

EXAMINATION QUESTIONS

CBSE-PMT-2005 (BIOLOGY)

- Q.1** Which of the following is the simplest amino acid – **[CBSE PMT-05]**
(1) Alanine (2) Asparagine (3) Glycine (4) Tyrosine
- Q.2** During which stage in the complete oxidation of glucose are the greatest number of ATP molecules formed from ADP – **[CBSE PMT-05]**
(1) Glycolysis (2) Krebs's cycle
(3) Electron transport chain (4) Conversion of purpuric acid to acetyl Co A
- Q.3** Ectophloic siphonostele is found in – **[CBSE PMT-05]**
(1) Osmunda and Equisetum (2) Adaintum and Cucurbitaceae
(3) Marsilea and Bortychium (4) Dicksonia and Maidenhair fern
- Q.4** G-6-P dehydrogenase deficiency is associated with haemolysis of – **[CBSE PMT-05]**
(1) Leucocytes (2) Lymphocytes (3) Platelets (4) RBCs
- Q.5** Which of the following statements regarding enzyme inhibition is correct – **[CBSE PMT-05]**
(1) Competitive inhibition is seen when a substrate competes with an enzyme for binding to an inhibitor protein
(2) Non-Competitive inhibitors often bind to the enzyme irreversibly
(3) Competitive inhibition is seen when a substrate competes for the active site on the enzyme
(4) Non-Competitive inhibition of an enzyme can be overcome by adding large amount of substrate
- Q.6** In contrast to Annelids the Platyhelminths show – **[CBSE PMT-05]**
(1) Absence of body cavity (2) Presence of pseudocoel
(3) Radial symmetry (4) Bilateral symmetry
- Q.7** Which of the following represent the edible part of the fruit of Litchi – **[CBSE PMT-05]**
(1) Endocarp (2) Pericarp (3) Juicy aril (4) Mesocarp
- Q.8** Which one of the following pairs is mismatched – **[CBSE PMT-05]**
(1) Nuclear power – radioactive wastes (2) Solar energy – greenhouse effect
(3) Fossil fuel burning – release of CO₂ (4) Biomass burning – release of CO₂
- Q.9** Enzymes, vitamins and hormones can be classified into a single category of biological chemicals, because all of these – **[CBSE PMT-05]**
(1) Are exclusively synthesized in the body of a living organism as at present
(2) Enhance oxidative metabolism
(3) Are conjugated proteins
(4) Help in regulating metabolism
- Q.10** *E.coli* cells with a mutated *z* gene of the *lac* operon cannot grow in medium containing only lactose as the source of energy because – **[CBSE PMT-05]**
(1) They cannot synthesize functional β -galactosidase
(2) They cannot transport lactose from the medium into the cells
(3) The *lac* operon is constitutively active in these cells
(4) In the presence of glucose, *E.coli* cells do not utilize lactose
- Q.11** The deficiencies of micronutrients, not only affects growth of plants but also vital functions such as photosynthetic and mitochondrial electron flow. Among the list given below, which group of three elements shall affect most, both photosynthetic and mitochondrial electron transport – **[CBSE PMT-05]**
(1) Ca, K, Na (2) Co, Ni, Mo (3) Mn, Co, Ca (4) Cu, Mn, Fe

- Q.12** Through which cell of the embryo sac, does the pollen tube enter the embryo sac—[CBSE PMT-05]
 (1) Presistant synergid (2) Egg cell (3) Central cell (4) Degenerated synergid
- Q.13** An acromian process is characteristically found in the — [CBSE PMT-05]
 (1) Skull of frog (2) Sperm of mammals
 (3) Pelvic girdle of mammals (4) Pectoral girdle of mammals
- Q.14** Golden rice is a transgenic crop of the future with the following improved trait — [CBSE PMT-05]
 (1) High protein content (2) High vitamin— A content
 (3) High lysine (essential amino acid) content (4) Insect resistance
- Q.15** In a type of apomixis known as a adventive embryony, embryos develop directly from the — [CBSE PMT-05]
 (1) Synergids or antipodals in an embryo sac (2) Nucellus integuments
 (3) Zygote (4) Accessory embryo sacs in the ovule
- Q.16** All of the following statements concerning the Actinomycetous filamentous soil bacterium *Frankia* are correct EXCEPT that *Frankia* — [CBSE PMT-05]
 (1) Forms specialized vesicles in which the nitrogenase is protected from oxygen by a chemical barrier involving triterpene hopanoids
 (2) Can induce root nodules on many plant species
 (3) Like *Rhizobium*, it usually infects its host plant through root hair deformation and stimulates cell proliferation in the host's cortex
 (4) Cannot fix nitrogen in the free—living state
- Q.17** In ornithine cycle, which of the following wastes are removed from the blood— [CBSE PMT-05]
 (1) CO₂ and ammonia (2) Ammonia and urea (3) CO₂ and urea (4) Urea and urine
- Q.18** At a particular locus frequency of 'A' allele is 0.6 and that of 'a' is 0.4. What would be the frequency of heterozygotes in a random matting population at equilibrium— [CBSE PMT-05]
 (1) 0.24 (2) 0.16 (3) 0.48 (4) 0.36
- Q.19** Four healthy people in their twenties got involved in injuries resulting in damage and death of a few cells of the following. Which of the cells are least likely to be replaced by new cells —[CBSE PMT-05]
 (1) Osteocytes (2) Liver cells
 (3) Neurons (4) Malpighian layer of the skin
- Q.20** Which one of the following makes use of RNA as a template to synthesize DNA—[CBSE PMT-05]
 (1) DNA dependant RNA polymerase (2) DNA polymerase
 (3) Reverse transcriptase (4) RNA polymerase
- Q.21** A student wishes to study the cell structure under a light in mircoscope having 10 X eyepiece and 45X objective. He should illuminate the object by which one of the following colours of light so as to get the best possible resolution — [CBSE PMT-05]
 (1) Red (2) Green (3) Yellow (4) Blue
- Q.22** As compared to a C₃— plant , how many additional molecules of ATP are needed for net production of the one molecule of hexose sugar by C₄— plants — [CBSE PMT-05]
 (1) Zero (2) Six (3) Two (4) Twelve
- Q.23** Bacillus thuringiensis (Bt) strains have been used for designing novel — [CBSE PMT-05]
 (1) Bioinsecticidal plants (2) Bio—mineralization processes
 (3) Biofertilizers (4) Bio—metallurgical techniques
- Q.24** Secretin and cholecystokinin are digestive hormones. They are secreted in — [CBSE PMT-05]
 (1) Oesophagus (2) Ileum (3) Duodenum (4) Pyloric stomach

- Q.25** Grey crescent is the area – **[CBSE PMT-05]**
 (1) At the point of entry of sperm into ovum
 (2) Just opposite to the site of entry to sperm into ovum
 (3) At the animal pole
 (4) At the vegetal pole

- Q.26** Match items in column I with those in column II – **[CBSE PMT-05]**

Column I	Column II
(A) Peritrichous flagellation	(J) <i>Ginkgo</i>
(B) Living fossil	(K) <i>Macrocystes</i>
(C) Rhizophore	(L) <i>Escherichia coli</i>
(D) Smallest flowering plant	(M) <i>Selaginella</i>
(E) Largest perennial alga	(N) <i>Wolffia</i>

Select the correct answer from the following –

- (1) A – L ; B – J ; C – M ; D – N ; E – K
 (2) A – K ; B – J ; C – L ; D – M ; E – N
 (3) A – J ; B – K ; C – N ; D – L ; E – K
 (4) A – N ; B – L ; C – K ; D – N ; E – J
- Q.27** Using imprints from a plate with complete medium and carrying bacterial colonies, you can select streptomycin resistant mutants and prove that such mutations do not originate as adaptation . These imprints need to be used – **[CBSE PMT-05]**
 (1) On plates with and without streptomycin
 (2) Only on plates with streptomycin
 (3) On plates with minimal medium
 (4) Only on plates without streptomycin

- Q.28** Chemiosmotic theory of ATP synthesis in the chloroplasts and mitochondria is based on **–[CBSE PMT-05]**
 (1) Membrane potential
 (2) Accumulation of K ions
 (3) Proton gradient
 (4) Accumulations of Na ions

- Q.29** Which one of the following experiments suggests that simplest living organisms could not have originated spontaneously from non–living matter – **[CBSE PMT-05]**
 (1) Larvae could appear in decaying organic matter
 (2) Meat was not spoiled, when heated and kept sealed in vessel
 (3) Microbes did not appear in stored meat
 (4) Microbes appeared from unsterilized organic matter

- Q.30** Which of the following is not used for disinfection of drinking water– **[CBSE PMT-05]**
 (1) Chlorine
 (2) Phenyl
 (3) Chloramine
 (4) Ozone

- Q.31** Which one of the following characters is not typical of the class Mammalia – **[CBSE PMT-05]**
 (1) Alveolar lungs
 (2) Ten pairs of cranial nerves
 (3) Seven cervical vertebrae
 (4) Thecodont dentition

- Q.32** Identify the correctly matched pair– **[CBSE PMT-05]**
 (1) Kyoto Protocol – Climatic change
 (2) Montreal Protocol – Global warming
 (3) Basal Convention – Biodiversity Conservation
 (4) Ramsar Convention – Ground water pollution

- Q.33** Auxospores and homocysts are formed, respectively, by – **[CBSE PMT-05]**
 (1) Some cyanobacteria and many diatoms
 (2) Several diatoms and a few cyanobacteria
 (3) Several cyanobacteria and several diatoms
 (4) Some diatoms and several cyanobacteria

- Q.34** Which one of the following phenomena supports Darwin's concept of natural selection in organic evolution – **[CBSE PMT-05]**
 (1) Production of 'Dolly', the sheep by cloning
 (2) Development of organs from 'stem cell's for organ transplantation
 (3) Development of transgenic animals
 (4) Prevalence of pesticide resistant insects
- Q.35** The name of Norman Borlaug is associated with – **[CBSE PMT-05]**
 (1) Green Revolution (2) White Revolution
 (3) Yellow Revolution (4) Blue Revolution
- Q.36** Nucleotides are building blocks of nucleic acids. Each nucleotide is a composite molecule formed by – **[CBSE PMT-05]**
 (1) Base – sugar – OH (2) Base – sugar – phosphate
 (3) Sugar – phosphate (4) (Base – sugar – phosphate)_n
- Q.37** Which of the following is generally used for induced mutagenesis in crop plants – **[CBSE PMT-05]**
 (1) Gamma rays (from cobalt 60) (2) Alpha particles
 (3) X-rays (4) UV (260 nm)
- Q.38** One of the most important functions of botanical gardens is that – **[CBSE PMT-05]**
 (1) They allow ex-situ conservation of germ plasm
 (2) They provide the natural habitat for wild life
 (3) One can observe tropical plants there
 (4) They provide a beautiful area for recreation
- Q.39** The net pressure gradient that causes the fluid to filter out of the glomeruli into the capsule – **[CBSE PMT-05]**
 (1) 20 mm Hg (2) 50 mm Hg (3) 75 mm Hg (4) 30 mm Hg
- Q.40** Epithelial cells of the intestine involved in food absorption have on their surface – **[CBSE PMT-05]**
 (1) Zymogen granules (2) Pinocytotic vesicles (3) Phagocytotic vesicles (4) Microvilli
- Q.41** If mammalian ovum fails to get fertilized, which one of the following is unlikely – **[CBSE PMT-05]**
 (1) Estrogen secretion further decreases (2) Progesterone secretion rapidly declines
 (3) Corpus leuteum will disintegrate (4) Primary follicle starts developing
- Q.42** The catalytic efficiency of two different enzymes can be compared by the – **[CBSE PMT-05]**
 (1) The Km value (2) The pH optimum value
 (3) Molecular size of the enzyme (4) Formation of the product
- Q.43** Biodiversity Act of India was passed by the Parliament in the year – **[CBSE PMT-05]**
 (1) 2002 (2) 1992 (3) 1996 (4) 2000
- Q.44** The salivary gland chromosomes in dipteran larvae, are useful in gene mapping because – **[CBSE PMT-05]**
 (1) They have endoreduplicated chromosomes (2) these are fused
 (3) These are easy to stain (4) These are much longer in size
- Q.45** Top-shaped multiciliate male gametes, and the mature seed which bears only one embryo with two cotyledons, are characteristic features of – **[CBSE PMT-05]**
 (1) Gamopetalous angiosperms (2) Conifers
 (3) Polypetalous angiosperms (4) Cycads

- Q.46** Which group of three of the following five statements (a–e) contain is all three correct statements regarding beri–beri – **[CBSE PMT-05]**
 (a) A crippling disease prevalent among the native population of sub–Saharan Africa
 (b) A deficiency disease caused by lack of thiamine (vitamin B₁)
 (c) A nutritional disorder in infants and young children when the diet is persistently deficient in essential protein
 (d) Occurs in those countries where the staple diet is polished rice
 (e) The symptoms are pain from neuritis, paralysis, muscle wasting, progressive oedema, mental deterioration and finally heart failure
 (1) b, c and e (2) a, b and d (3) b, d and e (4) a, c and e
- Q.47** Which of the following unicellular organism has a macronucleus for trophic function and one or more micronuclei for reproduction – **[CBSE PMT-05]**
 (1) *Trypanosoma* (2) *Paramecium* (3) *Euglena* (4) *Amoeba*
- Q.48** Protein synthesis in an animal cell occurs – **[CBSE PMT-05]**
 (1) On ribosomes present in cytoplasm as well as in mitochondria
 (2) On ribosomes present in nucleolus as well as in cytoplasm
 (3) Only on ribosomes attached to the nuclear envelope and endoplasmic reticulum
 (4) Only on the ribosomes present in cytosol
- Q.49** Centromere is required for – **[CBSE PMT-05]**
 (1) Movement of chromosomes towards poles (2) Cytoplasmic cleavage
 (3) Crossing over (4) Transcription
- Q.50** Which one of the following hydrolyses internal phosphodiester bonds in a polynucleotide chain – **[CBSE PMT-05]**
 (1) Lipase (2) Protease (3) Exonuclease (4) Endonuclease
- Q.51** Carbohydrates, the most abundant biomolecules on earth, are produced by – **[CBSE PMT-05]**
 (1) Some bacteria, algae and green plant cells (2) All bacteria, fungi and algae
 (3) Fungi, algae and green plants cells (4) Viruses, fungi, bacteria
- Q.52** Animals, have the innate ability to escape from predation. Examples for the same are given below. Select the incorrect example – **[CBSE PMT-05]**
 (1) Colour change in chameleon
 (2) Poison fangs in snakes
 (3) Melanism in moths
 (4) Enlargement of body size by swallowing air in puffer fish
- Q.53** Which one of the following represents an ovule, where the embryo sac becomes horse–shoe shaped and the funiculus and micropyle are close to each other– **[CBSE PMT-05]**
 (1) Amphitropous (2) Antropous (3) Circinotropous (4) Atropous
- Q.54** Three crops that contribute maximum to global food grain production are– **[CBSE PMT-05]**
 (1) Wheat, rice and maize (2) Rice, maize and sorghum
 (3) Wheat, maize and sorghum (4) Wheat, rice and barley
- Q.55** Telomerase is an enzyme which is a – **[CBSE PMT-05]**
 (1) RNA (2) Ribonucleoprotein (3) Reptitive DNA (4) Simple protein
- Q.56** In order to find out the different types of gametes produced by a pea plant having the genotype AaBb, it should be crossed to a plant with the genotype– **[CBSE PMT-05]**
 (1) AaBb (2) aabb (3) AABB (4) aaBB

- Q.57** Prolonged liberal irrigation of agricultural fields is likely to create the problem of – **[CBSE PMT-05]**
 (1) Aridity (2) Metal toxicity (3) Salinity (4) Acidity
- Q.58** According to widely accepted “fluid mosaic model” cell membranes are semi-fluid, where lipids and integral proteins can diffuse randomly. In recent years, this model has been modified in several respects. In this regard, which of the following statements is incorrect – **[CBSE PMT-05]**
 (1) Proteins can also undergo flip-flop movements in the lipid bilayer
 (2) Many proteins remain completely embedded within the lipid bilayer
 (3) Proteins in cell membranes can travel within the lipid bilayer
 (4) Proteins can remain confined within certain domains of the membrane
- Q.59** There exists a close association between the alga and fungus within a lichen. The fungus – **[CBSE PMT-05]**
 (1) Provides food for the alga
 (2) Provides protection, anchorage and absorption for the alga
 (3) Fixes the atmospheric nitrogen for the alga
 (4) releases oxygen for the alga
- Q.60** In a woody dicotyledonous tree, which of the following parts will mainly consist of primary tissues – **[CBSE PMT-05]**
 (1) Stem and root (2) All parts
 (3) Shoot tips and root tips (4) Flowers, fruits and leaves
- Q.61** Which of the following is not a hereditary disease– **[CBSE PMT-05]**
 (1) Haemophilia (2) Cretinism (3) Cystic fibrosis (4) Thalassemia
- Q.62** Which of the following is the relatively most accurate method for dating of fossils– **[CBSE PMT-05]**
 (1) Electron– spin resonance method (2) Uranium – lead method
 (3) Potassium– argon method (4) Radio–carbon method
- Q.63** More than 70 % of world’s freshwater is contained in – **[CBSE PMT-05]**
 (1) Antarctica (2) Polar ice
 (3) Glaciers and Mountains (4) Greenland
- Q.64** A woman with normal vision, but whose father was colour blind, marries a colour blind man. Suppose that the fourth child of this couple was a boy. This boy – **[CBSE PMT-05]**
 (1) Must have normal colour vision
 (2) May be colour blind or may be of normal vision
 (3) Will be partially colour blind since he is heterozygous for the colour blind mutant allele
 (4) Must be colour blind
- Q.65** Production of a human protein in bacteria by genetic engineering is possible because – **[CBSE PMT-05]**
 (1) Bacterial cell can carry out the RNA splicing reactions
 (2) The mechanism of gene regulation is identical in humans and bacteria
 (3) The human chromosome can replicate in bacterial cell
 (4) The genetic code is universal
- Q.66** Which of the following substances, if introduced into the blood stream, would cause coagulation of blood at the site of its introduction– **[CBSE PMT-05]**
 (1) Thromboplastin (2) Fibrinogen (3) Heparin (4) Prothrombin

- Q.67** The world's highly prized wool yielding 'Pashmina' breed is – **[CBSE PMT-05]**
 (1) Kashmir sheep –Afghan sheep cross (2) Goat
 (3) Sheep (4) Goat–sheep cross
- Q.68** Photosynthesis in C_4 plants is relatively less limited by atmospheric CO_2 levels because – **[CBSE PMT-05]**
 (1) The primary fixation of CO_2 is mediated via PEP carboxylase
 (2) Effective pumping of CO_2 into bundle sheath cells
 (3) Four carbon acids are the primary initial CO_2 fixation products
 (4) Rubisco in C_4 plants has higher affinity for CO_2
- Q.69** One of the examples of the action of the autonomous nervous system is – **[CBSE PMT-05]**
 (1) Knee– jerk response (2) Pupillary reflex
 (3) Peristalsis of the intestines (4) Swallowing of food
- Q.70** At what stage of the cell cycle are histone proteins synthesized in eukaryotic cells–**[CBSE PMT-05]**
 (1) During telophase (2) During S–phase
 (3) During G–2–stage of prophase (4) During entire prophase
- Q.71** During transcription holoenzyme RNA polymerase binds to a DNA sequence and the DNA assumes a saddle like structure at that point. What is that sequence called – **[CBSE PMT-05]**
 (1) CAATbox (2) GGTbox (3) AAAT (4) TATAbox
- Q.72** The main organelle involved in modification and routing of newly synthesized proteins to their destinations is – **[CBSE PMT-05]**
 (1) Endoplasmic Reticulum (2) Lysosome
 (3) Mitochondria (4) Chloroplast
- Q.73** Damage to thymus in a child may lead to – **[CBSE PMT-05]**
 (1) A reduction in haemoglobin content of blood
 (2) A reduction in stem cell production
 (3) Loss of antibody mediated immunity
 (4) Loss of cell mediated immunity
- Q.74** Which one of the following depresses brain activity and produces feelings of calmness, relaxation and drowsiness– **[CBSE PMT-05]**
 (1) Morphine (2) Valium (3) Hashish (4) Amphetamines
- Q.75** Why is vivipary an undesirable character for annual crop plants – **[CBSE PMT-05]**
 (1) It reduces the vigour of the plant
 (2) The seeds exhibits long dormancy
 (3) It adversely affects the fertility of the plant
 (4) The seeds cannot be stored under normal conditions for the next season
- Q.76** There are two opposing views about origin of modern man. According to one view *Homo erectus* in Asia were the ancestors of modern man. A study of variation of DNA however suggested African origin of modern man. What kind of observation on DNA variation could suggest this – **[CBSE PMT-05]**
 (1) Greater variation in asia than in Africa
 (2) Similar variation in Africa and Asia
 (3) Variation only in Asia and no variation in Africa
 (4) Greater variation in Africa

- Q.77** Which of the following is not true for a species – **[CBSE PMT-05]**
 (1) Members of a species can interbreed
 (2) Variation occur among members of a species
 (3) Gene flow does not occur between the populations of a species
 (4) Each species is reproductively isolated from every other species
- Q.78** Photosynthetic Active Radiation (PAR) has the following range of wavelengths – **[CBSE PMT-05]**
 (1) 340–450 nm (2) 450–950 nm (3) 500–600 nm (4) 400–700 nm
- Q.79** Haemophilia is more commonly seen in human males than in human females because – **[CBSE PMT-05]**
 (1) This disease is due to a Y–linked recessive mutation
 (2) This disease is due to an X–linked recessive mutation
 (3) This disease is due an X–linked dominant mutation
 (4) A greater proportion of girls die in infancy
- Q.80** Chlorophyll in chloroplasts is located in – **[CBSE PMT-05]**
 (1) Grana (2) Pyrenoid (3) Stroma (4) Both grana and stroma
- Q.81** AIDS is caused by HIV that principally infects– **[CBSE PMT-05]**
 (1) Activator B cells (2) T 4 lymphocytes (3) Cytotoxic T cells (4) All lymphocytes
- Q.82** Which one of the following pairs is mismatched – **[CBSE PMT-05]**
 (1) Savana – acacia trees (2) Coniferous forest – evergreen trees
 (3) Tundra – permafrost (4) Prairie – epiphytes
- Q.83** In which one pair both the plants can be vegetatively propagated by leaf pieces– **[CBSE PMT-05]**
 (1) Bryophyllum and Kalanchoe (2) Agave and Kalanchoe
 (3) Asparagus and Bryophyllum (4) Chrysanthemum and Agave
- Q.84** Parkinson's disease (characterized by tremors and progressive rigidity limbs) is caused by degeneration of brain neurons that are involved in movement control and make use neurotransmitter– **[CBSE PMT-05]**
 (1) Norepinephrine (2) Acetylcholine (3) GABA (4) Dopamine
- Q.85** A women with 47 chromosomes due to three copies of chromosome 21 is characterized by – **[CBSE PMT-05]**
 (1) Turner syndrome (2) Down syndrome (3) Superfemaleness (4) Triploidy
- Q.86** A man and a women, who do not show any apparent signs of a certain inherited disease, have seven children (2 daughters and 5 sons). Three of the sons suffer from the given disease but none of the daughters are affected. Which of the following mode in inheritance do you suggest for this disease – **[CBSE PMT-05]**
 (1) Sex–limited recessive (2) Autosomal dominant
 (3) Sex–linked recessive (4) Sex–linked dominant
- Q.87** At which latitude, heat gain through insolation approximately equals heat loss through terrestrial radiation– **[CBSE PMT-05]**
 (1) $42\frac{1}{2}^{\circ}$ North and South (2) $22\frac{1}{2}^{\circ}$ North and South
 (3) 40° North and South (4) 66° North and South
- Q.88** In a man, abducens nerve is injured. Which one of the following functions will be affected – **[CBSE PMT-05]**
 (1) Swallowing (2) Movement of the eye ball
 (3) Movement of the neck (4) Movement of the tongue

- Q.89** De Vries gave his mutation theory on organic evolution while working on – **[CBSE PMT-05]**
 (1) *Oenothera lamarckiana* (2) *Drosophila melanogaster*
 (3) *Pisum sativum* (4) *Althea rosea*
- Q.90** Genes for cytoplasmic male sterility in plants are generally located in – **[CBSE PMT-05]**
 (1) Nuclear genome (2) Chloroplast genome
 (3) Cytosol (4) Mitochondrial genome
- Q.91** A patient is generally advised to specially, consume more meat, lentils, milk and eggs in diet only when he suffers from – **[CBSE PMT-05]**
 (1) Anaemia (2) Scurvy (3) Kwashiorkor (4) Rickets
- Q.92** Barophilic prokaryotes– **[CBSE PMT-05]**
 (1) Grow slowly in highly alkaline frozen lakes at high altitudes
 (2) Grow and multiply in very deep marine sediments
 (3) Readily grow and divide in sea water enriched in any soluble salt of barium
 (4) Occur in water containing high concentration of barium hydroxide
- Q.93** An important step in manufacture of pulp for paper industry from the woody tissues of plants is the – **[CBSE PMT-05]**
 (1) Removal of water from the wood by prolonged heating at approximately 50°C
 (2) Treatment of wood with chemicals that break down cellulose
 (3) Removal of oils present in the wood by treatment with suitable chemicals
 (4) Preparation of pure cellulose by removing lignin
- Q.94** Potometer works on the principle of – **[CBSE PMT-05]**
 (1) Potential difference between the tip of the tube and that of the plant
 (2) Amount of water absorbed equals the amount transpired
 (3) Osmotic pressure
 (4) Root pressure
- Q.95** The ability of the Venus Flytrap to capture insects is due to – **[CBSE PMT-05]**
 (1) Rapid turgor pressure changes
 (2) A passive process requiring no special ability on the part of the plant
 (3) Specialized “muscle – like” cells
 (4) Chemical stimulation by the prey
- Q.96** Which of the following pairs, is correctly matched – **[CBSE PMT-05]**
 (1) Fibrous joint – between phalanges
 (2) Cartilaginous joint – skull bones
 (3) Gliding joint – between zygapophyses of the successive vertebrae
 (4) Hinge joint – between vertebrae
- Q.97** According to IUCN Red List, what is the status of Red Panda (*Ailurus fulgens*) – **[CBSE PMT-05]**
 (1) Critically endangered species (2) Vulnerable species
 (3) Extinct species (4) Endangered species
- Q.98** A person is undergoing prolonged fasting. His urine will be found to contain abnormal quantities of – **[CBSE PMT-05]**
 (1) Fats (2) Amino acids (3) Ketones (4) Glucose
- Q.99** For retting of jute the fermenting microbe used is– **[CBSE PMT-05]**
 (1) Methophilic bacteria (2) *Helicobacter pylori*
 (3) Butyric acid bacteria (4) *Streptococcus lactin*
- Q.100** From the following statements select the wrong one – **[CBSE PMT-05]**
 (1) Prawn has two pairs of antennae
 (2) Millepedes have two pairs of appendages in each segment of the body
 (3) Animals belonging to phylum Porifera are exclusively marine
 (4) Nematocysts are characteristics of the phylum cnidaria