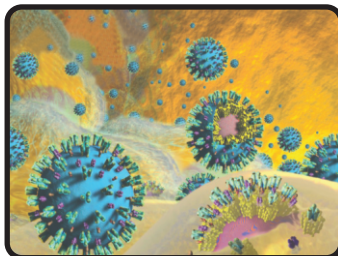


EtG

OLYMPIAD EXPLORER BIOTECHNOLOGY

EduHeal Foundation
Nationwide Biotechnology Olympiad
and other
National/International Biotechnology Olympiads/Talent Search Exams.



Class-7

EtG **BOOKS**

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Contents

S.No.	Chapters	Page No.
1.	Nutrition in Plants	1
2.	Nutrition in Animals	3
3.	Fibre to Fabric	5
4.	Respiration in Organisms	8
5.	Transportation in Animals and Plants	10
6.	Reproduction in Plants	12
7.	Water	15
8.	Forests : Our Lifeline	18
9.	Miscellaneous Questions	21
10.	Revision Questions	29
11.	NBTO Sample Paper	35



(For additional science topics the child can also refer to science work books)

SYLLABUS GUIDELINES

CLASS - VII

Based on CBSE, ICSE & GCSE Syllabus & NCF guidelines devised by NCERT

Food from where

How do plants get their food?

Utilization of food

How do plants and animals utilize their food?

What are enzymes and why most of Biotechnology is about enzymes only.

Materials of daily use

Do some of our clothes come from animal sources?

Which are these animals?

Who rears them?

Which parts of the animals yield the yarn?

How is the yarn extracted?

Different kinds of materials

Why does turmeric stain become red on applying soap?

How things change/react with one another

What gets deposited on a tawa / khurpi / kudal if left in a moist state?

Why does the exposed surface of a cut brinjal become black?

Why is seawater salty?

Is it possible to separate salt from seawater?

Surroundings affect the living

Why are nights cooler?

How does having winters and summers affect soil? Are all soils similar?

Can we make a pot with sand?

Is soil similar when you dig into the ground?

What happens to water when it falls on the cemented/bare ground?

The breath of life

Why do we/animals breathe?

Do plants also breathe?

Do they also respire?

How do plants/animals live in water?

Movement of substances

How does water move in plants?

How is food transported in plants?

Why do animals drink water?

Why do we sweat?

Why and how is there blood in all parts of the body?

Why is blood red? Do all animals have blood?

What is there in urine? *Can Biotechnology be used to prepare artificial blood?*

Class - 7

Multiplication in plants

Why are some plant parts like potato, onion swollen – are they of any use to the plants?

What is the function of flowers?

How are fruits and seeds formed?

How are they dispersed?

Why are there seeds in fruits?

Are they useful for humans?

If not how Biotechnology can help us in getting seedless fruits of grapes or water melon?

Rain, thunder and lightning

What causes storms?

What are the effects of storms?

Why are roofs blown off?

Light - Can we see a source of light through a bent tube?

How can we throw sunlight on a wall?

What things give images that are magnified or diminished in size ?

How can we make a coloured disc appear white?

Scarcity of water

Where and how do you get water for your domestic needs?

Is it enough? Is there enough water for agricultural needs?

What happens to plants when there is not enough water for plants?

Where does a plant go when it dies?

Forest products

What are the products we get from forests?

Do other animals also benefit from forests?

What will happen if forests disappear?

Waste Management

Where does dirty water from your house go?

Have you seen a drain?

Does the water stand in it sometimes?

Does this have any harmful effect?



- Q.1.** Which is a Producer?
(a) Cow (b) Paramecium
(c) Cactus (d) None of these
- Q.2.** Organism that obtains its nourishment in the same manner as plant is
(a) Halophytic Nutrition (b) Saprophytic Nutrition
(c) Holozoic Nutrition (d) None of these
- Q.3.** Utricularia, Drosera, Rafflesia, Pitcher plant and Venus fly trap are
(a) Parasites (b) Herbivores
(c) Insectivorous (d) None of these
- Q.4.** Slimy green patches found in ponds are due to
(a) Plants (b) Fishes
(c) Algae (d) None of these
- Q.5.** The nucleus surrounded by a jelly like substance in a cell is called
(a) Cell Membrane (b) Protoplasm
(c) Cytoplasm (d) Plasma
- Q.6.** Plants take CO₂ from the atmosphere mainly through their
(a) Stem (b) branches
(c) Roots (d) Leaves
- Q.7.** Stomata are surrounded by
(a) Guard cells (b) Carbohydrates
(c) Leaves (d) Chloroplasts
- Q.8.** The green coloured pigment in the leaves is
(a) Anthocyanin (b) Leucoplast
(c) Protoplast (d) Chlorophyll
- Q.9.** Which part of the plant gets CO₂ from the air for photosynthesis?
(a) Stem (b) Stomata
(c) Leaf veins (d) Root hair
- Q.10.** Type of Nutrition in which organisms make their food themselves is called
(a) Parasitic Nutrition (b) Heterotrophic Nutrition
(c) Saprophytic Nutrition (d) Autotrophic Nutrition

- Q.11.** Autotrophic nutrition is the mode of nutrition in
 (a) Non-green Plants (b) Animal
 (c) Human being (d) Blue green algae
- Q.12.** What are the three primary nutrients needed for plant growth?
 (a) Nitrogen, Phosphorus and Potassium
 (b) Sulphur, manganese and zinc
 (c) Calcium, Potassium and sodium
 (d) None of these
- Q.13.** Two different organisms living together & benefitting each other are known as
 (a) Symbiotic (b) Saprophytic
 (c) Parasitic (d) None of these

TRUE OR FALSE

Write T for True and F for False in the given statement

- Q.14.** During photosynthesis, carbohydrates get converted to proteins.
- Q.15.** Parasites feed on dead & decaying organic matter
- Q.16.** Pitcher plant is an insectivorous plant.
- Q.17.** Green coloured pigment in plants is chlorophyll
- Q.18.** Transport of water & minerals in plants occurs through xylem.



A N S W E R S

1. (c) 2. (a) 3. (c) 4. (c) 5. (c) 6. (d) 7. (a) 8. (d)
 9. (b) 10. (d) 11. (d) 12. (a) 13. (a) 14. (F) 15. (F) 16. (T)
 17. (T) 18. (T)



Chapter **2** **NUTRITION IN ANIMALS**

- Q.1.** The grass is rich in
 (a) Cellulose (b) Minerals
 (c) Proteins (d) None of these
- Q.2.** The undigested semisolid food is collected in
 (a) Anus (b) Liver
 (c) Intestine (d) rectum
- Q.3.** The hardest part of a tooth is
 (a) Gums (b) Dentine
 (c) Jaws (d) Enamel
- Q.4.** Which is a gastric disorder?
 (a) Bronchitis (b) Constipation
 (c) Hepatitis (d) None of these
- Q.5.** Widest part of alimentary canal is _____
 (a) Small Intestine (b) Rectum
 (c) Stomach (d) None of these
- Q.6.** _____ is the largest gland in human body.
 (a) Liver (b) Pancreas
 (c) Salivary (d) None of these
- Q.7.** The saliva breaks down to _____ and _____ respectively.
 (a) Starch, Sugar
 (b) Fats, Fatty Acids
 (c) Proteins, Amino Acids
 (d) None of these
- Q.8.** Biting is the function of _____ teeth.
 (a) Canine (b) Molar
 (c) Incisor (d) None of these
- Q.9.** The alimentary canal ends at _____
 (a) Oesophagus (b) Stomach
 (c) Anus (d) Mouth
- Q.10.** Transportation of food by contractions & expansions down the alimentary canal is called
 (a) Peristalsis (b) Sliding
 (c) Locomotion (d) None of these
- Q.11.** Digestive juice is not secreted by
 (a) Stomach (b) Large intestine
 (c) Small intestine (d) None of these

- Q.12.** Correct order of human nutrition
 (a) Ingestion, Assimilation, Digestion, Absorption & Egestion
 (b) Ingestion, Digestion, Assimilation, Absorption & Egestion
 (c) Ingestion, Digestion, absorption, Assimilation & Egestion
 (d) None of these
- Q.13.** _____ have four chambered stomach and digest food in two steps
 (a) Birds (b) Human
 (c) Ruminants (d) None of these

TRUE OR FALSE

Write T for True and F for False in the given statement

- Q.14.** Animals which eat flesh of other animals are omnivores.
Q.15. Gland in the walls of the stomach secretes an enzyme called pepsin.
Q.16. Stomach secretes dilute citric acid.
Q.17. The digestion of food in amoeba is intercellular.
Q.18. ORS is Oral Rehydration Solution.
Q.19. **Match the following**

Column I	Column II
1. Villi	(a) Gastric glands
2. Herbivore	(b) Small intestine
3. pseudopodia	(c) Amoeba
4. Bile Juice	(d) Salivary Glands
5. Stomach	(e) Cow
6. pancreas	(f) Pancreatic Juice
7. Mouth	(g) Liver



ANSWERS

1. (a) 2. (d) 3. (d) 4. (c) 5. (c) 6. (a) 7. (a) 8. (c)
 9. (c) 10. (a) 11. (b) 12. (c) 13. (c) 14. (F) 15. (T) 16. (F)
 17. (F) 18. (T) 19. (1-b, 2-e, 3-c, 4-g, 5-a, 6-f, 7-d)



<i>Chapter</i> 3	FIBRE TO FABRIC
-------------------------	------------------------

- Q.1.** Wool burns with smell of burning hairs
 (a) Because it is a natural fibre.
 (b) Because it is a synthetic fibre.
 (c) As it is obtained from hairs of sheep and goat
 (d) None of these
- Q.2.** Flax is a kind of
 (a) Synthetic Fibre (b) Plant
 (c) Natural Fibre (d) None of these
- Q.3.** Which fibres are not used to make clothes?
 (a) Silk (b) PVC
 (c) Polyester (d) Cotton
- Q.4.** Which among these member countries produce high quality wool?
 (a) International Wool Secretariat
 (b) Indian Wool Status
 (c) International Wool Supply
 (d) None of these
- Q.5.** Which animal gives the softest coat cloth?
 (a) Kashmiri Goat (b) Vicuna
 (c) Llama (d) None of these
- Q.6.** Pashmina shawls are obtained from which animals skin.
 (a) Kashmiri Goat (b) Angora
 (c) Alpaca (d) None of these
- Q.7.** Caterpillars spin their cocoons at which stage?
 (a) Larva Stage (b) Adult Stage
 (c) Pupa Stage (d) None of these
- Q.8.** The fabric made from the used wood, by carding, spinning and weaving is called
 (a) Shoddy (b) Crepe
 (c) Warp (d) None of these
- Q.9.** Silk thread woven by silkworm around its larva is made up of
 (a) Minerals (b) Proteins

- (c) Fats (d) Carbohydrates
- Q.10.** Which disease is not among the most common among the workers of sericulture industry?
 (a) Respiratory (b) Cancer
 (c) Skin (d) None of these
- Q.11.** The wool of Arabian_____ is used to make carpet
 (a) Camels (b) Sheeps
 (c) Goat (d) None of these
- Q.12.** The fibre obtained from Angora goat is
 (a) Vicuna (b) Mohair
 (c) Llama (d) None of these
- Q.13.** Silk is a natural animal fibre obtained from silkworms named
 (a) *Bomby Morix* (b) *Morus Alba*
 (c) *Bombyx mori* (d) None of these
- Q.14.** Removing of silk fibre from cocoons is
 (a) Reeling (b) Weaving
 (c) Knitting (d) None of these
- Q.15.** Which fibre burns with a yellow flame?
 (a) Cotton (b) Woollen
 (c) Rayon (d) None of these
- Q.16.** Eri is a type of
 (a) Silk (b) Cotton
 (c) Wool (d) None of these
- Q.17.** Wool is not graded according to its
 (a) Dying Capacity (b) Colour
 (c) Length & Texture (d) None of these
- Q.18.** _____ is not a cellulose fibre
 (a) Wool (b) Silk
 (c) Cotton (d) Both (b) & (c)
- Q.19.** Which of these is not a plant fibre?
 (a) Cotton (b) Avian Fibre
 (c) Wool (d) Silk

TRUE OR FALSE

Write T for True and F for False in the given statement

- Q.20.** Silk is called the queen of fibre.

- Q.21.** Silkworm feed on mulberry leaves.
- Q.22.** Practice of rearing silkworms to produce silk is called apiculture.
- Q.23.** The thread obtained by reeling process is called Raw Silk.
- Q.24.** Twisting of silk is called throwing.



A N S W E R S

1. (c) 2. (b) 3. (b) 4. (a) 5. (b) 6. (a) 7. (c) 8. (a)
 9. (b) 10. (b) 11. (a) 12. (b) 13. (c) 14. (a) 15. (c) 16. (a)
 17. (b) 18. (d) 19. (a) 20. (T) 21. (T) 22. (F) 23. (T) 24. (T)



Chapter **4** RESPIRATION IN ORGANISMS

- Q.1.** Plants get oxygen from
 (a) Stem (b) Root
 (c) Lenticels (d) None of these
- Q.2.** Which of these can not respire in the absence of oxygen?
 (a) Yeast (b) Frog
 (c) Fish (d) Both (a) & (b)
- Q.3.** Lungs are situated in the
 (a) Buccal Cavity (b) Thoracic cavity
 (c) Abdominal (d) None of these
- Q.4.** The organism which is not gill breather is
 (a) Tadpole (b) Fish
 (c) Amoeba (d) None of these
- Q.5.** Transport of materials in unicellular animals takes place through _____.
 (a) Lungs (b) Cell diffusion
 (c) Gills (d) None of these
- Q.6.** Why do we get cramps in the legs during heavy exercise?
 (a) Due to the accumulation of Lactic Acid
 (b) Due to the accumulation of Carbon dioxide
 (c) Both (a) and (b)
 (d) None of these
- Q.7.** A network of air tubes present in insects for exchange of gases is
 (a) Spiracles (b) Trachea
 (c) Bronchus (d) None of these
- Q.8.** The exchange of gases in human beings takes place in
 (a) Bronchus (b) Alveoli
 (c) Spiracles (d) None of these
- Q.9.** Aerobic respiration takes place in the
 (a) Absence of Oxygen
 (b) Presence of Carbon dioxide
 (c) Presence of Oxygen
 (d) None of these
- Q.10.** The air we breathe contains _____% of nitrogen.

- (a) 20% (b) 21%
 (c) 80% (d) None of these
- Q.11.** _____ and _____ are formed as a result of Anaerobic Respiration.
 (a) CO₂ and water (b) CO₂ and Ethyl alcohol
 (c) CO₂ and O₂ (d) None of these
- Q.12.** Presence of oxygen is not essential in a _____.
 (a) Aerobic Respiration (b) Breathing
 (c) Photosynthesis (d) None of these
- Q.13.** The process of breathing is regulated by a muscular organ called _____.
 (a) Lungs (b) Diaphragm
 (c) Bronchus (d) None of these
- Q.14.** The process of respiration results in the release of _____.
 (a) Energy (b) Oxygen
 (c) Food (d) None of these
- Q.15.** The process of inhalation and exhalation is known as
 (a) Respiration (b) Fermentation
 (c) Breathing (d) None of these

TRUE OR FALSE

Write T for True and F for False in the given statement

- Q.16.** Respiration is an energy releasing process.
- Q.17.** Frogs breathe through lungs and skin.
- Q.18.** In unicellular organisms respiration occurs by diffusion through cell membrane.
- Q.19.** During heavy exercise the breathing rate of a person slows down.
- Q.20.** Respiration is a type of combustion at ordinary temperature
- Q.21.** The size of the chest cavity increases during inhalation.



A N S W E R S

1. (c) 2. (a) 3. (b) 4. (c) 5. (b) 6. (a) 7. (b) 8. (c)
 9. (c) 10. (c) 11. (b) 12. (c) 13. (b) 14. (a) 15. (c) 16. (F)
 17. (T) 18. (T) 19. (F) 20. (T) 21. (T)



**NATIONWIDE BIOTECHNOLOGY
OLYMPIAD (NBTO)
SAMPLE PAPER**

Total duration : 60 Minutes

Total Marks : 50

GENERAL KNOWLEDGE

1. The greatest danger facing most endangered species is
(a) Capture for the pet trade (b) Hunting
(c) Habitat loss (d) Disease
2. Which of the following is not a renewable resource?
(a) Timber (b) Wild mushrooms
(c) Fish (d) Gold
3. Which house hold is considered as hazardous waste?
(a) Batteries (b) Glass
(c) Spoiled food (d) None of these
4. Which of the following is a renewable resource.
(a) Oil (b) Iron ore
(c) Trees (d) Coal
5. Which green house gas speeds up the global warming?
(a) Carbon dioxide (b) Natural gas
(c) Nuclear power (d) Petroleum
6. Most of the oil that we use is imported into our country from other nation. The oil is carried in huge sea going tankers. Sometimes these tankers get damaged and the oil leaks into the oceans and seas. What is such an accidental discharge of oil into water bodies called?
(a) Water pollution (b) Oil spill
(c) Oil leak (d) Tanker leak
7. Which one of these is a greenhouse gas?
(a) Oxygen (b) Carbon dioxide
(c) Helium (d) Sulfur dioxide
8. Which of these is not environmentally friendly
(a) Cold water in washing machine
(b) Warm water in washing machine
(c) Flying to the mountains
(d) None of these
9. Rising water temperatures is a result of global warming and may eventually increase sea levels due to the melting of what?
(a) Mountains (b) Marshes
(c) River beds (d) Glaciers
10. The process of repairing environmental damage to a site is termed
(a) Remediation (b) Repairation
(c) Recycling (d) None of these

LIFE SCIENCE

11. For which organic compounds must information be encoded in DNA for green plants to synthesize the other three compounds?
(a) Sugars (b) Fats (c) Starches (d) Proteins
12. Which factor is often responsible for the other three?
(a) Increase in levels of toxins in both water and air
(b) Increase in human population
(c) Increased poverty and malnutrition
(d) Increased depletion of finite resources
13. Dumping raw sewage into a river will lead to a reduction in dissolved oxygen in the water. This reduction will most likely cause
(a) An increase in all fish populations
(b) A decrease in most of the aquatic animal populations
(c) An increase in depth of the water
(d) None of these
14. Most of the hereditary information that determines the traits of an organism is located in
(a) The nuclei of body cells of an individual
(b) Certain genes in the vacuoles of body cells
(c) The numerous ribosomes in certain cells
(d) None of these
15. A greater stability of the biosphere would most likely result from
(a) Decreased finite resources (b) Increased deforestation
(c) Increased biodiversity (d) None of these
16. The characteristics of a developing fetus are most influenced by
(a) Gene combinations and their expression in the embryo
(b) Hormone production by the father
(c) Milk production in the mother
(d) None of these
17. Bioremediation is the process of cleaning oil spills or other pollutants from soil, water and wastewater using living organisms like bacteria or plants.
Which statement does not represent an example of bioremediation?
(a) Duckweed removes heavy metals from ponds and lakes.
(b) Ladybugs eliminate insect pests from plants.
(c) Ragweed plants remove lead from the ground around factory sites.
(d) None of these.
18. Main function of the is to filter the wastes from the blood and excrete them in the form of urine.
(a) Lungs (b) Urinary bladder

- (c) Kidneys (d) Endocrine glands
19. In an environment that undergoes frequent change, species that reproduce sexually have an advantage over species that reproduce asexually because the sexually reproducing species produce
(a) More offspring in each generation
(b) Identical offspring
(c) Offspring with more variety
(d) None of these
20. Which condition would most likely upset the stability of an ecosystem?
(a) A cycling of elements between organisms and the environment
(b) Green plants incorporating sunlight into organic compounds
(c) A greater mass of animals than plants
(d) None of these
21. One irreversible effect of both deforestation and water pollution on the environment is the
(a) Extinction of species
(b) Thinning of the ozone shield
(c) Depletion of atmospheric carbon dioxide levels
(d) None of these
22. Which statement best describes the result of some of the processes involved in genetic engineering?
(a) They alter the arrangement of hereditary material.
(b) They are necessary for normal gamete formation.
(c) They reduce variation in organisms that reproduce asexually.
(d) None of these
23. A biologist reported success in breeding a tiger with a lion, producing healthy offspring. Other biologists will accept this report as fact only if
(a) Other researchers can replicate the experiment
(b) The offsprings are given a scientific name
(c) The biologist included a control in the experiment
(d) None of these
24. A sudden change in the DNA of a chromosome can usually be passed on to future generations if the change occurs in a
(a) Skin cell (b) Sex cell
(c) Liver cell (d) Brain cell
25. Many vaccinations stimulate the immune system by exposing it to
(a) Antibodies (b) Changed genes
(c) Enzymes (d) Weakened microbes
26. Blood can be tested to determine the presence of the virus associated with the development of AIDS. This blood test is used directly for
(a) Cure (b) Diagnosis (c) Treatment (d) Prevention

27. Which of the following is not an application of biotechnology / bioinformatics?
 (a) Edible vaccine
 (b) Plants to run vehicle
 (c) Extracting information how human genome resemble chimpanzee genome.
 (d) None of these
28. Field of science dealing with the combination of biological, computer and information science necessary to manage, process and understand large amount of data is called
 (a) Computer science (b) Biotechnology
 (c) Bioinformatics (d) Genetic engineering
29. In **column A** some items are given and in **column B** their biotechnological uses are given. Match the Column A with Column B
- | Column A | Column B |
|----------------------|-------------------|
| (i) Corn | A. Bioremediation |
| (ii) Bacteria | B. Fermentation |
| (iii) Jatropha plant | C. Bioplastic |
| (iv) Yeast | D. Biodiesel |
- (a) (i) - A, (ii) - C, (iii) - D, (iv) - B
 (b) (i) - C, (ii) - B, (iii) - D, (iv) - A
 (c) (i) - C, (ii) - A, (iii) - D, (iv) - B
 (d) None of these
30. Coprophagy refers to feeding on
 (a) Insects (b) Dead matter
 (c) Faeces (d) Decomposing matter
31. Which of the following is / are preferred for making edible vaccines?
 (i) Tomato (ii) Potato
 (iii) Banana (iv) Pea
 (a) (i), (ii) and (iii) (b) (i), (ii) and (iv)
 (c) (ii), (iii) and (iv) (d) None of these
32. The transfer of genes from parents to their offspring is known as
 (a) Differentiation (b) Immunity
 (c) Heredity (d) Evolution
33. Which component of a stable ecosystem can not be recycled?
 (a) Oxygen (b) Energy (c) Water (d) Nitrogen
34. Which term is defined as all the chemical reactions that are required to sustain life?
 (a) Metabolism (b) Regulation
 (c) Nutrition (d) Synthesis
35. Which transport structures have specialized regions for filtering out bacteria and dead cells?

- (a) Arteries (b) Veins
 (c) Capillaries (d) Lymph vessels
36. The brightly coloured, highly scented flowers on a rosebush are an adaptation for
 (a) Wind pollination (b) Insect pollination
 (c) The production of spores (d) None of these
37. The green coloured pigment present in leaves is called
 (a) Stomata (b) Chlorophyll
 (c) Iodine (d) None of these
38. What happened during mastication?
 (a) Food is travelled through oesophagus.
 (b) Food is chewed and mixed with saliva.
 (c) Urine is passed (d) None of these
39. About how much time does a silkworm require to spin the cocoon?
 (a) 8 days (b) 20 days
 (c) 1 months (d) None of these
40. These organisms lives in the stomach of ruminant and help them digest hard to digest fibres of plants and animals. 'These' in the above sentence refers to
 (a) Virus (b) Bacteria
 (c) Fungi (d) None of these

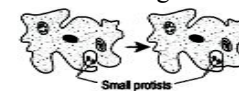
INTERACTIVE QUESTIONS

41. Which two organisms represented below are heterotrophic?



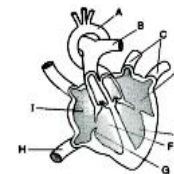
- (a) A and B (b) B and C (c) C and E (d) D and E

42. Which activity is illustrated in the diagram of an amoeba shown below?



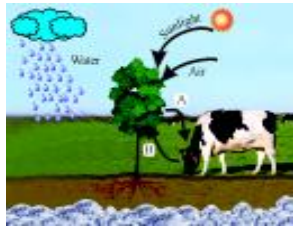
- (a) Egestion (b) Synthesis
 (c) Respiration (d) Ingestion

Base your answers to questions 43 and 44 on the diagram below of the human heart and on your knowledge of biology.



43. Which structures are most closely associated with the transport of deoxygenated blood?
 (a) A, B and C (b) C, D and E
 (c) B, F and I (d) D, H and I
44. A structure that prevents the backflow of blood into an atrium is indicated by letter
 (a) G (b) B (c) C (d) H

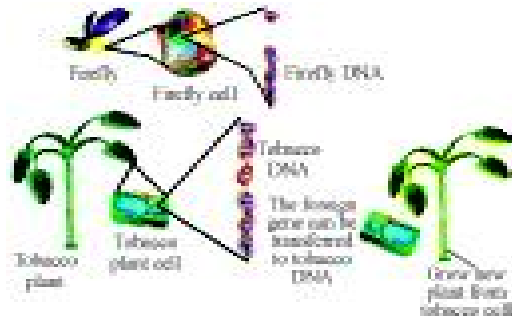
45.



'A' and 'B' in the figure represent

- (a) $A = \text{CO}_2$, $B = \text{O}_2$ (b) $A = \text{O}_2$ and $B = \text{CO}_2$
 (c) $A = \text{CO}_2$, $B = \text{CO}_2$ (d) None of these

46.



The picture given above illustrate the process of

- (a) Grafting (b) Genetic Engineering
 (c) DNA finger printing (d) None of these
47. The type of molecule represented below is found in organisms.

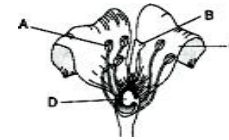


Which statement correctly describes the sequence of bases found in this type of molecule?

- (a) It changes every time it multiplies.

- (b) It determines the characteristics that will be inherited.
 (c) It is exactly the same in all organisms.
 (d) None of these.

48. A diagram of a flower is shown below:



Fertilization occurs in the region

- (a) A (b) B (c) D (d) None of these

49.



The structure shown above is named as

- (a) Cell (b) Nucleus
 (c) Chromosome (d) None of these

50. What a Genetic Engineer can do?

- (i) He can create a clone.
 (ii) He can combine the genes of variety of individual in the same individual
 (iii) He can grow two coloured flowers on a single plant.
 (a) Only (i) and (ii) (b) Only (ii) and (iii)
 (c) All (i), (ii) and (iii) (d) None of these

☺ END OF THE EXAM ☺

ANSWERS

- | | | | | |
|---------|---------|---------|---------|---------|
| 1. (b) | 2. (d) | 3. (a) | 4. (c) | 5. (a) |
| 6. (b) | 7. (b) | 8. (c) | 9. (d) | 10. (a) |
| 11. (d) | 12. (b) | 13. (b) | 14. (a) | 15. (c) |
| 16. (a) | 17. (b) | 18. (c) | 19. (c) | 20. (c) |
| 21. (a) | 22. (a) | 23. (a) | 24. (b) | 25. (d) |
| 26. (b) | 27. (d) | 28. (c) | 29. (c) | 30. (c) |
| 31. (a) | 32. (c) | 33. (b) | 34. (a) | 35. (d) |
| 36. (b) | 37. (b) | 38. (b) | 39. (a) | 40. (b) |
| 41. (c) | 42. (d) | 43. (b) | 44. (a) | 45. (c) |
| 46. (b) | 47. (b) | 48. (c) | 49. (c) | 50. (c) |

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