

**FACULTY SELECTION TEST**  
**PRE-FOUNDATION**  
**BIOLOGY**  
**PAPER - SAMPLE**

Time: 90 mins.

Max. Marks: 360

**GENERAL INSTRUCTIONS**

1. Write your Name in the Space Provided in the Bottom of this Booklet.
2. The question paper consists of '90' objective type questions.
3. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.
4. Each correct answer carries **4 marks** and each wrong answer **(- 1) Mark**.
5. Use **Black or Blue Ball Point Pen** only for filling particulars.
6. Use of Blank Papers, Clip Boards, Calculator, Log Table, Slide Rule and Mobile or any electronic gadgets in any form is not allowed.
7. In case of any dispute, the answer filled in the OMR sheet available with the institute shall be final.
8. After completion submit the Question Paper back along with the Answer Sheet.

Name: \_\_\_\_\_

- Q.1 Seismonastic movements are shown by which plant -  
 (1) Indian telegraph plant (2) 'Touch-me-not' plant  
 (3) Cucumber plant (4) Rose plant
- Q.2 Cerebral hemispheres are the centres of -  
 (1) Posture & Equilibrium (2) Reflex action  
 (3) Thinking & Memory (4) All of these
- Q.3 The reptile in which high incubation temperature results in male progeny is -  
 (1) a lizard (2) a turtle (3) a snake (4) a crocodile
- Q.4 The chlorophylls absorb mostly -  
 (1) Blue & green light (2) Blue & red light (3) Green & red light (4) Green & yellow light
- Q.5 As blood flows out of a damaged blood vessel, blood platelets release a substance called -  
 (1) Thrombin (2) Prothrombin (3) Thromboplastin (4) Fibrin
- Q.6 The lungs are covered by two thin membranes called -  
 (1) Hepatic caeca (2) Myocardium (3) Alveoli (4) Pleura
- Q.7 Which one of the following fishes is a surface feeder ?  
 (1) Rohus (2) Mrigals (3) Common carps (4) catlas
- Q.8 Silver nitrate solution is used to study -  
 (1) Endoplasmic reticulum (2) Golgi apparatus  
 (3) Nucleus (4) Mitochondria
- Q.9 Cell theory was given by -  
 (1) Schleiden & Schwann (2) Virchow  
 (3) Hooke (4) Haeckel
- Q.10 Which of the following does not lose their nucleus at maturity ?  
 (1) Companion cell (2) Red blood cells (3) Vessel (4) Sieve tube cells
- Q.11 Survival of plant in terrestrial environment has been made possible by the presence of -  
 (1) Intercalary meristem (2) Conducting tissue  
 (3) Apical meristem (4) Parenchymatous tissue
- Q.12 Cork cells are made impervious to water & gases by the presence of -  
 (1) Cellulose (2) Lipids (3) Suberin (4) Lignin
- Q.13 Karl von linne was involved with which branch of science ?  
 (1) Morphology (2) Taxonomy (3) physiology (4) Medicine
- Q.14 The feature that is not a characteristic of protochordata ?  
 (1) Presence of notochord (2) Bilateral symmetry & coelom  
 (3) Jointed legs (4) Presence of circulatory system



- Q.15 Sameer brought a free floating, bright green, silky mass from the surface of a fresh water pond. He observed it under a microscope -  
 (1) Sargassum (2) Spirogyra (3) Selaginella (4) Sphagnum
- Q.16 Cretinism in infants occurs due to -  
 (1) Hypersecretion of thyroid hormones (2) Hyposecretion of thyroid hormones  
 (3) Hyposecretion of insulin hormone (4) Hyposecretion of aldosterone hormone
- Q.17 Oxygen is harmful for -  
 (1) Ferns (2) Chara  
 (3) Nitrogen fixing bacteria (4) Mango tree
- Q.18 Growth of Lichens on barren rocks is followed by the growth of -  
 (1) Moss (2) Ferns (3) Gymnosperms (4) Algae
- Q.19 T cells are formed in -  
 (1) Bone marrow (2) Liver (3) Thymus (4) Bersa
- Q.20 Bipolar neurons are present in -  
 (1) Retina (2) Alimentary canal (3) Limbs (4) heart
- Q.21 Krebs' cycle occurs in -  
 (1) Cytoplasm (2) Chloroplast (3) Ribosome (4) Mitochondria
- Q.22 Surgical removal of both kidneys would result in death because -  
 (1) Urea will not be excreted (2) Glucose will be lost from body  
 (3) Water will accumulate in blood (4) Immunity will be suppressed
- Q.23 Double circulation, i.e., blood flows through the heart twice during one cycle of passage through the body, is exhibited by -  
 (1) Human beings (2) Pisces (3) Birds (4) Both (1) and (3)
- Q.24 Which of the following, is not a part of large intestine -  
 (1) Colon (2) Rectum (3) Caecum (4) Ileum
- Q.25 Digestion of starch starts from -  
 (1) Stomach (2) Intestine (3) Oesophagus (4) Mouth
- Q.26 Heart of Draco is -  
 (1) 4 chambered (2)  $3\frac{1}{2}$  chambered (3) 3 chambered (4) 5 chambered
- Q.27 Scion is a term in relation to -  
 (1) Layering (2) Cutting (3) Grafting (4) Micropropagation
- Q.28 Podocytes are exclusively located in -  
 (1) liver (2) Kidney (3) Heart (4) Spleen



- Q.29 In which part of the body the most of iron is present -  
 (1) Blood (2) Bones (3) Muscles (4) Heart
- Q.30 Pea shaped gland is -  
 (1) Thyroid (2) Adrenal (3) Pituitary (4) Thymus
- Q.31 Which of the following is the best source of iodine ?  
 (1) Sea food (2) Cereals & pulses (3) Fruit & nut (4) Milk product
- Q.32 Bacteria cannot survive in a highly salted pickle because -  
 (1) They become plasmolyse & die (2) They do anaerobic respiration  
 (3) Water is not available (4) all
- Q.33 Ligament is found between -  
 (1) bone & muscle (2) two bones (3) two muscles (4) None of these
- Q.34 Through which part air enters in the body of cockroach ?  
 (1) Lungs (2) Gills (3) Spiracles (4) Skin
- Q.35 Hard covering of seeds and nuts, made up of -  
 (1) Parenchyma (2) Sclerenchyma (3) Collenchyma (4) Aerenchyma
- Q.36 Storage of food takes place in -  
 (1) Parenchyma (2) Collenchyma (3) Sclerenchyma (4) Aerenchyma
- Q.37 Connecting link between living & nonliving is -  
 (1) Protozoa (2) Fungi (3) Virus (4) Algae
- Q.38 Lactobacillus convert the lactose into -  
 (1) Citric acid (2) Acetic acid (3) Lactic acid (4) None of these
- Q.39 The abnormal increase in the total RBC count is referred to as -  
 (1) Leucopenia (2) Pneumonia (3) Anaemia (4) Polycythemia
- Q.40 The Bowman's capsule functions as a -  
 (1) Suction pump (2) Sponge (3) Filter (4) All of these
- Q.41 The formation of seedless fruits without pollination and fertilization is known as -  
 (1) Apical dominance (2) Parthenogenesis (3) Senescence (4) Parthenocarpy
- Q.42 The substance that triggers the fall of mature leaves and fruits from plants is -  
 (1) Abscisic acid (2) Gibberellins (3) Cytokinin (4) Auxin
- Q.43 A plant placed near a window bends outward because -  
 (1) Its tip is able to obtain more light  
 (2) The auxin content on the shaded side is higher than on the lighted side  
 (3) Its tip is able to receive necessary warmth  
 (4) Its tip is able to get more oxygen



- Q.44 Fat soluble vitamins are -  
 (1) A, D, C, B (2) A, D, E, K (3) B, B<sub>12</sub>, K, C (4) All
- Q.45 Cells pointed at ends & lignified are present in -  
 (1) Sclerenchyma (2) Chlorenchyma (3) Collenchyma (4) Aerenchyma
- Q.46 "Locomotion by pseudopodia" is a character of phylum -  
 (1) Porifera (2) Coelenterata (3) Protozoa (4) None of these
- Q.47 Cells form the structure of Bone -  
 (1) Chondrocyte (2) Oestocytes (3) Sarcocytes (4) Vessels
- Q.48 Amphibia of plant kingdom is -  
 (1) Thallophyta (2) Bryophyta (3) Pteridophyta (4) All of these
- Q.49 Chromosome number is reduced to half in -  
 (1) Mitosis (2) Meiosis (3) Binary fission (4) Parthenogenesis
- Q.50 Xerophytes have long roots -  
 (1) due to light (2) to give mechanical support  
 (3) to draw water from deep water beds (4) None of these
- Q.51 Pulses are good source of -  
 (1) Protein (2) Fat (3) Vitamin (4) Carbohydrate
- Q.52 Food poisoning, caused by -  
 (1) Clostridium (2) Measles (3) Cephaluros (4) Plasmodium
- Q.53 Membrane of vacuole is -  
 (1) Chloroplast (2) Pleuroplast (3) Tonoplast (4) Ergoplast
- Q.54 Whooping cough is caused by -  
 (1) Mycobacterium (2) E. Histolytica (3) Myxobacterium (4) Moulds
- Q.55 Secretion of pancreas do not contain -  
 (1) Amylase (2) Lactase (3) Lipase (4) Trypsin
- Q.56 Which of the following hormone regulate the ovulation in female -  
 (1) TSH (2) ACTH (3) FSH (4) ADH, FSH
- Q.57 Closure of stomata is caused by -  
 (1) Auxin (2) Cytokinin (3) ABA (4) Ethylene
- Q.58 Which of the following organism reproduced by budding -  
 (1) Planaria (2) Rhizopus (3) Hydra (4) Plasmodium
- Q.59 Formation of acrosome in sperm, occur by -  
 (1) Lysosome (2) Ribosome (3) Golgi complex (4) Endoplasmic reticulum



- Q.60 The structure which prevents the entry of food into respiratory tract is -  
 (1) Larynx (2) Epiglottis (3) Pharynx (4) Glottis
- Q.61 The assimilatory power in photosynthesis is -  
 (1) ATP and NADPH<sub>2</sub> (2) NADPH  
 (3) ATP (4) ATP, NADPH & CO<sub>2</sub>
- Q.62 Woody plants carry gaseous exchange through -  
 (1) Lenticels (2) Stem hair (3) Root hair (4) Epidermal cells
- Q.63 The Inner lining of stomach is protected from hydrochloric acid by -  
 (1) Salivary amylase (2) Mucus (3) Pepsin (4) Bile
- Q.64 A few drops of iodine solution were added to rice water. The solution turned blue-black. This indicates that rice water contains -  
 (1) Starch (2) Amino acids (3) Fats (4) Protein
- Q.65 Gaseous exchange occurs in the lungs in the region of -  
 (1) Trachea (2) Alveoli (3) Bronchioles (4) Bronchi
- Q.66 Nutrition in Amoeba is -  
 (1) Holophytic (2) Saprophytic (3) Parasitic (4) Holozoic
- Q.67 Emulsification of fat is carried out by -  
 (1) Gastric juice (2) Intestinal juice (3) Bile juice (4) Hydrochloric acid
- Q.68 Pulse can be detected on a superficial artery like that of -  
 (1) Wrist (2) Thigh (3) Diaphragm (4) Humerus
- Q.69 Genome is -  
 (1) Diploid set of chromosomes (2) Haploid set of chromosomes  
 (3) A single chromosome (4) None of the above
- Q.70 Nucleolus takes part in the synthesis of -  
 (1) rRNA (2) tRNA (3) mRNA (4) None of these
- Q.71 The apical cell concept was proposed by -  
 (1) Schmidt (2) Nageli (3) Strasburger (4) Haberlandt
- Q.72 Corpus luteum is found in -  
 (1) Ovary (2) Oviduct (3) Uterus (4) Vagina
- Q.73 Which of the following one protect the pollen grain from damaging effects of U.V. Radiations -  
 (1) Tapetum (2) Endothecium (3) Sporopollenin (4) Pollen kitt
- Q.74 Pernicious anaemia is caused due to the deficiency of -  
 (1) Folic acid (2) Vitamin B<sub>6</sub> (3) Vitamin B<sub>12</sub> (4) Appendix



- Q.75 By the mechanical stimulation on the wall of stomach, a hormone is released. This is -  
 (1) Gastrin (2) Progesterone (3) Secretin (4) Pancreozymin
- Q.76 What is the total volume of air a person can inspire after a normal expiration is -  
 (1) 3000 ml (2) 500 ml (3) 3500 ml (4) 1200 ml
- Q.77 Each haemoglobin molecule can carry how many molecules of O<sub>2</sub>  
 (1) 1 (2) 12 (3) 4 (4) 12 -16
- Q.78 Photorespiration is found in -  
 (1) C<sub>4</sub> plants (2) CAM plants (3) C<sub>3</sub> plants (4) All the above
- Q.79 The capacity of mammals to raise their hair erect by muscles attached to hair follicles is primarily concerned with -  
 (1) Frightening enemies  
 (2) Faster evaporation of sweat for cooling  
 (3) Greater insulation for preservation of body heat  
 (4) Greater perception of contact stimuli
- Q.80 Melanin is a -  
 (1) Pigment (2) Enzyme (3) Hormone (4) Excretory product
- Q.81 Which cell organelle connect nuclear envelope with cells membrane  
 (1) Lysosome (2) Golgi body  
 (3) Endoplasmic reticulum (4) Mitochondria
- Q.82 Lysosomes are the reservoirs of  
 (1) Hydrolytic enzymes (2) RNA and protein  
 (3) Secretory glycoproteins (4) Fats
- Q.83 Anticodon is present on  
 (1) rRNA (2) mtRNA (3) tRNA (4) mRNA
- Q.84 Which of the following forms the covering of the central nervous system of man  
 (1) Duramater and piamater (2) Duramater and arachnoid membrane  
 (3) Arachnoid membrane and piamater (4) Duramater, arachnoid mater and piamater
- Q.85 If a person has lost his memory in an accident, the following part of the brain have got injured  
 (1) Diencephalon (2) Medulla oblongata  
 (3) Cerebellum (4) Cerebrum
- Q.86 The membranous cover of the ovum at ovulation is:  
 (1) Corona radiata (2) Zona radiata (3) Zona occludence (4) Chorion
- Q.87 The year 1900 AD is highly significant for geneticists due to the  
 (1) Discovery of genes (2) Principle of Linkage  
 (3) Mendelian rediscovery (4) Chromosome theory of heredity

- Q.88 Following statements are given regarding MTP. Choose the correct options given below
- i. MTPs are generally advised during first trimester
  - ii. MTPs are used as a contraceptive method
  - iii. MTPs are always surgical
  - iv. MTPs require the assistance of qualified medical personnel
- (1) ii and iii                      (2) ii and iii                      (3) i and iv                      (4) i and ii
- Q.89 How many characters of pea were chosen by mendel
- (1) Three                      (2) Two                      (3) One                      (4) Seven
- Q.90 Pylorus is situated at the junction of
- (1) Oesophagus and stomach                      (2) Stomach and duodenum
- (3) Duodenum and ileum                      (4) Ileum and rectum