



ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD

**Class : 12****Subject : BIOLOGY****Term : SECOND TERM****Max Marks : 80****Q 1 :** Antibodies present in the colostrum which protects the new born from certain diseases**Marks : 1**

1. IgG

2. IgA

3. IgD

4. IgE

 (This Answer is Correct)**Q 2 :** Which of the following is not a lymphoid tissue?**Marks : 1**

1. Spleen

2. Tonsils

3. Pancreas

4. Thymus

 (This Answer is Correct)**Q 3 :** Methanogenic bacteria are not found in**Marks : 1**

1. Rumen of cattle

2. Gobar gas plant

3. Bottom of water logged paddy field

4. Activated sludge

 (This Answer is Correct)**Q 4 :** Which of the following is not used as a biopesticide?**Marks : 1**

1. Trichoderma sp

2. Nucleopolyhedrovirus

3. Xanthomonas campestris

4. Bacillus thuringiensis

 (This Answer is Correct)**Q 5 :** The vitamin whose content increases following the conversion of milk to curd by Lactic Acid Bacteria is**Marks : 1**

1. Vitamin C

2. Vitamin D

3. Vitamin B12

4. Vitamin E

 (This Answer is Correct)

Q 6 : In paddy fields, which of the following serves as important biofertilizer? **Marks : 1**

- 1 . Fungi
- 2 . Bacteria
- 3 . Cyanobacteria** (This Answer is Correct)
- 4 . All of the above

Q 7 : Which of the following elements are obtained by Glomus and passes on to the plant? **Marks : 1**

- 1 . Potassium
- 2 . Phosphorus** (This Answer is Correct)
- 3 . Nitrogen
- 4 . Carbon

Q 8 : The primary treatment involves **Marks : 1**

- 1 . Filtration
- 2 . Sedimentation
- 3 . Filtration and sedimentation** (This Answer is Correct)
- 4 . Digestion by microbes

Q 9 : Penicillium acts on **Marks : 1**

- 1 . Escherichia coli
- 2 . Staphylococcus sp** (This Answer is Correct)
- 3 . Rhizobium sp
- 4 . Penicillium notatum

Q 10 : Atropa belladonahas _____properties. **Marks : 1**

- 1 . Hallucinogenic** (This Answer is Correct)
- 2 . Sedative
- 3 . Analgesic
- 4 . Antiallergic

Q 11 : Which of the following is not a way of treatment in cancer? **Marks : 1**

- 1 . Surgery
- 2 . Radiotherapy
- 3 . Chemotherapy
- 4 . Magnetic Resonance Imaging (MRI)** (This Answer is Correct)

Q 12 : For retroviruses, the viral DNA is produced by

Marks : 1

1. Replication
2. Reverse transcription
3. Transcription
4. Transduction

(This Answer is Correct)

Q 13 : Which of the following reduces the symptoms of allergy?

Marks : 1

1. Adrenaline
2. Steroids
3. Anti-histamine
4. All of the above

(This Answer is Correct)

Q 14 : During the life cycle of Plasmodium, sexual reproduction takes place in which of the following hosts?

Marks : 1

1. Human
2. Female Anopheles mosquito
3. Male anopheles mosquito
4. Both male and female Anopheles mosquito

(This Answer is Correct)

Q 15 : When there is a change in allele frequency of a population leading to the formation of new sample of population leading to the formation of new species, it is called

Marks : 1

1. Natural selection
2. Founder effect
3. Bottle-neck effect
4. None of the above

(This Answer is Correct)

Q 16 : The triplet that codes for Alanine is

Marks : 1

1. GGG
2. AAG
3. GAA
4. GCU

(This Answer is Correct)

Q 17 : If the base sequence of a codon in mRNA is 5'-UAC-3', the sequence of tRNA pairing with it must be

Marks : 1

1. 5' - UAC- 3'
2. 5'-CAU-3'
3. 5'- AUG-3'
4. 5'-GUA-3'

(This Answer is Correct)

Q 18 : The mutations that involve addition, deletion or substitution of a single pair in a gene are referred to as **Marks : 1**

1 . Point mutations (This Answer is Correct)

2 . Lethal mutations

3 . Silent mutation

4 . Retrogressive mutation

Q 19 : During transcription, RNA polymerase binds to **Marks : 1**

1 . Promoter (This Answer is Correct)

2 . Regulator

3 . Receptor

4 . Enhancer

Q 20 : In Messelson-Stahl's experiment, the number of hybrid bands that was formed after 20 minutes of transferring from 15 N to 14N medium [1 generation] was **Marks : 1**

1 . Zero

2 . One (This Answer is Correct)

3 . Two

4 . Three

Q 21 : In DNA replication, the discontinuously synthesized fragments were formed from **Marks : 1**

1 . Template strand 5'-3' (This Answer is Correct)

2 . Template strand 3'-5'

3 . Template strands 5' - 3' and template strand 3' - 5'

4 . Not formed at all

Q 22 : If the sequence of bases in DNA is GCTTAGGCAA when the sequence of bases in the transcript will be **Marks : 1**

1 . GCTTAGGCAA

2 . CGAATCCGTT

3 . CGAAUCCGUU (This Answer is Correct)

4 . AACGGAUUCG

Q 23 : There are no tRNA for **Marks : 1**

1 . CGA

2 . UGA (This Answer is Correct)

3 . AUG

4 . AGA

Q 24 : When a single gene may express more than one effect, the phenomenon is called **Marks : 1**

- 1 . Multiple allelism
- 2 . Mosaicism
- 3 . Pleiotropy**
- 4 . Polygeny

(This Answer is Correct)

Q 25 : In the F2 generation of Mendelism dihybrid cross, the number of phenotypes and genotypes are **Marks : 1**

- 1 . Phenotypes-4, Genotypes-16
- 2 . Phenotypes-9, Genotypes-4
- 3 . Phenotypes- 4, Genotypes- 8
- 4 . Phenotypes- 4, Genotypes-9**

(This Answer is Correct)

Q 26 : The inheritance of flower colour in Antirrhinum (dog flower) in the F2 generation shows a phenotypic ratio of **Marks : 1**

- 1 . 3:1
- 2 . 1:2:1**
- 3 . 1:1
- 4 . 2:1

(This Answer is Correct)

Q 27 : Grasshopper is an example of XO type of sex determination in which the males have **Marks : 1**

- 1 . One X chromosome**
- 2 . One Y chromosome
- 3 . Two X chromosomes
- 4 . No X chromosomes

(This Answer is Correct)

Q 28 : 44 + XO genotypes denotes **Marks : 1**

- 1 . Edwards Syndrome
- 2 . Down's Syndrome
- 3 . Turner's Syndrome**
- 4 . Klinefelter's Syndrome

(This Answer is Correct)

Q 29 : The problem of infertility in couples where the male partner has very low sperm count, can be solved by **Marks : 1**

- 1 . IUD

2 . GIFT

3 . IUI

(This Answer is Correct)

4 . ZIFT

Q 30 : Intensely lactating mothers do not generally conceive due to

Marks : 1

1 . Suppression of gametic transport

2 . Suppression of fertilisation

3 . Absence of ovulation

(This Answer is Correct)

4 . Hypersecretion of gonadotropins

Q 31 : Cu7 and Multiload 375 are effective IUDs because

Marks : 1

1 . Decrease spermatogenesis

2 . Suppress sperm motility

(This Answer is Correct)

3 . Suppress oogenesis

4 . Prevents entry of sperms into the vagina

Q 32 : Medical Termination of Pregnancy (MTP) is considered safe during

Marks : 1

1 . Second trimester

2 . 12 weeks of pregnancy

(This Answer is Correct)

3 . 3 weeks of pregnancy

4 . 4 months of pregnancy

Q 33 : Which of the following has 23 chromosomes?

Marks : 1

1 . Oogonia

2 . Primary oocyte

3 . Secondary oocyte

(This Answer is Correct)

4 . All of the above

Q 34 : The secretion of gonadotropins increase during

Marks : 1

1 . Menstruation

2 . Follicular phase

(This Answer is Correct)

3 . Ovulation

4 . Secretory phase

Q 35 : FSH acts on

Marks : 1

(This Answer is Correct)

- 1 . Sertoli cells
 - 2 . Leydig Cells
 - 3 . Sperms
 - 4 . All of the above
-

Q 36 : The 1st polar body is formed at

Marks : 1

- 1 . Fetal life
- 2 . Adult reproductive life
- 3 . Birth
- 4 . Puberty

 (This Answer is Correct)

Q 37 : Pollens lose viability within half an hour of their release in

Marks : 1

- 1 . Rose
- 2 . Gram
- 3 . Potato
- 4 . Wheat

 (This Answer is Correct)

Q 38 : Grasses are commonly

Marks : 1

- 1 . Hydrophilous
- 2 . Anemophilous
- 3 . Entomophilous
- 4 . Ornithophilous

 (This Answer is Correct)

Q 39 : Which of the following is a part that participates in reproduction of earthworm?

Marks : 1

- 1 . Scrotum
- 2 . Clitellum
- 3 . Antheridiophore
- 4 . Oogonium

 (This Answer is Correct)

Q 40 : Smack' is obtained from

Marks : 1

- 1 . Latex of Papaver somniferum
- 2 . Leaves of Cannabis sativa
- 3 . Flowers of Datura stramonium
- 4 . Fruits of Erythroxyllum coca

 (This Answer is Correct)

Q 41 : During the digestion of sludge, the bacteria does not produce

Marks : 1

1. Methane
2. Hydrogen Sulphide
3. Carbon Dioxide
4. Ammonia

(This Answer is Correct)

Q 42 : Butyric Acid is produced from species of

Marks : 1

1. Aspergillus
2. Acetobacter
3. Clostridium
4. Lactobacillus

(This Answer is Correct)

Q 43 : Typhoid fever can be diagnosed by

Marks : 1

1. Widal Test
2. Enzymed - Linked Immuno Sorbent Assay
3. X- rays
4. Biopsy

(This Answer is Correct)

Q 44 : Rheumatoid arthritis is _____ disease.

Marks : 1

1. Genetic
2. Infectious
3. Auto-immune
4. Communicable

(This Answer is Correct)

Q 45 : AIDS occur by

Marks : 1

1. Reduction of T-Helper Cells
2. Reduction of killer T- Cells
3. Auto immune
4. Less production of interferon

(This Answer is Correct)

Q 46 : In a ribose sugar,

Marks : 1

1. OH is present at 2'
2. OH is present at 3'
3. O is present at 2'
4. CH₃ is present at 2'

(This Answer is Correct)

Q 47 : In E.coli, the lac operon gets switched on when

Marks : 1

- 1 . lactose is present and it binds to the repressor
- 2 . repressor binds to the operator
- 3 . Lactose is present and it binds to RNA polymerase
- 4 . RNA polymerase binds to the operator

(This Answer is Correct)

Q 48 : In Hershey and Chase's experiment, they could prove that DNA is the genetic material as

Marks : 1

- 1 . DNA contained Phosphorus but not Sulphur
- 2 . Viruses infect bacteria
- 3 . Protein contain Sulphur nut not Phosphorus

4 . Protein contain Sulphur nut not Phosphorus and DNA contained Phosphorus but not Sulphur

(This Answer is Correct)

Q 49 : RNA polymerase II transcribes

Marks : 1

- 1 . srRNA
- 2 . tRNA
- 3 . hnRNA
- 4 . snRNA

(This Answer is Correct)

Q 50 : The processing of hnRNA to form mRNA undergoes

Marks : 1

- 1 . Splicing
- 2 . Capping
- 3 . Tailing
- 4 . All of the above

(This Answer is Correct)

Q 51 : UTRs are present in

Marks : 1

- 1 . t RNA
- 2 . 5' end of m RNA
- 3 . 3' end of m RNA
- 4 . Both 5'end of m RNA and 3' end of m RNA

(This Answer is Correct)

Q 52 : The number of codons coding for amino acids is

Marks : 1

- 1 . 60
- 2 . 61
- 3 . 62
- 4 . 63

(This Answer is Correct)

Q 53 : Administration of progesterone-estrogen combinations are effective as contraceptives within

Marks : 1

- 1 . 72 hours of ovulation
- 2 . 72 hours of coitus
- 3 . 72 hours of menstruation
- 4 . 72 hours of taking the pill

(This Answer is Correct)

Q 54 : The progesterone level in the body increases

Marks : 1

- 1 . At menstruation
- 2 . At ovulation
- 3 . At proliferative phase
- 4 . At luteal phase

(This Answer is Correct)

Q 55 : Lower end of uterus is called

Marks : 1

- 1 . Urethra
- 2 . Cervix
- 3 . Clitoris
- 4 . Vulva

(This Answer is Correct)

Q 56 : The large holes in swiss cheese is due to the release of CO₂ by

Marks : 1

- 1 . Trichoderma polysporum
- 2 . Propionibacterium sharmanii
- 3 . Acetobacter aceti
- 4 . Saccharomyces cerevisiae

(This Answer is Correct)

Q 57 : The process of release of sperms from the seminiferous tubules is called

Marks : 1

- 1 . Spermatogenesis
- 2 . Spermiogenesis
- 3 . Spermiation
- 4 . Spermatozoation

(This Answer is Correct)

Q 58 : Protection of the anther and its dehiscence is not a function of

Marks : 1

- 1 . Tapetum
- 2 . Epidermis
- 3 . Endothecium
- 4 . Middle layer

(This Answer is Correct)

Q 59 : Penicillium reproduces by

Marks : 1

1. Buds
2. Conidia
3. Chlamyospore
4. Gemmule

(This Answer is Correct)

Q 60 : The vital link that ensures continuity of species of one generation and the next is

Marks : 1

1. Gametes
2. Chromosomes
3. Zygote
4. Embryo

(This Answer is Correct)

Q 61 : The substance that protect other cells from further infection during a viral infection or activates the immune system is

Marks : 1

1. Serotonin
2. Dopamine
3. Interferon
4. Histamine

(This Answer is Correct)

Q 62 : BOD of wastewater is estimated by measuring the amount of

Marks : 1

1. Total organic matter
2. Biodegradeable organic matter
3. Oxygen evolution
4. Oxygen consumption

(This Answer is Correct)

Q 63 : The drink produced without distillation is

Marks : 1

1. Wine
2. Whisky
3. Rum
4. Brandy

(This Answer is Correct)

Q 64 : Injection of antitoxin in tetanus confers which type of immunisation?

Marks : 1

1. Active immunisation
2. Passive immunisation
3. Auto immunisation
4. Humoral immunisation

(This Answer is Correct)

Q 65 : An antibody is represented as

Marks : 1

1. H1L2
2. H4L2
- 3. H2L2**
4. H2L1

(This Answer is Correct)

Q 66 : Vaccine against polio viruses is an example of

Marks : 1

1. Auto immunisation
2. Passive immunisation
- 3. Active immunisation**
4. Simple immunisation

(This Answer is Correct)

Q 67 : Darwin's finches show

Marks : 1

1. Divergent Evolution
- 2. Adaptive Radiation**
3. Convergent Evolution
4. All of the above

(This Answer is Correct)

Q 68 : A phosphate group is linked to 5'-OH of the nucleoside by

Marks : 1

1. Phosphodiester Bond
- 2. Phosphoester bond**
3. Hydrogen Bond
4. Glycosidic Bond

(This Answer is Correct)

Q 69 : If a dsDNA has got 20% Cytosine, the percentage of Adenine is

Marks : 1

1. 20%
2. 40%
- 3. 30%**
4. 60%

(This Answer is Correct)

Q 70 : In transcription, the coding strand has polarity

Marks : 1

- 1. 5'-3'**
2. 3' - 5'
3. Both 5' - 3' and 3' - 5'
4. No polarity

(This Answer is Correct)

Q 71 : Which of the following is not true about satellite DNA?

Marks : 1

- 1 . Code for proteins
- 2 . Form a large portion of human genome
- 3 . Show high degree of polymorphism
- 4 . Form the basis of DNA fingerprinting

(This Answer is Correct)

Q 72 : The disease which is caused by recessive autosomal genes when present in homozygous condition

Marks : 1

- 1 . Alkaptonuria
- 2 . Albinism
- 3 . Cystic fibrosis
- 4 . All of the above

(This Answer is Correct)

Q 73 : Karyotype of 47, XXY is observed in

Marks : 1

- 1 . Down's Syndrome
- 2 . Klinefelter's Syndrome
- 3 . Turner's Syndrome
- 4 . Addisons disease

(This Answer is Correct)

Q 74 : Chromosome number of a child suffering from Down's syndrome can be denoted by

Marks : 1

- 1 . (2n - 1)
- 2 . (2n - 2)
- 3 . (2n + 2)
- 4 . (2n + 1)

(This Answer is Correct)

Q 75 : Vasa efferentia is present between

Marks : 1

- 1 . Vas deferens and epididymis
- 2 . Seminiferous tubule and rete testis
- 3 . Rete testis and epididymis
- 4 . Vas deferens and urethra

(This Answer is Correct)

Q 76 : Which is the correct arrangement of layers?

Marks : 1

- 1 . Ovum < Zona pellucida < Perivitelline space < Corona radiata
- 2 . Corona radiata < Perivitelline space < Zona Pellucida < Ovum
- 3 . Ovum < Perivitelline space < Corona radiata < Zona pellucida
- 4 . Perivitelline Space < Zona pellucida < Corona radiata < Ovum

(This Answer is Correct)

Q 77 : Antrum is present in

Marks : 1

- 1 . Primary follicle
- 2 . Secondary follicle
- 3 . Tertiary follicle**
- 4 . Primary oocyte

(This Answer is Correct)

Q 78 : In a multicarpellary pistil, when the pistils are fused together, it is called

Marks : 1

- 1 . Apocarpous
- 2 . Syncarpous**
- 3 . Synandrous
- 4 . Gynandrous

(This Answer is Correct)

Q 79 : Which of the following plants is marine?

Marks : 1

- 1 . Vallisneria
- 2 . Hydrilla
- 3 . Zostera**
- 4 . Water hyacinth

(This Answer is Correct)

Q 80 : If there are 34 chromosomes in Apple , the number of chromosomes in the pollen and the seed coat respectively is

Marks : 1

- 1 . 17,17
- 2 . 17,34**
- 3 . 34,17
- 4 . 68,17

(This Answer is Correct)
