



FACULTY SELECTION TEST

INSTRUCTIONS :

1. Attempt all questions.
2. Indicate your answer on the question paper itself.
3. Each question has four options. Out of these only one is the correct answer.
4. Each correct answer carries +1 marks. for each wrong answer 0.25 marks will be deducted.

- Q.1** Autonomic nervous system controls -
(A) Voluntary activities (B) Involuntary activities
(C) Neither voluntary nor involuntary activities (D) Both voluntary & involuntary activities
- Q.2** Seismonastic movements are shown by which plant -
(A) Indian telegraph plant (B) 'Touch-me-not' plant
(C) Cucumber plant (D) Rose plant
- Q.3** Cerebral hemispheres are the centres of -
(A) Posture & Equilibrium (B) Reflex action
(C) Thinking & Memory (D) All of these
- Q.4** A small portion of vas deferens is removed in -
(A) Vasectomy (B) Tubectomy (C) IUCD (D) Barrier method
- Q.5** Who provided experimental evidence to support theory of origin of life from inanimate matter ?
(A) Oparin & Haldane (B) Miller & Urey (C) Watson & Crick (D) Mendel & Darwin
- Q.6** The reptile in which high incubation temperature results in male progeny is -
(A) a lizard (B) a turtle (C) a snake (D) a crocodile
- Q.7** The chlorophylls absorb mostly -
(A) Blue & green light (B) Blue & red light (C) Green & red light (D) Green & yellow light
- Q.8** As blood flows out of a damaged blood vessel, blood platelets release a substance called -
(A) Thrombin (B) Prothrombin (C) Thromboplastin (D) Fibrin
- Q.9** The lungs are covered by two thin membranes called -
(A) Hepatic caeca (B) Myocardium (C) Alveoli (D) Pleura
- Q.10** Name the hormone which is commonly termed 'birth hormone' & 'milk ejecting' hormone -
(A) Oxytocin (B) Vasopressin (C) Thyroxin (D) Luteinising hormone
- Q.11** A slide shows a cell & another similar cell of smaller size attached to the top of the first cell. This slide could be that of -
(A) Yeast with bud (B) Amoeba with bud
(C) Two daughted cells of amoeba (D) Two buds of yeast
- Q.12** Which of the following cell, is amoeboid in nature -
(A) Histiocytes (B) Fibroblast (C) Mast cells (D) Lymphoids
- Q.13** Hensen's discs are found in -
(A) Nervous tissue (B) Muscular tissue (C) Connective tissue (D) Epithelial tissue
- Q.14** Which of the following is not a weed ?
(A) Cowpea (B) Motha (C) Parthenium (D) Xanthium

- Q.15** Which one of the following species of honey bee is an Italian species -
 (A) *Apis dorsata* (B) *Apis florae* (C) *Apis cerana indica* (D) *Apis mellifera*
- Q.16** Which one of the following fishes is a surface feeder ?
 (A) Rohu (B) Mrigals (C) Common carps (D) catlas
- Q.17** The idea 'omnis cellula e cellula' which means that all living cells arise from pre-existing cells was given by -
 (A) Robert brown (B) Purkinje (C) Rudolf Virchow (D) Schleiden
- Q.18** Silver nitrate solution is used to study -
 (A) Endoplasmic reticulum (B) Golgi apparatus
 (C) Nucleus (D) Mitochondria
- Q.19** Cell theory was given by -
 (A) Schleiden & Schwann (B) Virchow
 (C) Hooke (D) Haeckel
- Q.20** The undefined nuclear region of prokaryotes are also known as -
 (A) Nucleus (B) Nucleolus (C) Nucleic acid (D) Nucleoid
- Q.21** Starch grain of potato are -
 (A) Oval (B) Hexagonal (C) Rod shaped (D) Rectangular
- Q.22** Intercalated disc is present in -
 (A) Cardiac muscle (B) Striated muscle (C) neuron (D) Smooth muscle
- Q.23** Which of the following does not lose their nucleus at maturity ?
 (A) Companion cell (B) Red blood cells (C) Vessel (D) Sieve tube cells
- Q.24** Survival of plant in terrestrial environment has been made possible by the presence of -
 (A) Intercalary meristem (B) Conducting tissue (C) Apical meristem (D) Parenchymatous tissue
- Q.25** The water conducting tissue, generally present in gymnosperm, is -
 (A) Vessels (B) Sieve tube (C) Tracheids (D) Xylem fibers
- Q.26** Cork cells are made impervious to water & gases by the presence of -
 (A) Cellulose (B) Lipids (C) Suberin (D) Lignin
- Q.27** Black dot like structures seen in the underside of fern leaflets are -
 (A) Spores (B) Sori (C) Sporophylls (D) Seeds
- Q.28** Fruit is formed by -
 (A) Seed (B) Leaf (C) Stem (D) Ovary
- Q.29** Which one of the following causes kala-azar ?
 (A) *Ascaris* (B) *Trypanosoma* (C) *Leishmania* (D) *Salmonella*
- Q.30** Which of the following bacterium causes peptic ulcers ?
 (A) *E-coli* (B) *Helicobacter pylori* (C) *Clostridium* (D) *Cephaleuros*
- Q.31** Skeleton is made entirely of cartilage in -
 (A) Sharks (B) Tuna (C) Rohu (D) Labeo
- Q.32** The book 'Systema Nature' was written by -
 (A) Linnaeus (B) Haeckel (C) Whittaker (D) Robert brown
- Q.33** Karl von linne was involved with which branch of science ?
 (A) Morphology (B) Taxonomy (C) physiology (D) Medicine

- Q.34** Ferns develop sex organs (antheridia & archegonia) on -
 (A) Leaf (B) Leaflet (C) Pinna (D) Prothallus
- Q.35** The five kingdom classification is based on -
 (A) Complexity of cell structure (B) Complexity of organism's body
 (C) Mode of nutrition (D) All
- Q.36** Who introduced the system of scientific nomenclature of organisms -
 (A) Robert Whittaker (B) Carolus Linnaeus (C) Robert hooke (D) Ernst haeckel
- Q.37** Hard calcium carbonate structure are used as skeleton by -
 (A) Echinodermata (B) Protochordata (C) Arthropoda (D) Nematoda
- Q.38** The feature that is not a characteristic of protochordata ?
 (A) Presence of notochord (B) Bilateral symmetry & coelom
 (C) Jointed legs (D) Presence of circulatory system
- Q.39** Sameer brought a free floating, bright green, silky mass from the surface of a fresh water pond. He observed it under a microscope -
 (A) Sargassum (B) Spirogyra (C) Selaginella (D) Sphagnum
- Q.40** Chewing mouth part are found in -
 (A) Birds (B) Fish (C) Cockroach (D) Earthworm
- Q.41** A specimen of a fish was given to students to identify the externally visible chordate features in it. Students would look for -
 (A) Operculum (B) Notochord
 (C) Dorsal tubular nerve cord (D) Post anal tail
- Q.42** Cretinism in infants occurs due to -
 (A) Hypersecretion of thyroid hormones (B) Hyposecretion of thyroid hormones
 (C) Hyposecretion of insulin hormone (D) Hyposecretion of aldosterone hormone
- Q.43** Nitrosomonas bacteria convert -
 (A) Nitrite to nitrate (B) Elemental nitrogen (C) Ammonia into nitrite (D) nitrate into ammonia
- Q.44** Major source of mineral in soil is the -
 (A) Parent rock (B) Animals (C) Plants (D) Bacteria
- Q.45** Oxygen is harmful for -
 (A) Ferns (B) Chara
 (C) Nitrogen fixing bacteria (D) Mango tree
- Q.46** Growth of Lichens on barren rocks is followed by the growth of -
 (A) Moss (B) Ferns (C) Gymnosperms (D) Algae
- Q.47** T cells are formed in -
 (A) Brain (B) Liver (C) Thymus (D) Bersa
- Q.48** Which of the following technique can be use to analyse the amount of urea, glucose, protein in body fluid -
 (A) Autoanalyzer (B) Ultrasound imaging
 (C) Nuclear magnetic resonance (D) Tomographic scanning
- Q.49** Bipolar neurons are present in -
 (A) Retina (B) Alimentary canal (C) Limbs (D) heart
- Q.50** The stage at which DNA/chromosome replicates is
 (A) prophase (B) interphase (C) metaphase (D) telophase
- Q.51** The process of splitting of water during photosynthesis is called -
 (A) Haemolysis (B) Photolysis (C) Hydrolysis (D) Plasmolysis

- Q.52** Krebs' cycle occurs in -
 (A) Cytoplasm (B) Chloroplast (C) Ribosome (D) Mitochondria
- Q.53** Glycolysis occurs in -
 (A) Cytoplasm (B) Mitochondria (C) Ribosomes (D) Chloroplast
- Q.54** Pigment haemoglobin is present in -
 (A) Blood platelets (B) WBC (C) RBC (D) Blood plasma
- Q.55** Which of following blood vessels carry deoxygenated blood ?
 (A) Aorta (B) Pulmonary vein (C) Pulmonary artery (D) Capillaries
- Q.56** Heart chamber having the largest size and thickest wall is -
 (A) Left ventricle (B) Right auricle (C) Right ventricle (D) Left auricle
- Q.57** Valve present between left auricle and left ventricle is -
 (A) Tricuspid valve (B) Transverse valve (C) Semilunar valve (D) Bicuspid valve
- Q.58** After mitosis, the number of chromosomes in the daughter cells shall be
 (A) $\frac{1}{4}$ of parent cell (B) $\frac{1}{2}$ of parent cell
 (C) double of parent cell (D) same as parent cell
- Q.59** Surgical removal of both kidneys would result in death because -
 (A) Urea will not be excreted (B) Glucose will be lost from body
 (C) Water will accumulate in blood (D) Immunity will be suppressed
- Q.60** Double circulation, i.e., blood flows through the heart twice during one cycle of passage through the body, is exhibited by -
 (A) Human beings (B) Pisces (C) Birds (D) Both (A) and (C)