

Name :
Roll No. :
Invigilator's Signature :

CS/B.PHAM/SEM-1/PTB-101/2009-10
2009
REMEDIAL BIOLOGY

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following :
 $10 \times 1 = 10$
- i) The thin layer of cytoplasm lining of the vacuole is called
 - a) endoplasm
 - b) ectoplasm
 - c) tonoplasm
 - d) primordial utricule.
 - ii) the plastids which are concerned with the storage of food are called
 - a) chromoplasts
 - b) chloroplasts
 - c) amyloplasts
 - d) leucoplasts.
 - iii) Type of inflorescence in sunflower is called
 - a) umble
 - b) capitulum
 - c) spadix
 - d) catcin.

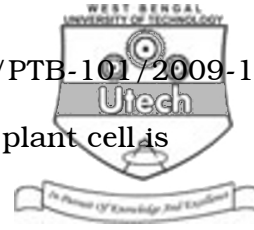
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- iv) Presence of flagella is the characteristic feature of animal under class
- a) Rhizophoda b) Mastigophora
c) Sporozoa d) Ciliophora.
- v) Vector host of Trypanosoma is
- a) mosquito b) fly
c) pig d) sheep.
- vi) is a type of modified underground stem.
- a) Runner b) Sucker
c) Stolon d) Rhizome.
- vii) In which type of vernation, leaf margins touch each other without any overlapping ?
- a) Valvate b) Contorted
c) Imbricate d) Equitant.
- viii) Intermediate host of *Schistosoma* is
- a) Pig b) Human being
c) Fresh water snail d) Bird.
- ix) True fruits originates from
- a) Thalamus b) Calyx
c) Ovary d) Stamen.
- x) *Glossina palpalis* is the alternating host of the parasite
- a) *Entamoeba histolytica* b) *Ancylostoma*
c) *Amoeba* d) *Trypanosoma*.



- xi) The main seat of protein synthesis in plant cell is
- a) Mitochondria
 - b) Ribosome
 - c) Plasma membrane
 - d) Endoplasmic Reticulum.
- xii) In the life cycle of *Plasmodium vivax* the exo-erythrocytic phase occurs in
- a) WBC
 - b) RBC
 - c) Liver cells
 - d) Stomach.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. Write the difference between plant and animal cells. What is the difference between endoplasm and ectoplasm ? $3 + 2$
3. Describe the structure of an organised nucleus. Write down the importance of nucleus in the living organism. $3 + 2$
4. Describe the life cycle of Trypanosoma in human body. Name the disease caused by Trypanosoma in human body. $4 + 1$
5. What do you mean by the artificial, natural and phylogenetic system of classification ?
6. What is leaf ? Mention its function and write the difference between simple leaf and compound leaf. $1 + 2 + 2$

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GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. Give a vivid description of Meiosis cell division. How does the number of chromosomes remain constant in a species though meiosis is a reduction division ? $10 + 5$
8. Write the difference between the following :
- a) Dicotyledonous and monocotyledonous plants.
 - b) Meristematic and permanent tissues.
 - c) Plastids and Mitochondria. $5 + 5 + 5$
9. What is meant by volatinism ? Briefly explain the different kinds of volatinism. What are the physical characteristics of cocoon.
10. What is inflorescence ? What are sessile and pedicillate flowers ? Give one example of each. What is the difference between Racemose and Cymose types of inflorescence ? Describe spadix and capitulum types of inflorescence with suitable diagram. $2 + 4 + 2 + 3 + 4$
11. What are the differences between Anopheles and Culex mosquitoes ? Describe the life cycle of Anopheles mosquito with labelled diagram. Mention the various preventive measures taken against mosquito proliferation. $4 + 8 + 3$

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