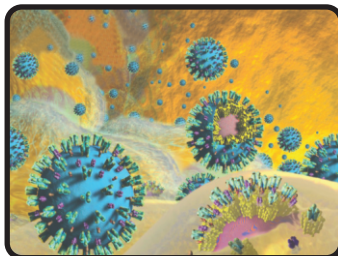


EtG

OLYMPIAD EXPLORER BIOTECHNOLOGY

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



Class-1

EtG **BOOKS**

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New Delhi - 110029, Ph. 011-26197342, 26161014

E-mail : edusys.in@gmail.com

Website : www.edusys.in

Contents

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2.	Air & Water	10
3.	Food	14
4.	Our Body	19
5.	Habitat	23
6.	Weather, Sky & Space	28
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(For additional science topics the child can also refer to science work books)

SYLLABUS GUIDELINES

CLASS - I

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

1. About Plants

What are their types, how do they grow, what they give us. How they are useful to us. What are major parts of plants, seed, flower, leaves.

2. About Animals

World of animals, types of animals, what they eat, where they live, what are their groups called, what are the names of their home, how they grow.

3. Air

What is Air, why it is necessary, fun with air, what can we do with air.

4. Water

Why we need water. What are the work where we use water. Forms of water.

5. Weather

Day and night, Sunny day, Cold day, Rainy day, Summer, Monsoon.

6. Sky & Space

General idea about Sun, Moon, Stars. Indian people at moon and space.

7. Our needs & habits

What we need to keep ourselves healthy : cleanliness, Good food, exercise, walk, clothing etc. What good habits we should follow.

8. Safety First

Precautions to take while on Roads, when playing outdoor games, when in home.



Q.1. Match the following

A. Plants

i.



B. Animals

ii.



C. Humans

iii.



D. Birds

iv.



(a) A-ii, B-iii, C-iv, D-i

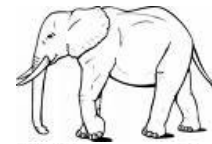
(b) A-i, B-ii, C-iv, D-iii

(c) A-iii, B-ii, C-iv, D-i

(d) A-iv, B-ii, C-ii, D-i

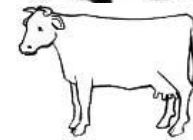
Q.2. Match the animals with the sound they make

A.



i. Bray

B.



ii. Buzz

C.



iii. Trumpet



- D. iv. Moo
 (a) A-ii, B-iv, C-iii, D-i (b) A-iii, B-iv, C-i, D-ii
 (c) A-i, B-iii, C-iv, D-i (d) A-iii, B-ii, C-i, D-iv

Q.3. What sound do the sheep make

- (a) Croak
 (b) Bleats
 (c) Hisses
 (d) Roar



Q.4. Match the following to their names



i. Rose



ii. Marigold



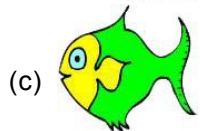
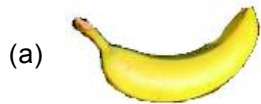
iii. Sunflower



iv. Lily

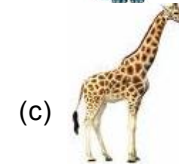
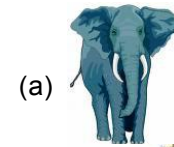
- (a) A-i, B-iv, C-ii, D-iii (b) A-ii, B-iv, C-i, D-iii
 (c) A-iii, B-iv, C-ii, D-i (d) A-iv, B-i, C-ii, D-iii

Q.5. The Bird mostly likes to feed on



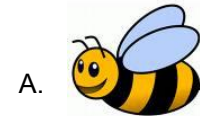
(d) None of these

Q.6. Which of the following animals are vegetarians?



(d) All of these

Q.7. Match the following with their first alphabet.



i. R



ii. H



iii. B



iv. M

- (a) A-iii, B- iv, C-ii, D-i (b) A-ii, B- iii, C-i, D-iv
 (c) A-i, B- iv, C-iii, D-ii (d) None of these

Q.8. How many legs do insects have?

- (a) 8 (b) 7
 (c) 6 (d) None of these

Q.9. give us ?

- (a) Milk (b) Honey
 (c) Juice (d) None of these

- Q.10.** Plants need _____ and _____ to grow
 (a) Sunlight, milk (b) Sunlight, water
 (c) Sunlight (d) None of these



- Q.11.** Where can you find the _____ plants ?
 (a) Desert (b) Mountains
 (c) Rivers (d) None of these
- Q.12.** Sheep are kept in a apiary. True or False?
 (a) True (b) False
 (c) Can't say (d) None of these
- Q.13.** A tree or plant has friends that help it grow.
 (a) Sun (b) Air
 (c) Water (d) Soil

- Q.14.** What else is needed besides soil and wind for a plant to grow?
 (a) Water and salt (b) Water and sugar
 (c) Water and sun (d) Sun and moon

- Q.15.** Which animal can run faster than any other?



(a)



(b)



(c)



(d)

- Q.16.** Guess my name from what I say? Mew.....Mew.....
 (a) Cat (b) Cow
 (c) Lion (d) Goat

- Q.17.** When monkey talk they are said to _____.
 (a) Chatter (b) Blabber
 (c) Bleat (d) Moo

- Q.18.** _____ are our best friends.

(a)



(b)



(c)



(d) None of these

- Q. 19.** Trees give us-

(a)



(b)



(c)



(d) All of these

- Q.20.** Raw material for books, houses and pencils can be obtained from

(a)



(b)



(c)



(d) None of these

- Q.21.** What are whales ?



(a) Animal

(b) Fish

(c) Birds

(d) None of these

- Q.22.** Living things can live because of

(a) Land

(b) Air

(c) Water

(d) All of these

- Q.23.** Are all plants of the same size or some are big and some are small

(a) All plants are big in size

- (b) All plants are small in size
- (c) Plants are of different sizes
- (d) None of these

Q.24. Can you recognize this tree?

- (a) Coconut
- (b) Mango
- (c) Apple
- (d) None of these



Q.25. Is  smaller than 

- (a) Yes
- (b) No
- (c) Can't say
- (d) None of these

Q.26. _____ are very small and have soft stems

- (a) Trees
- (b) Shrubs
- (c) Herbs
- (d) None of these

Q.27. Match the following



i. cotton plant



ii. Rose



iii. Rice



iv. Brinjal

(a) A-iii, B-iv, C-i, D-ii

(b) A-iii, B-ii, C-i, D-iv

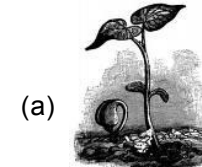
- (c) A-iv, B-ii, C-iii, D-1
- (d) None of these

Q.28. Plants which are weak and cannot stand on their own are called as



(d) None of these

Q.29. Which of the following plant is a climber?



(Bean Plant)



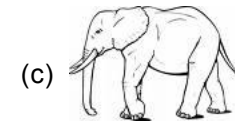
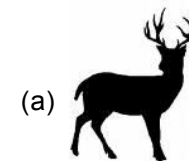
(Pea Plant)



(MoneyPlant)

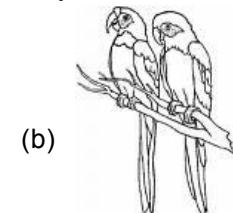
(d) All of these

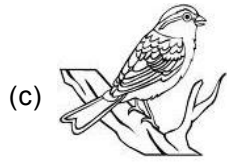
Q.30. Which of the following animals is the largest?



(d) All of these

Q.31. Which of the following cannot fly in the air?

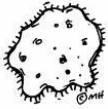


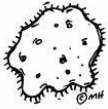


(c)  (d) All of these

Q.32. Insects are very - very small animals

- (a) True (b) False
(c) Can't say (d) None of these



Q.33.  are also called _____

- (a) Microphone (b) Microbes
(c) Macro organisms (d) None of these

Q.34. Those organisms which we cannot see with our naked eyes are called

- (a) Microbes (b) Macro organism
(c) Microphone (d) None of these

Q.35. We can see Germs with the help of a

- (a) Telescope (b) Periscope
(c) Microscope (d) None of these



Q.36. A  is a _____.

- (a) Plants
(b) Bird
(c) Animal
(d) None of these

Q.37. Insects are _____ animals

- (a) Large (b) Small
(c) Invisible (d) None of these

Q.38. Trees are big and _____.

- (a) Tall (b) Small
(c) Fall (d) None of these

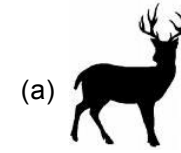
Q.39. Climbers have _____ stems.

- (a) Weak (b) Strong
(c) Hard (d) None of these

Q.40. Living things include:-

- (a) Man (b) Animals
(c) Plants (d) All of these

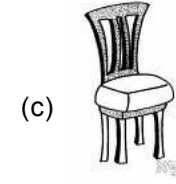
Q.41. Which of the following is a non living thing?



(a)



(b)



(c)

(d) All of these

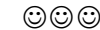
Q.42. Bacteria is also known as _____.

- (a) Plants (b) Animals
(c) Germs (d) None of these

Q.43. The picture given below is of



- (a) Beans (b) Bacteria
(c) Buttons (d) None of these



ANSWERS

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



- Q.1.** We should keep the air around us _____.
 (a) Clean (b) Dirty
 (c) We should not bother (d) None of these
- Q.2.** What happens when the water is boiled?
 (a) All the water becomes sweet
 (b) All the water become salty
 (c) All the germs in the water are killed
 (d) None of these
- Q.3.** Does our body have water in it?
 (a) Yes (b) No
 (c) Can't say (d) None of these
- Q.4.** If you add sugar to water it will become _____.
 (a) Salty (b) Juicy
 (c) Sweet (d) Sour
- Q.5.** Air forms a very important part of our _____.
 (a) Culture (b) Environment
 (c) Habitat (d) None of these
- Q.6.** What do all living things breathe in ?
 (a) Water (b) Smoke
 (c) Air (d) None of these
- Q.7.** Human beings take in _____ and give out _____.
 (a) Oxygen, Nitrogen (b) Oxygen, Smoke
 (c) Oxygen, Water
 (d) Oxygen, Carbon – dioxide
- Q.8.** What saves us from the bad rays of the sun?
 (a) Ozone gas (b) Oxygen gas
 (c) Laughing gas (d) None of these
- Q.9.** What do all living things breathe out?
 (a) Germs (b) Air
 (c) Water (d) None of these
- Q.10.** It is not safe to take bad air as it has less oxygen.
 (a) True (b) False
 (c) Can't say (d) None of these
- Q.11.** What happens when more and more smoke is released out of vehicles?
 (a) Air becomes better (b) Air become bad
 (c) Air becomes clean (d) None of these
- Q.12.** The smoke and other gases from factories make the air _____.
 (a) Healthy (b) Better
 (c) Unhealthy (d) None of these
- Q.13.** The air that we breathe in contains disease causing germs.
 (a) False (b) True
 (c) Can't say (d) None of these
- Q.14.** What are the disease that we can catch from the air that we breathe in
 (a) Cough (b) Cold
 (c) Conjunctivitis (d) All of these
- Q.15.** Plants produce oxygen through the process of _____.
 (a) Dancing (b) Photosynthesis
 (c) Singing (d) None of these
- Q.16.** When plant go through the process of photosynthesis they give out _____.
 (a) Oxygen (b) Nitrogen
 (c) Carbon di oxide (d) None of these
- Q.17.** When we ride a bicycle we help the air remain _____.
 (a) Dirty (b) Clean
 (c) It is of no help (d) None of these
- Q.18.** The pollution from cars and trucks make the air dirty.
 (a) True (b) False
 (c) Can't say (d) None of these
- Q.19.** What kind of sources of pollution are volcano and wild fire?
 (a) Man- Made (b) Natural
 (c) Can't say (d) None of these
- Q.20.** W ___ R is also a very important part of our environment.
 (a) Water (b) Wafer
 (c) Walls (d) None of these
- Q.21.** We cannot live without water
 (a) False (b) True
 (c) Can't say (d) None of these
- Q.22.** Water is used in our every day life for _____.
 (a) Drinking (b) Washing
 (c) Boating (d) All of these

- Q.23.** When water is boiled all the _____ are killed.
 (a) Germs (b) Crams
 (c) Grains (d) None of these
- Q.24.** What is the only way to supply earth with fresh water?
 (a) Photosynthesis (b) Pollution
 (c) Water cycle (d) Food chain
- Q.25.** The heat from the sun is the most important part of renewing our water supply.
 (a) True (b) False
 (c) Can't say (d) None of these
- Q.26.** The four parts of a water cycle are Condensation, Precipitation, Accumulation and Evaporation.
 (a) True (b) False
 (c) Can't say (d) None of these
- Q.27.** When the water moves up through plants it is known as _____.
 (a) Condensation (b) Evaporation
 (c) Transpiration (d) None of these
- Q.28.** When the water rises up in the form of vapour it is known as _____.
 (a) Evaporation (b) condensation
 (c) Precipitation (d) None of these
- Q.29.** When the water vapour gets collected in the form of clouds it is called _____.
 (a) Transpiration (b) Evaporation
 (c) Condensation (d) None of these
- Q.30.** The water falls back to the ground in the form of rain is called _____.
 (a) Precipitation (b) Condensation
 (c) Evaporation (d) None of these
- Q.31.** Clouds and steam are examples of _____.
 (a) Condensation (b) Evaporation
 (c) Can't say (d) None of these
- Q.32.** Rain, snow, sleet and hail are examples of _____.
 (a) Evaporation (b) Precipitation
 (c) Condensation (d) None of these
- Q.33.** Puddles, lakes, rivers and oceans are examples of _____.
 (a) Accumulation (b) Precipitation
 (c) Can't say (d) None of these

- Q.34.** When the sun dries up the puddle and the water turns into water vapour _____ takes place.
 (a) Condensation (b) Evaporation
 (c) Nothing happens (d) Can't say
- Q.35.** What happens when we take water without cleaning it.
 (a) We become healthy (b) We become ill
 (c) We become sad (d) None of these
- Q.36.** Vomiting and stomachache can be caused by
 (a) Germs in water (b) Salt in water
 (c) Can't say (d) None of these
- Q.37.** Water gets polluted due to
 (a) By throwing garbage in water
 (b) By the bad types of germs thriving in water
 (c) By the disposal of factory waste in water
 (d) All of these
- Q.38.** What happens when oil gets mixed in water bodies like, lakes, rivers and oceans?
 (a) The water becomes rich in oil
 (b) It support the flora and fauna in water
 (c) It kills the animals and plants living in water
 (d) None of these
- Q.39.** What is the percentage of fresh water on earth
 (a) 100% (b) 50%
 (c) 10% (d) 0.01%
- Q.40.** Only 0.01% of water on earth is fresh water. The rest is
 (a) Salty (b) Frozen
 (c) Underground (d) All of these



ANSWERS

1. (a) 2. (c) 3. (a) 4. (c) 5. (b) 6. (c) 7. (d) 8. (a)
 9. (b) 10. (a) 11. (b) 12. (c) 13. (b) 14. (d) 15. (b) 16. (a)
 17. (b) 18. (a) 19. (b) 20. (a) 21. (b) 22. (d) 23. (a) 24. (c)
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 33. (a) 34. (b) 35. (b) 36. (a) 37. (d) 38. (c) 39. (d) 40. (d)



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

Total duration : 40 Minutes

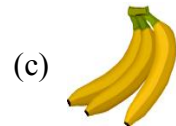
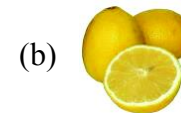
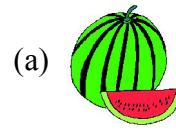
Total Marks : 25

GENERAL KNOWLEDGE

1. Has man polluted the space around Earth?
(a) Yes, with space debris (b) No
(c) Cannot say (d) None of these
2. Rain water is the purest form of water
(a) Yes (b) No
(c) Cannot say (d) None of these
3. We should switch off light when not in room
(a) Yes (b) No
(c) Can't say (d) None of these
4. Seedless grapes are Natural.
(a) Yes (b) No, made by man
(c) Cannot say (d) None of these
5. Bacteria helps to make curd
(a) Yes (b) No
(c) Can't say (d) None of these

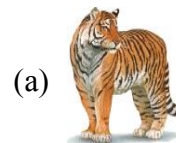
E.V.S.

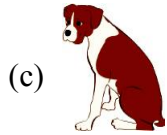
6. Which of these fruit TASTE SOUR?



(d) None of these

7. Animal which EATS ONLY PLANT MATERIAL is





(c) (d) None of these

8. 'They CAN MAKE FOOD with sun's energy'. They are

- (a) All Animals
- (b) All Plants
- (c) All plants and animals
- (d) None of these

9. Rose plant is a

- (a) Herb
- (b) Shrub
- (c) Tree
- (d) None of these

10. The HABITAT OF LOTUS plant is

- (a) Land
- (b) Pond
- (c) Sea
- (d) None of these

11. Which of the following is LIVING?



- (a) (b)
- (c) (d) All of these



12. Find the ODD one based on place they live in ?



- (a) (b)
- (c) (d)



13. What is made using BIOTECHNOLOGY?



(a) (Book)



(b) (House)



(c) (Curd)

(d) None of these

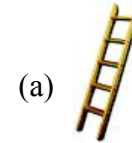
14. _____ of cow is used as FUEL.

- (a) Skin
- (b) Dung
- (c) Milk
- (d) None of these

15. Which water is SAFE FOR DRINKING?

- (a) Sea water
- (b) Pond water
- (c) Boiled water
- (d) None of these

16. Which of the following is DNA



(a)



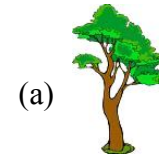
(b)



(c)

(d) None of these

17. Which of the following POLLUTES THE AIR.



(a)



(b)

- (c) Both of these
- (d) None of these




18. What you get from SKIN OF DEAD ANIMALS?

- (a) Foam
- (b) Leather
- (c) Cotton
- (d) None of these

19. Which is TRUE?





- (a) Pollution is good
- (b) Do not kill animals
- (c) Cut trees to make tall buildings
- (d) All the above

20. Who have DNA?


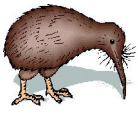


- (a)  (b) 
- (c)  (d) All of these

INTERACTIVE QUESTIONS




21. Which grow above the ground?

- (a)  Potato (b)  Ground nut
- (c)  Apple (d)  Carrot




22. Which of the following is not a bird

- (a)  (b) 
- (c)  (d) 



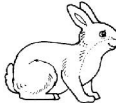

23. Who can give you the strongest natural fibre?

- (a)  Mango (b)  Spider
- (d)  Cow (d) None of these

24. Which of the following is true?

- (a)  is a root (b)  is a fruit
- (c)  are seeds (d) All of these

25. Which is the domestic animal?

- (a)  Lion (b)  Zebra
- (c)  Rabbit (d)  Fox

☺ END OF THE EXAM ☺

ANSWERS

1. (a) 2. (a) 3. (a) 4. (b) 5. (a)
 6. (b) 7. (b) 8. (d) 9. (b) 10. (b)
 11. (d) 12. (c) 13. (c) 14. (b) 15. (c)
 16. (b) 17. (b) 18. (b) 19. (b) 20. (d)
 21. (c) 22. (d) 23. (b) 24. (a) 25. (c)

☺☺☺