#### DELHI PUBLIC SCHOOL, DURGAPUR

# QUESTION BANK AND REVISION FUNSHEET FOR FINAL EXAMINATION (2017-18) CLASS- IX

# **SUBJECT: BIOLOGY**

## **DIVERSITY IN LIVING ORGANISMS**

- 1. Who is the writer of the book "The origin of Species"?
- 2. Give examples of Monera and Protista
- **3.** What is saprophytic nutrition?
- **4.** What is symbiotic relationship?
- **5.** What is the other name of seed leaves?
- **6.** What is the phylum of jellyfish, dogfish, cuttlefish?
- 7. What is meaning of triploblastic?
- **8.** Name a fish with skeleton made up of cartilage.
- **9.** Name the reptile made up of four chambered heart.
- 10. Give examples of fishes which are made up of both bone and cartilage
- **11.** How thallophyta is different from bryophyte.
- 12. Give two examples of hermaphrodites.
- 13. Name the opening through which water leaves the body cavity of sponges.
- **14.** Name the extensions used by Amoeba for locomotion.
- **15.** What is haemocoel?
- **16.** Name one parasitic nematode.
- 17. Give the characteristics of flatworms, algae, round worms. Give their phylum.
- 18. Depict the classification of the plant kingdom using a flow chart.
- 19. Differentiate between vertebrates and invertebrates
- **20.** Give the difference between two types of symmetry that animals show.
- **21.** What is the difference between monocots and dicots.
- 22. What are characteristics of Platyhelminthes, coelenterate, Echinodermata, mammals, amphibians.
- **23.** Why do most amphibians lay their eggs in water?
- **24.** What is the meaning of cold blooded animals?
- **25.** To which phylum does coral belong to ? What is coral made up of?
- **26.** How vertebrata are classified into sub groups?
- **27.** What is the difference between aves and mammals?
- **28.** Name the phylum which has pores
- **29.** What are angiosperms and gymnosperms?
- **30.** Give two examples of pseudo coelomate animals.
- 31. Write a short note on Archae bacteria
- **32.** Give a single term for:
  - a) a group related family
  - b) a group of related classes
- 33. Differentiate between flying lizard and bird.
- **34.** Why bryophytes are called amphibians of plant kingdom?
- **35.** Difference between cryptogams and phanerogams .
- **36.** Why do we keep both snake and turtle in the same class?

- **37.** Name the phylum of the following.
  - a. Jellyfish
  - b. Octopus
  - c. Ascaria
  - d. Spider
- **38.** Which do you think is a more basic characteristic for classifying organisms?
- **39.** Explain all the important characteristics of the given phyla:
  - a. Platyhelminthes
  - b. Coelenterates
  - c. Annelida

# **IMPROVEMENT IN FOOD RESOURCES**

- 1. Do organisms need food? Why?
- 2. Name few common practices used for dairy industry.
- **3.** What does food provide?
- **4.** Name the organism used in the preparation of vermicompost.
- **5.** Name two fertilisers supplying N, P, K to crops.
- **6.** What are the factors on which irrigation requirements depend?
- **7.** What are the various irrigation systems adopted in India?
- **8.** Give any two differences between micro and macro nutrients.
- **9.** What is hybridisation in plants? Mention any two desired characters for which it is done.
- **10.** How does the use of fertilisers improve crop production?
- 11. Though fertilisers increase crop production, they are to be used in limited amount. Why?
- **12.** What are the different types of fisheries?
- 13. What is 'apiculture'? Name a few products obtained from apiculture.
- **14.** What are weeds? Give examples.
- **15.** State the harmful effects of using excessive fertilizers?
- **16.** What are the different ways of hybridisation?
- **17.** What do you understand by organic farming?
- **18.** Define one method of crop production ensuring high yield.
- **19.** What are macro-nutrients?
- 20. Give points of difference between egg producing chicken and broiler producing chicken.
- 22. How do efficiency of nutrients affect the crop?
- **23.** Name two rabi and two kharif crops.
- **24.** Explain different types of fisheries.
- **25.** Give any two differences between manure and fertilizers.
- **26.** What are the different cropping systems?
- **27.** How can weeds be controlled?
- **28.** What are manures? How are they classified?
- **29.** Name any two Indian cattle.

## **NATURAL RESOURCES**

- 1. Name two chemicals that are depleting ozone layer.
- 2. State 3 methods by which free nitrogen can be converted into nitrates.
- **3.** What is denitrification, ammonification and nitrogen fixation?
- **4.** How do fossil fuels cause air pollution?
- **5.** In spite of breathing out carbon dioxide in a large amount and released by combustion, the atmosphere has mere fraction of CO<sub>2</sub> only. Why?
- **6.** What is water pollution? Give its causes and harmful effects?
- 7. State in brief the role of photosynthesis and respiration in carbon cycle in nature.
- **8.** What is the difference between smog and fog? Give two examples effects of smog.
- **9.** Explain carbon cycle.
- **10.** What is humus?
- 11. Name two elemental form of carbon.
- **12.** What is bad ozone and good ozone?
- **13.** What are the diseases caused by air pollution?
- **14.** How can lichen help in indicating the pollutants in air?
- **15.** What is air pollution? How it is caused? Give any two harmful effects.
- **16.** Explain water cycle with diagram.
- 17. How does oxygen occur in nature. Explain oxygen-cycle in nature.
- **18.** Give existence of carbon.
- 19. Explain nitrogen cycle in detail and define all the terms involved in it.
- **20.** Explain biosphere.
- 21. Name four factors which lead to soil formations
- **22.** What make the quality and type of soils?
- **23.** How does atmosphere help in climate control?
- **24.** What is acid rain? Give its harmful effects.
- **25.** What is greenhouse effect? Why it is named so?
- **26.** Explain the physical, chemical and biological factors which lead to the formation of soil.

# THE FUNDAMENTAL UNIT OF LIFE

- **1.** Explain the types of Plastids in brief.
- 2. Explain the functions and structure of Golgi bodies.
- **3.** What is nucleoid?
- **4.** What is the difference between plant cells and animal cells?
- **5.** What are suicidal bags (lysosomes)?
- **6.** What is the function of chromosomes?
- **7.** Name the smallest cell in human body?
- **8.** Which is the largest cell in human body?
- **9.** Why Plant cells are are more rigid than animal cells?
- 10. Explain the process of osmosis in detail.
- 11. Draw and label diagrams of plant cell and animal cell.

- **12.** What is cell theory? Who formulated it?
- 13. Write the full form of DNA and ATP.
- **14.** What is the importance of nucleus?
- **15.** Explain the process of osmosis through an example.
- **16.** Draw and label a Plant cell neatly.
- **17.** Why is Plasma Membrane a selectively permeable membrane?
- **18.** What is the function of chromosome?
- **19.** Name the cleansing organelle in the cell.
- **20.** How does amoeba consume food?
- **21.** Explain the process of osmosis and give an example.
- **22.** What are the functions of plastids?
- 23. Explain the difference between Prokaryotic cell and Eukaryotic cell
- **24.** What are genes? What is the difference between genes and chromosomes?
- **25.** Why are lysosomes called suicidal bags?
- **26.** Write a short note on Plasma Membrane.
- **27.** Why is the inner membrane of Mitochondria folded?
- **28.** Name the smallest and the longest cell in human body.
- 29. Define nucleoid.

# WHY DO WE FALL ILL ?

- 1. What are vectors?
- 2. Name two diseases transmitted by protozoa
- **3.** Give full form of AIDS.
- **4.** Name the organism that causes kala azar.
- **5.** Bacteria is a cell, antibiotics kill bacteria (cell), human body is also made of cells. How does it affect our body?
- **6.** How does cholera becomes epidemic?
- 7. Why we cannot make antiviral medicines?
- **8.** Becoming exposed to or infected with an infectious microbe does not necessarily mean developing noticeable symptoms . Justify .
- **9.** If some one in your family gets infectious disease, what precautions he should take?
- 10. Give common methods of transmission of diseases.
- 11. State any two conditions essential for good health.
- 12. State any two conditions essential for being disease free.
- **13.** Are the answers to the above questions necessarily the same or different? Why?
- **14.** List any three reasons why you would think that you are sick and ought to see a doctor. If only one of these symptoms were present, would you still go to the doctor? Why or why not?
- 15. What are the different means by which infectious diseases are spread?
- **16.** Who precaution can you take in your school to reduce the incidence of infectious diseases?
- **17.** What are the immunisation programmes available at the nearest health centre in your locality? Which of these diseases are the major health problem in your area?
- **18.** What is immunisation?
- **19.** What are pathogens?
- **20.** Name two disease spread by bacteria and by fungi each.
- **21.** Name two air-borne diseases.
- 22. Give difference between chronic and acute disease.

- **23.** Why sick person is advised to take rest?
- **24.** Give function of antibiotic penicillin.
- **25.** What are disease specific means of prevention?
- **26.** What are three limitations for the approach to deal with infectious disease?
- **27.** Write a short note on malaria as a disease, its symptoms and control.

#### **TISSUES**

- 1. Give four differences between bone and cartilage.
- **2.** Give the functions of cartilage.
- **3.** Give difference between xylem and pholem.
- **4.** What is stomata? State its functions.
- **5.** Why does epidermal tissue have no intercellular space?
- **6.** Name and give the function of each component of xylem.
- **7.** Why is blood called connective tissue?
- **8.** State the difference between simple tissues of plants.
- **9.** Explain the structure, function and location of nervous tissue.
- **11.** What is a tissue?
- **12.** What is the utility of tissues in multicellular organisms?
- **14.** Where is apical meristem found?
- **15.** Which tissue makes up the husk of coconut?
- **16.** What are the constituents of phloem?
- 17. Name the tisswe responsible for movement in our body.
- 19. Give three features of cardiac muscles.
- **20.** What are the functions of areolar tissue?
- **21.** Define the term "tissue".
- **23.** How are simple tissues different from complex tissues in plants?
- 24. Differentiate between parenchyma, collenchyma and sclerenchyma on the basis of their cell wall
- 28. Differentiate between striated, unstriated and cardiac muscles on the basis of their structure and location in the body.
- 29. Draw a labelled diagram of neuron.
- **30.** Name the following:
  - (1) Tissue that forms the inner lining of our mouth.
  - (2) Tissue that connect muscle to bone in humans
  - (3) Tissue that transports food in plants.
  - (4) Tissue that stores fat in our body.
  - (5) Connective tissue with a fluid matrix:.
  - (6) Tissue present in the brain.
- **31.** Identify the type of tissue in the following: Skin, bark of tree, bone, lining of kidney tubule, vascular bundle.
- **32.** Name the plant parts where parenchyma tissue is present.
- **33.** What is the role of epidermis in plants?
- **34.** How does the cork act as a protective tissue?
- **35.** What is the function of cartilage and bone?
- **36.** What are the different types of tissues present in plants?

- **37.** State the different types of tissues present in animals .
- **38.** Draw a neat labeled diagram of nervous tissue.
- **39.** What is the function of stomata?
- **41.** What are complex tissues? Explain their types.
- **43.** What are guard cells?
- **44.** Explain various types of blood cells.
- **45.** Write a note on plant tissues?
- **46.** What is the function of connective tissues? Explain its types.
- **47.** Draw a structure of a nerve cell (neuron).
- **48.** What is the region where parenchyma tissue is present?
- **49.** Write structural differences between cardiac muscle and striated muscle
- **50.** Draw a neat diagram of smooth muscle.
- **51.** Where is apical meristematic tissue present?
- **52.** What are the various types of animal tissue?
- **53.** Write the difference between xylem and phloem.
- **54.** Write the difference between a bone and cartilage.

## **SYLLABUS FOR ANNUAL EXAMINATION:**

# IMPROVEMENT IN FOOD RESOURCES NATURAL RESOURCES

THE FUNDAMENTAL UNIT OF LIFE

**DIVERSITY IN LIVING ORGANISMS** 

WHY DO WE FALL ILL?

**TISSUES**