Q. B. Series: **A**

Q. B. Number: **283453**

CET for 12th Based Paramedical & other Diploma Courses - 2024

QUESTION BOOKLET

INSTRUCTIONS

Maximum Time Allowed: 02 Hours
Negative Marking: 0.25 Marks

No. of Questions: 120
Maximum Marks :120

Roll Number: _____ **Answer Sheet Number:** _____

1) **Check the Booklet thoroughly**: In case of any defect Misprint, Missing question(s), Missing page, Blank page, Damaged or Defaced page, or duplication of question(s) / Page(s), get the Booklet changed with the Booklet of the same series from the Room Invigilator. No complaint shall be entertained after the Entrance Test is over.

2) Write your Roll Number and the OMR Answer Sheet Number on the Question Booklet.

3) Mark carefully your Roll Number, Question Booklet Number and Question Booklet Series on the OMR Answer Sheet and sign at the appropriate place. Candidates shall be personally responsible for any mistake committed in making these entries in the OMR Answer Sheet. Board shall under no circumstances be responsible for any such mistake.

4) Strictly follow the instructions given by the Centre Supervisor / Room Invigilator and those given on the Question Booklet.

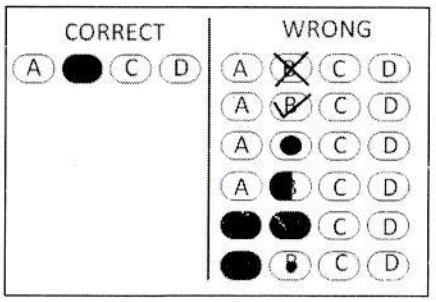
5) Candidates are not allowed to carry any papers, notes, books, calculators, cellular phones, scanning devices, pagers etc. to the Examination Hall. Any candidate found using, or in possession of, such unauthorized material or indulging in copying or impersonation or adopting unfair means / reporting late / without Admit Card will be debarred from the Entrance Test.

6) Please mark the right responses on the OMR Sheet with ONLY a Blue/Black ball point pen. Use of eraser, whitener (fluid) and cutting on the OMR Answer Sheet is NOT allowed.

7) The test is of objective type, containing multiple choice questions (MCQs). Each objective question is followed by four responses. You are required to choose the correct/best response and mark your response on the OMR Answer Sheet and NOT on the Question Booklet.

8) There will be negative marking of 0.25 marks for every wrong answer.

9) For marking response to a question, completely darken the CIRCLE so that the alphabet inside the CIRCLE is not visible. Darken only ONE circle for each question. If you darken more than one circle, it will be treated as a wrong answer. The CORRECT and the WRONG method of darkening the CIRCLE on the OMR Answer Sheet are shown below.



10) Please be careful while marking the response to questions. The response once marked cannot be changed and if done shall be treated as a wrong answer.

11) In view of the limited time, do NOT waste your time on a question which you find difficult during the test.

12) DO NOT make any stray or faint mark anywhere in or around the oval on the OMR Answer Sheet. It will be read as double shading and will make answer invalid. DO NOT fold or wrinkle the OMR Answer Sheet.

13) Rough work MUST NOT be done on the OMR Answer Sheet. Use rough page of your Question Booklet for this purpose.

14) Candidates are provided carbonless OMR Answer Sheet, having original copy and candidate's copy. After completing the examination, candidates are directed to fold at perforation on the top of the sheet, tear it to separate original copy and candidate's copy and then hand over the original copy of OMR Answer Sheet to the Room Invigilator and retain candidate's copy.

DO NOT OPEN THE SEAL OF THIS BOOKLET UNTIL TOLD TO DO SO

SEAL

PHYSICS (Q No. 1 to 40)

Q1. You are given water, mustard oil, glycerine and kerosene. In which of these media, a ray of light incident obliquely at same angle would bend the most?

(a) Kerosene
(b) Water
(c) Mustard oil
(d) Glycerine

Q2. Which of the following statements is true?

(a) A convex lens has 4 dioptre power having a focal length 0.25 m
(b) A convex lens has -4 dioptre power having a focal length 0.25 m
(c) A concave lens has 4 dioptre power having a focal length 0.25 m
(d) A concave lens has -4 dioptre power having a focal length 0.25 m.

Q3. The mirror used as rear-view mirror in vehicles

(a) convex mirror
(b) plane mirror
(c) cylindrical mirror
(d) concave mirror

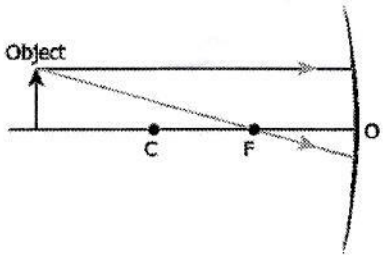
Q4. An object is placed 20 cm in front of a concave mirror of focal length 15 cm. The image formed will be:

(a) Real, inverted and magnified
(b) Real, inverted and diminished
(c) Virtual, erect and magnified
(d) Virtual, erect and diminished

Q5. The angle of incidence for a light ray incident on a plane mirror is 30°. What will be the angle of reflection?

(a) 30°
(b) 60°
(c) 90°
(d) 120°

Q6. The image shows the path of incident rays to a concave mirror.



Where would the reflected rays meet for the image formation to take place?

(a) Behind the mirror
(b) Between F and O
(c) Between C and F
(d) Beyond C

Q7. An image of an object produced on a screen which is about 36 cm using a convex lens. The image produced is about 3 times the size of the object. What is the size of the object?

(a) 12 cm
(b) 33 cm
(c) 39 cm
(d) 108 cm

Q8. **Assertion:** Linear magnification of a mirror has no unit.
Reason: The ratio of height of the image to the height of the object is the linear magnification produced by mirror.

(a) Both A and R are true and R is correct explanation of the assertion.
(b) Both A and R are true but R is not the correct explanation of the assertion.
(c) A is true but R is false.
(d) A is false but R is true.

Q9. Coin placed in a bowl seen from a place just disappear. When water is poured into the bowl without disturbing the coin, the coin :

(a) will not be seen
(b) becomes visible again
(c) Appears above the water surface
(d) Appears very much deep inside the water

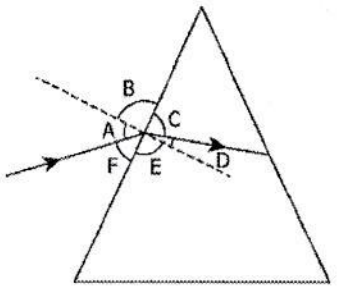
Q10. Which of the following is not related to spherical mirrors?
(a) Principal axis
(b) Optical centre
(c) Aperture
(d) None of the above

Q11. The change in focal length of an eye lens is caused by the action of the
(a) pupil
(b) retina
(c) ciliary muscles
(d) iris

Q12. A person gets out in the sunlight from a dark room. How does his pupil regulate and control the light entering the eye?
(a) The size of the pupil will decrease, and less light will enter the eye
(b) The size of the pupil will decrease, and more light will enter the eye
(c) The size of the pupil will remain the same, but more light will enter the eye
(d) The size of the pupil will remain the same, but less light will enter the eye

Q13. The danger signals installed at the top of tall buildings are red in colour. These can be easily seen from a distance because, among all other colours, the red light
(a) is scattered the most by smoke or fog
(b) is scattered the least by smoke or fog
(c) is absorbed the most by smoke or fog
(d) moves fastest in the air

Q14. The image shows a light ray incident on a glass prism.



The various angles are labelled in the image. Which angle shows the angle of incidence and angle of refraction, respectively?
(a) A and D
(b) B and E
(c) C and F
(d) D and F

Q15. Which of the following phenomena contributes significantly to the reddish appearance of the sun at sunrise or sunset?
(a) Dispersion of light
(b) Scattering of light
(c) Total internal reflection of light
(d) Reflection of light from the earth

Q16. Which of the following conditions is caused by the clouding of the lens in the eye?
(a) Myopia
(b) Astigmatism
(c) Glaucoma
(d) Cataract

Q17. Which of the following structures in the eye is responsible for transmitting visual information from the retina to the brain?
(a) Optic nerve
(b) Trigeminal nerve
(c) Facial nerve
(d) Vestibulocochlear nerve

Q18. Which of the following parts of the eye is responsible for producing tears?
(a) Retina
(b) Cornea
(c) Sclera
(d) Lacrimal gland

Q19. When the muscles are relaxed, the eye lens is _____ and the distant objects can be seen clearly.
(a) Thin
(b) Thick
(c) Inclined
(d) None

Q20. The angle between two refracting surfaces of prism is called angle of:
(a) Prism
(b) Emergence
(c) Deviation
(d) Incidence

Q21. The equivalent resistance of two wires in parallel is $\frac{6}{5}\Omega$. If the resistance of one of the wires is 2Ω, then the resistance of the other wire is:
(a) $\frac{3}{5}\Omega$
(b) 2Ω
(c) $\frac{5}{3}\Omega$
(d) 3Ω

Q22. What constitutes current in a metal wire?
(a) Electrons
(b) Protons
(c) Atoms
(d) Molecules

Q23. 1 horse power is equal to:
(a) 700W
(b) 726 W
(c) 736 W
(d) 746 W

Q24. The nature of graph between potential difference and electric current flowing through a conductor:
(a) Parabola
(b) Circle
(c) Straight line
(d) Hyperbola

Q25. Rheostat is a device used to vary:
(a) Voltage
(b) Current
(c) Resistance
(d) Power

Q26. A piece of wire of resistance R is cut into five equal parts. These parts are then connected in parallel. If the equivalent resistance of this combination is R1 then the relation R/R1 is:
(a) $\frac{1}{25}$
(b) $\frac{1}{5}$
(c) 5
(d) 25

Q27. _____ discovered that when a compass needle deflects when kept nearer to an electric circuit in which current is flowing
(a) Hans Christian Oersted
(b) Michael Faraday
(c) Galileo
(d) Newton

Q28. An electric Iron of resistance 20Ω takes a current of 5A. Heat developed in 30 sec. is:
(a) 10000J
(b) 15000 J
(c) 20000 J
(d) None of the above

Q29. How much energy is given to each coulomb of charge on passing through a 6 V battery?
(a) 1J
(b) 4J
(c) 8J
(d) 6J

Q30. Which substance is different from other as regards conduction of electricity?
(a) Copper
(b) Rubber
(c) Silver
(d) Aluminium

Q31. A positively charged particle projected towards west is deflected towards north by a magnetic field. The direction of magnetic field is:
(a) Towards south
(b) Towards east
(c) Downwards
(d) Upward

Q32. Which of the following correctly describes the magnetic field near a long straight wire?
(a) The field consists of straight lines perpendicular to the wire.
(b) The field consists of straight lines parallel to the radial lines originating wire.
(c) The field consists of radial lines originating from the wire.
(d) The field consists of concentric circles centered on the wire.

Q33. State which of the following statement is true?
(a) An electric motor converts electrical energy into mechanical energy.
(b) An electric generator works on the principle of electromagnetic induction.
(c) The field at the center of a long circular coil carrying current will be parallel straight lines
(d) All the above

Q34. The frequency of household supply of AC in India is:
(a) Zero
(b) 50Hz
(c) 60Hz
(d) 100Hz

Q35. The magnetic field inside a long solenoid carrying current:
(a) Is zero
(b) Decreases as we move towards its ends.
(c) Increases as we move towards its ends.
(d) Is the same at all points

Q36. Appliances that have a metal body are generally connected to the earthing wire. What is the reason to earth these wires?
(a) To prevent the excess current
(b) To prevent the leakage of current
(c) To provide extra current to the appliance
(d) To provide high resistance to the appliance

Q37. For which electrical appliances earthing is to be done
(a) Geyser
(b) Toaster
(c) Refrigerator
(d) All of these

Q38. A high tension wire has a resistance
(a) high
(b) medium
(c) low
(d) Both (a) & (b)

Q39. What is an electromagnet?
(a) A magnet made of iron
(b) A magnet made of copper
(c) A magnet made of steel
(d) A magnet made of a current-carrying coil

Q40. In an electrical circuit three incandescent bulbs A, B and C of rating 40 W, 60 W and 100 W respectively are connected in parallel to an electric source. Which of the following is likely to happen regarding their brightness?
(a) Brightness of all the bulbs will be the same
(b) Brightness of bulb A will be the maximum
(c) Brightness of bulb B will be more than that of A
(d) Brightness of bulb C will be less than that of B

CHEMISTRY (Q No. 41 to 80)

Q41. The process which involves the breaking of bonds and making new ones is known as:
(a) Chemical reaction
(b) Physical equation
(c) Chemical equation
(d) All of these

Q42. Lime when added to water, forms slaked lime (calcium hydroxide). It is an example of _____ reaction:
(a) Combustion
(b) Decomposition
(c) Displacement
(d) Sublimation

Q43. Which of the following is an unbalanced chemical reaction?
(a) $H_2+Cl_2 \rightarrow 2HCl$
(b) $2H_2 + O_2 \rightarrow 2H_2O$
(c) $Zn+HCl \rightarrow ZnCl_2+ H_2$
(d) $ZnO + C \rightarrow Zn+ CO$

Q44. Which of the following metal is protected by a layer of its oxide?
(a) Copper
(b) Silver
(c) Iron
(d) Aluminium

Q45. Which of the statements about the reaction given below is/are incorrect?
$2PbO\ (s) + C\ (s) \rightarrow 2Pb\ (s) + CO_2\ (g)$
(i) Lead is getting reduced
(ii) Carbon Dioxide is getting oxidized
(iii) Carbon is getting oxidized
(iv) Lead oxide is getting reduced
(a) (i) and (ii)
(b) (i) and (iii)
(c) (i), (ii) and (iii)
(d) All of these

Q46. The reaction given below is an example of _____reaction:
$Fe_2O_3 + 2Al \rightarrow Al_2O_3 + 2Fe$
(a) Combination
(b) Decomposition
(c) Double displacement
(d) Displacement

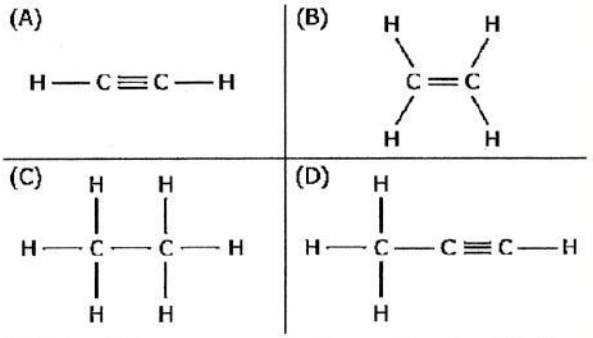
Q47. **Assertion:** Foodstuffs become rancid when kept for a long time.
Reason: Antioxidant is used to prevent rancidity of foodstuffs.
(a) Assertion is True, Reason is True; Reason is a correct explanation for Assertion.
(b) Assertion is True, Reason is True; Reason is not a correct explanation for Assertion.
(c) Assertion is True, Reason is False.
(d) Assertion is False, Reason is True.

Q48. Electrolysis of water is a decomposition reaction. The mole ratio of hydrogen and oxygen gases liberated during electrolysis of water is _____.
(a) 1 : 1
(b) 2 : 1
(c) 4 : 1
(d) 1 : 2

Q49. Which of the following is not an example of corrosion?
(a) Black coating on silver
(b) Green coating on copper
(c) Bad smell of butter
(d) Rusting of Iron

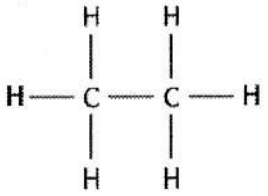
Q50. Which of the following gases can be used for storage of fresh sample of oil for a long time?
(a) Carbon dioxide or oxygen
(b) Nitrogen or oxygen
(c) Carbon dioxide or helium
(d) Helium or nitrogen

Q51. The image represents the structure of a few hydrocarbon compounds.



Which of these compounds can be classified as alkynes?
(a) Only (A)
(b) Only (B)
(c) Both (A) and (D)
(d) Both (B) and (C)

Q52. The given image represents the structure of a carbon compound known as ethane.



Which of the following option explains the naming of ethane?
(a) The presence of a functional group connected with a single bond
(b) As it contains two carbon atoms, and a single bond connects the carbon atoms
(c) Carbon compound with a total number of eight atoms is named ethane
(d) As it contains six hydrogen atoms, and a single bond connects the carbon and hydrogen atom

Q53. Methane, ethane and propane are said to form a homologous series because all are:
(a) Hydrocarbons
(b) Saturated compounds
(c) Aliphatic compounds
(d) Differ from each other by a CH_2 group

Q54. Which of the following is not a characteristic of fullerenes?
(a) Of all the fullerene, the C_{60} allotrope is the most stable
(b) Its shape is similar to that of a soccer ball
(c) It contains only fused six-membered carbon-carbon rings
(d) Its hardness is lower than that of a diamond

Q55. A hydrocarbon should have a minimum of _____ carbon atoms to show isomerism.
(a) Three
(b) Four
(c) Five
(d) Six

Q56. Name the functional group present in CH_3COCH_3.
(a) Alcohol
(b) Carboxylic acid
(c) Ketone
(d) Aldehyde

Q57. A soap molecule has a
(a) hydrophobic head and hydrophobic tail
(b) hydrophobic head and hydrophilic tail
(c) hydrophilic head and hydrophilic tail
(d) hydrophilic head and hydrophobic tail

Q58. Which of the following is an example of an ester?
(a) Ethene
(b) Ethane
(c) Ethanol
(d) Ethyl acetate

Q59. The process of conversion of vegetable oils to vegetable ghee involves:
(a) Hydrogenation
(b) Oxidation
(c) Esterification
(d) Polymerization

Q60. Which of the given represents a saponification reaction?
(a) $CH_3COONa + NaOH + CaO \rightarrow CH_4 + Na_2CO_3$
(b) $CH_3COOH + C_2H_5 + H_2SO_4 \rightarrow CH_3COOC_2H_5 + H_2O$
(c) $2CH_3COOH + 2Na \rightarrow 2CH_3COONa + H_2$
(d) $CH_3COOC_2H_5 + NaOH \rightarrow CH_3COONa + C_2H_5OH$

Q61. Match the following:

(A)	Liquid at room temperature	i. Lead
(B)	Can be cut with a knife	ii. Silver
(C)	Best conductor of heat	iii. Sodium
(D)	Poor conductor of heat	iv. Mercury

(a) (A)→(iv), (B)→ (iii), (C)→ (ii), (D)→ (i)
(b) (A)→(ii), (B)→ (iii), (C)→ (iv), (D)→ (i)
(c) (A)→(iii), (B)→ (ii), (C)→ (iv), (D)→ (i)
(d) (A)→(ii), (B)→ (iii), (C)→ (i), (D)→ (iv)

Q62. Which of the following metals do not react with cold water as well as hot water?
(a) Na
(b) Ca
(c) Mg
(d) Fe

Q63. Which of the following method is suitable for preventing an iron frying pan from rusting?
(a) Applying grease
(b) Applying paint
(c) Applying a coating of zinc
(d) All of these

Q64. Food cans are coated with tin and not with zinc because Zinc is _____
(a) costlier than tin
(b) has a higher melting point than tin
(c) less reactive than tin
(d) more reactive than tin

Q65. Which of the following metal / metals is/ are used for making jewellery?
(a) Gold
(b) Platinum
(c) Silver
(d) All of these

Q66. A student studying the chemical properties of metals finds incomplete chemical reactions in his book, as shown below:
$MgO + HNO_3 \rightarrow$
Which option completes the reaction?
(a) $MgO + HNO_3 \rightarrow Mg_3N_2 + 4H_2O$
(b) $MgO + HNO_3 \rightarrow Mg + NO_2 + O_2$
(c) $MgO + 2HNO_3 \rightarrow Mg(OH)2 + 2NO_2$
(d) $MgO + 2HNO_3 \rightarrow Mg(NO_3)2 + H2O$

Q67. Aqua regia is a freshly prepared mixture of concentrated HNO_3 and concentrated HCl in the ratio of:
(a) 1:3, respectively
(b) 2:3, respectively
(c) 3:1, respectively
(d) 3:2, respectively

Q68. Which of the following is not a property of non-metals?
(a) Good conductors of heat and electricity
(b) Brittle
(c) Non-lustrous
(d) Poor conductors of heat and electricity

Q69. Which of the following non-metals is used as a disinfectant?
(a) Chlorine
(b) Nitrogen
(c) Oxygen
(d) Sulphur

Q70. The earthy impurities associated with minerals used in metallurgy are called
(a) Slag
(b) Flux
(c) Gangue
(d) Ore

Q71. A solution turns red litmus blue, its pH is likely to be
(a) 1
(b) 4
(c) 5
(d) 10

Q72. A solution reacts with crushed eggshells to give a gas that turns lime-water milky. The solution contains
(a) NaCl
(b) HCl
(c) LiCl
(d) KCl

Q73. 10 mL of a solution of NaOH is found to be completely neutralised by 8 mL of a given solution of HCl. If we take 20 mL of the same solution of NaOH, the amount of HCl solution (the same solution as before) required to neutralise it will be
(a) 4 ml
(b) 8 ml
(c) 12 ml
(d) 16 ml

Q74. Which one of the following types of medicines is used for treating indigestion?
(a) Antibiotic
(b) Analgesic
(c) Antacid
(d) Antiseptic

Q75. What happens when a solution of an acid is mixed with a solution of a base in a test tube?
(i) The temperature of the solution increases
(ii) The temperature of the solution decreases
(iii) The temperature of the solution remains the same
(iv) Salt formation takes place
(a) (i) only
(b) (i) and (iii)
(c) (ii) and (iii)
(d) (i) and (iv)

Q76. Which acid is present in tamarind?
(a) Tartaric acid
(b) Oxalic Acid
(c) Lactic Acid
(d) Citric Acid

Q77. Setting of Plaster of Paris takes place due to:
(a) Reduction
(b) Hydration
(c) Dehydration
(d) Oxidation

Q78. Sodium Carbonate is a basic salt because it is a salt of:
(a) strong acid and strong base
(b) weak acid and weak base
(c) strong acid and weak base
(d) weak acid and strong base

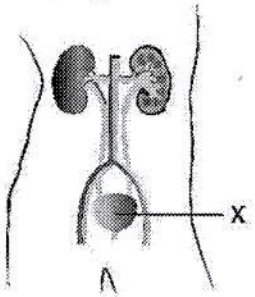
Q79. Curd cannot be stored in:
(i) Brass vessel
(ii) Copper vessel
(iii) Steel vessel
(iv) Bronze vessel
(a) (i), (ii), (iii)
(b) (ii), (iii), (iv)
(c) (i), (ii), (iv)
(d) (i), (iii), (iv)

Q80. Many salts absorbs water from atmosphere. This property is called as:
(a) Deliquescence
(b) Efflorescence
(c) Addition
(d) Hydration

BIOLOGY (Q No. 81 to 120)

Q81. The contraction and expansion movement of the walls of the food pipe is called:
(a) Translocation
(b) Transpiration
(c) Peristaltic movement
(d) Digestion

Q82. The image shows the excretory system in humans.



What is the importance of the labelled part in the excretory system?
(a) It produces urine.
(b) It filters waste from the blood.
(c) It stores the urine till urination.
(d) It carries urine from the kidney to the outside.

Q83. Which of the following is the correct sequence of body parts in the human alimentary canal?
(a) Mouth → stomach → small intestine → large intestine → oesophagus
(b) Mouth → oesophagus → stomach → small intestine → large intestine
(c) Mouth → stomach → oesophagus → small intestine → large intestine
(d) Mouth → oesophagus → stomach → large intestine → small intestine

Q84. Which of the following is NOT a raw material required for photosynthesis?
(a) Carbon dioxide
(b) Water
(c) Oxygen
(d) Sunlight

Q85. Which of the following is the correct equation for aerobic respiration?
(a) Glucose + Oxygen →→ Carbon dioxide + Water + Energy
(b) Carbon dioxide + Water + Energy →→ Glucose + Oxygen
(c) Glucose + Carbon dioxide →→ Water + Oxygen + Energy
(d) Oxygen + Water →→ Glucose + Carbon dioxide + Energy

Q86. The normal range of blood pressure in a human being is -
(a) 120/80 mm Hg
(b) 120/90 mm Hg
(c) 160/80 mm Hg
(d) 130/80 mm Hg

Q87. Which of the following is the primary function of the hemoglobin?
(a) To make blood calories.
(b) To kill harmful bacteria.
(c) Transport of O_2
(d) None of the above

Q88. A network of extremely narrow tubes through which the arteries and veins are connected is known as -
(a) Vena cava
(b) Capillaries
(c) Valves
(d) None of the above

Q89. What is the function of the pituitary gland?
(a) To develop sex organs in males
(b) To stimulate growth in all organs
(c) To regulate sugar and salt levels in the body
(d) To initiate metabolism in the body

Q90. A female is suffering from an irregular menstrual cycle. The doctor prescribed her some hormonal tablets. Which option shows that the hormone she lacks in her body is from the endocrine gland?
(a) Oestrogen
(b) Testosterone
(c) Adrenalin
(d) Thyroxin

Q91. Which plant hormone promotes dormancy in seeds and buds?
(a) Auxin
(b) Gibberellin
(c) Cytokinin
(d) Abscisic acid

Q92. Which of the following is plant hormone?
(a) insulin
(b) thyroxine
(c) oestrogen
(d) cytokinin

Q93. When a person is suffering from cold, he cannot:
(a) Differentiate the taste of an apple from that of ice cream
(b) Differentiate the smell of a perfume from that of agarbatti
(c) Differentiate red light from green light
(d) Differentiate a hot object from a cold object

Q94. Which of the following is not an involuntary action?
(a) salivation
(b) chewing
(c) heart beat
(d) vomiting

Q95. A doctor advised a person to take an injection of insulin because _____.
(a) His blood pressure was low
(b) His heart was beating slowly
(c) He was suffering from goiter
(d) His sugar level in blood was high

Q96. The movement of a plant part in response to the force of attraction exerted by the earth is called:
(a) Hydrotropism
(b) Geotropism
(c) Chemotropism
(d) Phototropism

Q97. Reproduction is essential for living organisms in order to _____.
(a) Keep the individual organism alive
(b) Fulfill their energy requirement
(c) Maintain growth
(d) Continue the species generation after generation

Q98. The correct sequence of organs in the male reproductive system for the transport of sperm is
(a) Testis → vas deferens → urethra
(b) Testis → ureter → urethra
(c) Testis → urethra → ureter
(d) Testis → vas deferens → ureter

Q99. The process in which small portions of the oviducts of a woman are removed by surgical operation, and the cut ends are ligated is
(a) copper T
(b) tubectomy
(c) vasectomy
(d) diaphragm

Q100. During favourable conditions, Amoeba reproduces by
(a) multiple fission
(b) binary fission
(c) budding
(d) fragmentation

Q101. In a potato, vegetative propagation takes place by:
(a) root
(b) leaf
(c) stem tuber
(d) grafting

Q102. The period of pregnancy is called
(a) gestation period
(b) incubation period
(c) ovulation
(d) menstruation period

Q103. In human beings, the fertilization occurs in the
(a) uterus
(b) ovaries
(c) fallopian tubes
(d) vagina

Q104. The embryo in humans gets nutrition from the mother's blood with the help of a special tissue called
(a) Placenta
(b) Villi
(c) Uterus
(d) Womb

Q105. Which of the following is an example of genetic variation?
(a) One person has a scar, but his friend doesn't
(b) One person is older than the other
(c) Reeta eats meat, but her sister Geeta is a vegetarian
(d) Two children have different eye colour

Q106. In evolutionary terms, we have more in common with:
(a) A Chinese schoolboy
(b) A chimpanzee
(c) A spider
(d) A bacterium

Q107. A zygote which has an X chromosome inherited from the father will develop into a:
(a) boy
(b) girl
(c) X chromosome does not determine the sex of a child
(d) either boy or girl

Q108. Exchange of genetic material takes place in:
(a) Vegetative reproduction
(b) Asexual reproduction
(c) Sexual reproduction
(d) Budding

Q109. If the fossil of an organism is found in the deeper layers of earth, then we can predict that _____.
(a) The extinction of organism has occurred recently
(b) The extinction of organism has occurred years ago
(c) The fossil position in the layers of earth is not related to its time of extinction
(d) Time of extinction cannot be determined

Q110. Which of the following evidence of evolution is associated with fossils?
(a) Embryological
(b) Paleontological
(c) Anatomical
(d) Morphological

Q111. Which of these are identified to be the earliest of the life forms?
(a) Fungi
(b) Cyanobacteria
(c) Protozoa
(d) Plants

Q112. A sudden irreversible change that takes
(a) Evolution
(b) Mutation
(c) Melanism
(d) Natural selection

Q113. The driving force of any ecosystem is
(a) Carbohydrates
(b) Solar energy
(c) Biomass
(d) ATP

Q114. The cleaners of nature are
(a) Producers
(b) Consumers
(c) Herbivores
(d) Decomposers

Q115. The biotic components of an ecosystem consist of
(a) Plants and animals
(b) Algae and fungi
(c) Producers, consumers & decomposer
(d) Air, water, soil

Q116. Which of the following could be incinerated?
(a) Paper
(b) Medicine bottles
(c) Needle of the syringe
(d) All of the above

Q117. Good ozone is found in the
(a) stratosphere
(b) ionosphere
(c) troposphere
(d) mesosphere

Q118. UV rays is higher in summer as
(a) during summer, ozone is more in the atmosphere
(b) sun is busy in summer specially
(c) sun is closer to planet earth so UV rays have a shorter distance to travel and reach us
(d) none of the above

Q119. What is the process of using waste material to create new products called?
(a) Recycling
(b) Reusing
(c) Reducing
(d) Composting

Q120. A network of interconnected food chains is called:
(a) food web
(b) web cycle
(c) chain web
(d) ecosystem