched. The reaction that occurred is known as _____
A. neutralization
B. redox
C. endothermic
D. exothermic

25. One of the following salts has no residue after heating
A. lead chloride
B. sodium chloride
C. ammonium chloride
D. iron chloride

26. Which of these following salts is yellow when hot but white when cold?
A. lead salt
B. iron salt
C. zinc salt
D. copper salt

27. An example of a unicellular, motile alga is
A. Chlorella
B. Chlamydomonas
C. Ulva
D. Spirogyra

28. The common bread mould is
A. Penicillium
B. Agaricus
C. Aspergillus
D. Rhizopus

30. The structure that absorbs nutrients from digested organic matter in fungi is
A. Sporangiophore
B. Sporangium
C. Rhizoid
D. Spore

31. The most specialized protozoan in the following is
A. Paramecium
B. Euglena
C. Amoeba
D. Trypanosome

32. Lung books or gill books are used for gaseous exchange in
A. Crabs
B. Termite
C. Millipede
D. Spider

33. The subunits of lactose are
A. Glucose + glucose
B. Glucose + galactose
C. Glucose + fructose
D. Fructose + fructose

34. What happen when red blood cells are placed in water
A. the cells are non-affected
B. the cells shrink and crinkles
C. the cells swell up and burst
D. none

35. The intermediate product in anaerobic breakdown of glucose in fungi and germinating seeds is
A. Citric acid
B. Lactic acid
C. Pyruvic acid
D. Glycolic acid

36. A stage of mitosis during which sister chromatids are pulled apart to opposite ends of the cell is
A. Interphase
B. Prophase
C. Metaphase
D. Anaphase

37. A type of tactic response that involves the swimming of bacteria from cold regions to warm regions is
A. Phototaxis
B. Chemotaxis
C. Thermotaxis
D. None

38. Example of joint that occurs at the elbow and knee is
A. Ball and socket
B. Hinge
C. Pivot
D. Gliding

39. Which of the following has the largest surface area to volume ratio?
A. Insect
B. Man
C. Hydra
D. Amoeba

40. The left and right parts of the heart are separated by
A. Septum
B. Pericardium
C. Ventricle
D. Auricle

**Read the passages below and answer the questions that follow:**

Every discernible observer could foresee the crisis which engulfed the Edo House last week. Only a few days before, reports were rife about the AC reaching out to some PDP legislators to cross-carpet. The intention being to gain a majority and then assume the Speakership with the least constraint. Zakawanu Garuba, the then Speaker, retorted with a fiat, threatening to declare vacant the seat of any defector.

This in spite of the constitutional support for such action, as evidenced, for example, by the crisis that has torn the PDP apart in Edo State. The party has two factional chairmen in the state, even though one is more vociferous. The desperate attempt by Garuba to cling to the Speaker's chair is condemnable. He was not being recalled from the legislature; and so, he still has his

seat as a floor member. As speaker, he was only first among equals.

The Speakership is not his birth right. With the defection of one PDP lawmaker to the AC, the legislature reconvened hours after the bloodbath and elected a protem Speaker, while impeaching and suspending Garuba and a few others. They are to be probed. *(Adapted from The Guardian, Thursday, March 4, 2011, p.14)*

41. Why did AC woo PDP members?
A. They are few in number
B. They want speakership without stress
C. PDP members are faithful
D. The House is tough

42 The legislators impeached
A. Garuba the lawmakers
B. PDP lawmakers
C. Garuba and some PDP lawmakers
D. Garuba and some lawmakers

43. The crisis in the Edo State House of Assembly could be predicted by
A. The lawmakers
B. Edo State indigenes
C. The protem Speaker
D. All conscious observers

**Choose the interpretation that you consider most appropriate for this sentence:**

44. When I leave this country it will be for good. This means that I will
A. never come back
B. leave for better conditions elsewhere
C. become an adventurer
D. improvement ways

**Choose the word or group of words that best completes the following sentences:**

45. The committee has submitted its report _____ the students.
A. in
B. for
C. about
D. on

46. The chairman told members that he was open _____suggestions.
A. to
B. for
C. about
D. on

**Choose the option that is nearest in meaning to the word underlined:**

47. Nobody will endure such <u>profligate</u> spending habits.
A. generous
B. arrogant
C. wasteful
D. mindless.

48. Is he <u>oblivious</u> of the political situation in his community?
A. unconscious
B. conscious
C. afraid
D. intolerant.

**Choose the option that is opposite in meaning to the word underlined.**

49. John and Ahmed's ideas were <u>speculative</u>
A. stipulative
B. superlative
C. factual
D. attractive.

50. Henry was admitted to the hospital with <u>profuse</u> bleeding.
A. much
B. little
C. internal
D. continuous

# ANSWERS TO 2016 QUESTIONS [DAY 2]

1. C 2. D 3. C 4. A 5. B 6. C 7. C 8. A

9. C 10. D 11. B 12. C 13. D 14. B

15. B 16. C 17. B 18. B 19. C 20. B

21. B 22. A 23. B 24. D 25. C 26. C

27. A 28. D 30. C 31. A 32. D 33. B

34. C 35. C 36. D 37. C 38. B 39. D

40. A 41. B 42. A 43. D 44. A 45. D

46. A 47. C 48. A 49. C 50. B

# UNIMED 2017 POST UTME QUESTIONS

1. A spring scale reads 20N as it pulls a 5kg mass across a table. What is the magnitude of the force exerted by the mass on the spring scale?
A. 49 N
B. 20 N
C. 5 N
D. 4 N

2. A block slides down an inclined plane at angle 45° to the horizontal. If the angle is increased, the coefficient of kinetic friction between the bottom surface of the block and the surface of the incline plane will
A. Decrease
B. Increase
C. Generate heat
D. Remain the same

3. Myopia is due to:
A. older age
B. change in focal length
C. shortening of the eyeball
D. elongation of the eyeball

4. Tesla is a unit of:
A. electric flux
B. magnetic flux
C. electric field
D. magnetic field

5. Which of the following consists of only vector quantities?
A. force, mass and energy
B. power, mass and energy
C. velocity, power and acceleration
D. velocity, acceleration and force

6. A stone sinks in water but floats in mercury. Why is this so?
A. The stone is heavier than water but lighter than mercury.
B. The stone is heavier than mercury but lighter than water.
C. The stone is denser than water but less dense than mercury.
D. The stone is denser than mercury but less dense than water.

7. A ball is released from the bottom of a swimming pool. It rises and reaches a constant speed after some time. At this moment, the resultant force acting on the ball is
A. zero.
B. upwards and less than the ball's weight.
C. upwards and greater than the ball's weight
D. upwards and equal to the ball's weight

8. A body is moving in a circle at constant speed. Which of the following statements about the body is true?
A. There is no acceleration.
B. There is no force acting on it.
C. There is force acting at a tangent to the circle.
D. There is force acting towards the centre of the circle.

9. A high resistance voltmeter reads 3V when connected across the terminal of battery on open circuit. What will be the voltmeter reading when the battery supplied a current of 0.2A to a lamp of 13Ω?
A. 2.6V
B. 0.52V
C. 13V
D. 1.5V

10. What is the height of an object 30cm from a pin-hole camera? If the height and image distance are 10cm and 20cm, respectively.
A. 20cm
B. 45cm
C. 15cm
D. 70cm

11. A car initially at rest travelled with acceleration of $5ms^{-2}$, if its K.E. after 4s is 100000J, what is the mass of the car?
A. 2000kg
B. 500kg
C. 1000kg
D. 5000kg

12. What is the value of a capacitor in series with two other capacitors valued 5 μF and 7

μF that are in parallel if the equivalent capacitance of the circuit is 4 μF.
A. 6μF
B. 4 μF
C. 2 μF
D. 12 μF

13. Which of the following properties of light makes it behaves as a particle
A. Momentum
B. diffraction and interference
C. interference only
D. diffraction only

14. A chemical substance which absorb moisture but does not turn to solution is called _____
A. hydrated
B. efflorescence
C. hygroscopic
D. deliquescent

15. The relative number of a reacting substance in a well-balanced chemical equation is
A. mole
B. stoichiometry coefficient
C. stoichiometry
D. mole ratio

16. Brass is an alloy consists of
A. zinc and copper
B. tin and copper
C. zinc and tin
D. copper and aluminium

17. What is the volume of 0.2 mole of oxygen gas at standard temperature and pressure?
A. 2.24$dm^3$
b.4.48$dm^3$
C. 1.12$dm^3$
D. 22.4$dm^3$

18. Which of these molecules has the highest entropy: $H_{2(g)}$, $CO_{2(g)}$, $H_2O_{(l)}$, $CH_{4(g)}$?
A. $CO_{2(g)}$
B. $H_2O_{(l)}$
C. $H_{2(g)}$
D. $CH_{4(g)}$

19. Rate of chemical reaction is not influence by _____
A. temperature
B. catalysts
C. surface area
D. none

20. Purity of solid organic compounds can be tested physically by its _____
A. boiling point
B. melting point
C. distillation
D. evaporation

21. A property that makes carbon atom unique and central to organic compound is _____
A. functional group
B. isomerization
C. catenation
D. epimerization

22. All these are aromatic compound except _____
A. benzene
B. toluene
C. cyclohexane
D. phenol

23. An anti-knocking agent frequently added to gasoline to improve its performance is _____
A. tetramethyl lead
B. tetraethyl lead
C. triethyl lead
D. trimethyl lead

24. Which of the following reagent(s) is/are appropriate for identifying metallic radicals?
A. Sodium hydroxide
B. Ammonium hydroxide
C. Hydrochloric acid
D. A & B

25. All the following do not form precipitate with sodium hydroxide solution except
A. $K^+$
B. $NH_4^+$
C. $Zn_2^+$
D. $Na^+$

26. _____ gives lilac flame colour in a non-luminous Bunsen flame
A. Na
B. K

C. Ca
D. Ba.

27. Bilharziasis is caused by
A. Plasmodium
B. Escherichia coli
C. Schistosome
D. Retrovirus

28. Regulation of excess water in Paramecium is achieved by
A. Food vacuole
B. Contractile vacuole
C. Gullet
D. Trichocyst

29. Animals having both male and female sex organs in the same organisms are termed
A. Hermaphrodites
B. Parthenogenic
C. Asexual
D. Unisexual

30. One of these is an annelid except
A. Ascaris
B. Earthworm
C. Leech
D. Ragworm

31. Soft moist skin which can be used for gaseous exchange is a characteristic feature of
A. Sharks
B. Frog
C. Snake
D. Eagle

32. The structure in which eggs are deposited in cockroach and earthworm is
A. Pouch
B. Cocoon
C. Cloaca
D. Ovipositor

33. Goitre is often associated with the deficiency of
A. Chlorine
B. Calcium
C. Copper
D. Iodine

34. The process by which liquid materials are taken up into the cell is termed
A. Pinocytosis
B. Phagocytosis
C. Endocytosis
D. Exocytosis

35. One of these is a trace element
A. Potassium
B. Calcium
C. Manganese
D. Phosphorus

36. The simple organic form of protein is
A. Simple sugars
B. Amino acids
C. Glycerol
D. Fatty acids

37. One of the following animals has hydrostatic skeleton
A. Snake
B. Earthworm
C. Spider
D. Mouse

38. A solid piece of bone below the neural canal is
A. Neural canal
B. Neural spine
C. Centrum
D. Neural arc

39. Open circulatory system is found in
A. Birds
B. Protozoans
C. Molluscs
D. Man

40. The blood vessel that carries deoxygenated blood to the lung is
A. Pulmonary vein
B. Pulmonary artery
C. Inferior vena cava
D. Superior vena cava

**Read the passages below and answer the questions that follow:**

Days passed fast for Ntanya and Teresa. They could hardly notice the land getting

brown all over Kachawanga again, since neither of them hardly noticed anymore the sun come up and go down. Ntanya would work very hard in the field hauling in the last harvest and Teresa would stay at home washing, cooking and waiting, waiting for him to come home. She would cook his meal with extra care and when there was little meat, she would only give bits to the children and not even touch it herself but use only the smell to get her food down and reserve the whole chunk for her husband.

When Ntanya would come home with sweat on his brows she would put the wooden tray on a stool for him and sit down by him watching him eat with great satisfaction: every bolus that went down Ntanya's throat would also go down her own throat. When Ntanya would insist on sharing the food with her she would always say she had eaten already no matter how hungry she might be. Ntanya would then eat and drink to his satisfaction and always rest a while in the sun after saying 'Thank you mother'.

*(Taken from Peter K. Palangyo's novel: Dying in the sun)*

41. Bolus in the passage means
A. throat pill
B. liquid
C. piece of meat
D. large morsel.

42. Ntanya and Teresa could hardly notice the land getting brown because
A. they were on their honeymoon
B. they had just got married
C. they hardly notice the sun
D. the sun did not come up

43. Ntanya said 'Thank you mother' to
A. his mother
B. his wife
C. his aunt
D. Teresa's mother

**Choose the interpretation that you consider most appropriate for this sentence:**

44. When she confronted her husband, he hung his head and didn't answer her questions. This means that he was
A. defiant
B. ashamed and embarrassed
C. caught unawares
D. angry with her

**Choose the word or group of words that best completes the following sentence:**

45. The policeman shot the escaping armed robber _____ the leg
A. on
B. in
C. at
D. into

46. For the management, your remarks amount to a slap _____ the face
A. on
B. upon
C. at
D. in

**Choose the option that is nearest in meaning to the word underlined:**

47. Many people look into the future with <u>trepidation</u>.
A. certainty
B. uncertainty
C. fear
D. faith.

48. Can you marry such a <u>lanky</u> man?
A. tall and thin
B. sturdy
C. fat and short
D. thin and short.

**Choose the option that is opposite in meaning to the word underlined.**

49. Many people regard him as <u>prolific</u>.
A. diplomatic
B. productive
C. unproductive
D. unacademic.

50. Our success is <u>paramount</u> in his mind.
A. unimportant Ans
B. important

C. certain
D. uncertain.

# ANSWERS TO 2017 QUESTIONS

1. B 2. D 3. D 4. D 5. D 6. C 7. A 8. B

9. C 10. C 11. B 12. A 13. A 14. C 15. C

16. A 17. B 18. C 19. D 20. B 21. C

22. C 23. B 24. D 25. C 26. B 27. C

28. B 29. A 30. A 31. B 32. B 33. D

34. A 35. C 36. B 37. B 38. C 39. C

40. B 41. C 42. C 43. B 44. B 45. A

46. D 47. C 48. A 49. C 50. A