b. Linkage
c. Changes in the sequence of gene in DNA
d. Changes in the sequences of nitrogen bases
10. Which is a suddendende[(Wh315(2.Tm5n(nde)4(nde)gDN)6(A)] TJETon)5Tm4(arba)1(mosome?1
d. Red Blood Cell
a. Adrenal cortex
b. Adrenal medulla
c. Testis
d. Ovary
35. Muscle spasm may occur due to the deficiency of
a. Thyroxine
b. Testosterone
c. Parathyroid hormone
d. Vasopressin
36. A Woman started developing male characteristics. It may be due to
a. over production of adrenal androgen
b. c .
d.d.
c. both a and b
d. amplification of sound
51. Optical fiber is based on phenomenon
a. Total internal reflection
b. Interference
c. Diffraction.
d. Polarization
52. In periodic table on moving left to right what happens
a. Ionization energy decreases
b. Electronegativity decreases
c. Metallic character decreases
d. Non Metallic Character decreases
53. What is the method of variation in asexually reproducing organisms a. Mutation
b. Crossing over
c. Fertilization
d. Replication
54. Lichen is ecologically important because
a. It is the association of algae and fungi
b. It has mycorrhizal roots
c. are earliest settlers of barren rocks
d. can grow in polluted area
55. Sudden change in the gene is due to
a. mutation
b. crossing over
c.
e. $\mathrm{H}_{2} \mathrm{O}$
f. $\mathrm{H}_{2} \mathrm{O}_{2}$
g. $\mathrm{O}_{2}$
h. $\mathrm{H}_{2} \mathrm{O}$
68. An ester used as medicine is:
a. Ethyl aceate108.02 693.1 Tm -0.0182 Tc[(h.34.9 Tm -0.0182 Tc[(b.)] TJETBT1 001117.14634 .9

## Et

75. In a mature fertilized ovule $n, 2 n 3 n$ condition respectively are a.
a. Thymus
b. Thyroid
c. Parathyroid
d. Adrenal
e. Ovary
76. Which of the following hormone belongs to catecholamine?
77. Food poisoning is caused by ingestion of food or drink contaminated with living bacteria or their toxins, inorganic chemical substances and poisons derived from plants \& animals. The most common form of food poisoning is
d. Oxaloacetic acid
78. Final image formed by microscope is
79. Mycobacterium causes:
a. Typhoid
b. Tuberculosis
c. Malaria
d. Meningitis
80. In the middle of a round pool
81. The number of cranial nerves in man is
a. Protection
b. Secretion
c. Absorption
82. The term cell was first used by
a. Schleiden
b. Robert Hooke
c. Schwann
d. Annelida
83. S 1 OTS stands for
a. S 1 irectly observed treatment system
b. S 1 irectly observed treatment short course
c. S 1 aily observed treatment system
d. S 1 aily observed treatment short course
84. Which on 1 e of the following statements is tre for cathode rays?
a. It is stream of positively charged particl 1 es
b. It emits $x$ -
85. In which process is oxygen a waste product?
a. Active transport
b. Aerobic respiration
c. Anaerobic respiration
d. Photosynthesis
86. Scientific forms for upper jaw bones is:
a. Maxilla
b. Mandible
c.
b. Cuttle fish
c. Dog fish
d. Cray fish
87. Spores in fern are found in
a. leaves
b. stem
c. root
d. branches
88. HCl is secreted by
a.

89. Cancerous state of blood is called
a. Proteinemia
b. Uraemia
c. Azotemia
d. Leukemia
90. 
91. Which of the following is keratinized?
a. conjunctivae
b. Mucous membrance of oral cavity
c. Lining of vagina
d. Skin
92. Synovial membrance is found in
a. Joints
b.
93. All cells have:
a. a cell wall and cytoplasm
b. a nucleus and a cell wall
c. cell membrane and cytoplasm
a. Fungus
b. Virus
c. Bacteria
d. Mycoplasma
94. Head of tapeworm is know as

## 227. Salmonella Typhi mainly affects

a. Large Intesatine
b. Liver
c. Ileu 130.17leu 01121.58 693.1 Tm -0.0182 T64.06.
243. Giardiasis is treated by
a. Metronidazole and tinidazole
b. Albendazole \& mebendazole
c. DEC (Diethyl carbamazine)
d. sodium stibogluconate
244.
a. Stomach
b. Duodenum
c. Ileum
d.
265. Origin of
272. Plasma membrane is composed of
a. Proteins
c. Lysine
d. Glocose
280. Cardiac muscles are
a. Striated and voluntary
b. Striated and Involuntary
c. Smooth and voluntary
d. Smooth and Involuntary
281. Which of the following(f)-3(83ru)5(man ce)11(I)-4(I)-4(s)13( )-4(do)5( )-4(no(f)-t)-3( )-4(co(f)-ntai)

## Chemistry

286. Which statement about an element in the period-4(anc )8(t)-3(ab)4(I)-4(e)13( )-4(-4(ans)13()-4(c
287. The hydrogen phosphate of certain metal has a formula MHPO4. The formula of
288. Which anion is the weakest base?
a. $\mathrm{C}_{2} \mathrm{H}_{5} \mathrm{O}-$
b. $\mathrm{NO}_{3}$
c. $F$
289. 
290. Heater is 1000 W then energy consumes in $\mathbf{2}$ Hours is
a. 2 J
b. 20 KJ
291. A proton of kinetic energy 2 MeV is moving perpendicular to a uniform magnetic field of 2.5 T . The force on the proton is:
a. $8 \quad 10-12 \mathrm{~N}$
292. In radiotherapy X -rays21413(us)4(ed)4( )-4(t)-3(o)13(:)] TJETBT1 001286.61 722.4 Tm[( )] TJE
293. The oxidation number of Fe in $\mathrm{K} 4 \mathrm{Fe}(\mathrm{CN}) 6$ is:
294. The gas that can't be collected over water is:
295. Formation of sporophyte directly from prothallus is:
a. parthenogamy
b. diplospory
c. apospory
296. Which
297. When the margins of sepals and petals ovaersap4()-123(of)5(e)-122(an)4(dote)43(Ir)-1145(w
298. Heart beat is controlled by which cranial nerve?
a. Xth
b. IXth
c. IIIrd
d. Vth
299. The fungus absorbs the food by:

| a. Mycelium | b. | Root |
| :--- | :--- | :--- | :--- |
| c. $\quad$ Rhizome | d. | Thallus |

442. Which of the following in a cell is non-living?
a. Mitochondria
b. Vacuole
c.
443. Living cells contain 60 to $90 \%$ water. Water is human body is
a. $60-65 \%$
b. $50-55 \%$
c. $75-80 \%$
d. $65-70 \%$
444. Digestive enzymes are
a. Ligases
b. Lyases
c. Hydrolases
445. Artificial sweetener which is stable under cold conditions only is:
a. Sacchorine
b. Sucralose c. Aspartame d. Alitame
446. Which is the strongest acid in the following:
a. H 2 SO 4
b. HClO 3
c. HClO 4
d. H 2 SO 3
447. The percentage of gold in 18 carat gold is
a. $60 \%$
b. $18 \%$
448. During which phase ( S ) of cell cycle, amount of DNA in a cell remains at 4 C level if the initial amount is denoted as $\mathbf{2 C}$ ?
a.
449. Which one of the following pla( )6(t)13.s are Amphibia( 4(s?)] TJETBT1 001 389.23 712.3 Tm[(

## d. Gymsperm

521. T he initial step in the digestion of milk in Huma( 4(s i)-7.s) carried out by:
b. T-8(r)13.ypsin
c. Kivase
d. Pepsin
522. 
523. 
524. 

Which of the following is correct?
a.

## 555. A good producer of citric acid is:

a. Aspergillus
b. Pseudomonas
c. Clostridium
d. Saccharomyces
556. Artificial insemination means:
a. Transfer of sperms of a healthy male donor to a test tube containing ova
b.
561. The diagram shows an important concept in the genetic implication of DNA. Fill in the blanks A to $\mathbf{C}$.

| A | B | C |  |
| :---: | :---: | :---: | :---: |
| DNA | in RNA | Protein | Proposed by |

a. $\mathrm{A} \pm$ transcription, $\mathrm{B} \pm$ replication, $\mathrm{C} \pm$ James Watson
b. $\mathrm{A} \pm$ translation, $\mathrm{B} \pm$ transcription, $\mathrm{C} \pm$ Erevin chargaff
c. $\mathrm{A} \pm$ transcription, $\mathrm{B} \pm$ translation, $\mathrm{C} \pm$ Francis crick
d. $\mathrm{A} \pm$ Translation, $\mathrm{B} \pm$ Extension, $\mathrm{C} \pm$ Rosalind Franklin 562.
566. Which one is the most abundant protein in the animal world?
a. Trypsin
b. Haemoglobin
c. Collagen
d. Insulin
567. Gymnosperms are also called soft wood spermatophytes because they lack:
a. Cambium
b. Pholeum fibres
c. Thick walled tracheids
d. Xylem fibres
568. Bulk of carbon dioxide (CO2) released from body tissues into the blood is present as:
a. Bicarbonate in blood plasma and RBC's
b. Free $\mathrm{CO}_{2}$ in blood plasma
c. $70 \%$ carbamino hemog3(i) bin and $30 \%$ as bicarbonate
d. Carbamino $\pm$ hemog3(i) bin in RBC's
569. Which one of the following cona] TTJETBT (o)13(w)-14(i[c7h14TBT/F2 11.04 Tf1 001 ETBT)
576. Equimolar solutions of the following substances are prepared separately. Which one of these will record the highest pH value?
a. $\mathrm{BaCl}_{2}$
b. $\mathrm{Al} \mathrm{Cl}_{3}$
c. LiCl
581. A current loop in a magnetic field:
a.
586.
594. Melatonin is produced by
a) MSH
b) TSH
c) Hypothalamus
d) Pineal gland
595. Gerontology is tha81 00 ud
609.
624. Which one of the following is a fructose lichen?
a) Graphis
b) Parmelia
c) Cladonia
d) Rhizocarpon
625. A chordate may not have:
a) Notochord
b) Tubular nerve cord
c) Gill slits
d) Vertebral column
626.
649. Greenhouse effect is caused by
a) Infrared rays
b) UV rays
c) X-rays
d) Visible rays
650. Unit of magnetic permeability is
a) $A m \neg-1$
b) $\mathrm{Am}-2$
c) H
662. Which of the following is character of Ironic bond
a) Low melting and boiling point
b) Insoluble in polar solvent
F 9DCOHZDDG/IRIFHRI DWXDFWPQ
d) High melting and boiling point
663. Which alcohol is formed from wa60(d f)-5(ro)1cohveETBT/F2 11.04 Tf1 001396.07730 .7 Tmm
687. Formation of cynohydrin from ketone is an example of
a) Nucleophilic addition
b) Nucleophilic substitution
c) Electrophilic substitution
d) Electrophilic addition
688. A nitrate salt on heating with Aluminium powder and NaOH gives which of the following
a) N 2 O
700. Ovule integument gets transformed into
a. Seed b.
713. Which is a sudden change in a gene or chromosome
a. Allele b. Genotype
c. Mutation
d. phenotype
725. Which of the following hormones is NOT secreted by anterior lobe of the pituitary gland
a. TSH
b. Oxytocin
c. Prolactin
d. ACTH
726. The host that harbours the adult or sexually mature, parasite is called
a. Intermediate host
b. Reservoir host
c. Definitve host
d. Symbiotic host
727. The organ of corti in mammals is found in
a. Vestibular canal
738.

a. aqueous bromine b. dilute hydrochloric acid
c. limewater
d. potassium dichromate(VI) in acidic solution
754. The isomerism observed in Urea molecule is
A.( )6( )6Chain
B. $6($ ( )-4(P)4(osi(6(t)-4(i)5(on)3( )-4( )6( )-4( )6( )-4( )6( )-4( )6( )-4( )6( )6( )-4( )6
755. Methyl acetate and ethyl acetate can be distinguished by
A. ( )6(a)lRaläne KMnO4
B.(6( )-4(ne)3(ut)8(r)-3(al)6( )-4(Fe)4(C)5(I)5(3 D3( )-4D)6PHA4¢\$6( )-4( )6( )] T
756.
766.
778. The unit of magnetic permeability is
a. $\quad \mathrm{A} \mathrm{m}^{-1}$
b. $\mathrm{Am}^{-2}$
c. H
d. $\mathrm{H} \mathrm{m}^{-1}$
790. Mendelian recombination is due to
a.Independent assortment of genes b.Linkage of genes
c.Mut. 001 (en)3(e)-4( 16.92 Tm[(M)-3(en)
804.
817. The conversion of protein waste, the ammonia into urea occurs mainly in a.Kidney
b.Lungs
c.Liver
856. Bell metal is an alloy of
A. Zn and Cu
B. Zn and Pb
C. Cu and Sn
D. Cu and Ni
867. A change in temperature affects which property of sound?
a. Frequency
878. If a body loses half its velocity on penetrating 3 cm on a wooden block, then how much will it penetrate more before coming to rest?
a. 1 cm
b. 2 cm
c. 3 cm
d. 4 cm
879.
890. Edible fungus is
a. Mucor
b. Rhizopus
c. Puccinia
d. Agaricus
891. What is the contribution of Watson and Crick
a. single stranded linear structure
b. double helix
structure of DNA
c. single coiled structure
d. double linear structure
892. Nissl's granules are found in
a. RBCb. Nerve cell
901.
913.
925. Genes involved in cancer are called
a. Cancer genes
b. Oncogenesc. Tumor genes
d.Regulator genes
926. The full form of
947. Which one of the human cell do not contain mitochondria
a. Nerve cells b. Red blood cells
c. Liver cells
d.White blood cells
948. By the statement 'survival of the fittest', Darwin meant that
a. The strongest of all species survives
b. The most intelligent of the species survives
c. The cleverest of the species survives
d. The most adaptable of the species to change survives
949.

