DELHI PUBLIC SCHOOL, DURGAPUR

QUESTION BANK & REVISION SHEET FOR PERIODIC ASSESSMENT II (2018-19)

CLASS-X

SUBJECT: BIOLOGY

TOPIC : PLANT NUTRITION

Q1. (a) List the events that occur during the process of photosynthesis. State in brief the role of stomata in this process.

(b) Describe an experiment to show that sunlight is essential for photosynthesis.

Q2. (a) Draw the cross section of the leaf and label the following parts:

(i) Upper epidermis (ii) Chloroplast (iii) Vascular bundle (iv) Xylem (v) Phloem

(b) Define photosynthesis.

(c) Write the chemical equation involved in photosynthesis.

(d) How is unused energy stored in plants?

(e) What is the site for photosynthesis?

Q3. How do the guard cells regulate opening and closing of stomatal pores? Explain with the help of diagram.

What happens to the rate of photosynthesis if stomata get blocked due to dust?

Q4. (a) Write two functions of stomata.

(b) What are the basic materials used during photosynthesis?

Q5. State two sources from which plants obtain nitrogen for synthesis of proteins and other compounds.

Q6. In the experimental set up , two potted plants are kept under belljar, one of them having a chemical in watch glass in set a and nothing in the other set b ---to establish that one of the atmospheric gases is essential for photosynthesis in plants.

(a) Name the atmospheric gas which is essential for photosynthesis.

(b) What is kept in watch glass in figure 'a' and why?

(c) State the difference between the plants in the pots 'a' and 'b' after a few days.

Q7. Explain an activity with diagram to show that chlorophyll is essential for photosynthesis.

Q8. Name three life processes which are essential for maintaining life and briefly explain the functioning of any one of them.

Q9. Explain an activity with diagram to show that carbon dioxide is essential for photosynthesis.

Q10. Stomata of desert plants remain closed during the daytime. How do they take up carbon dioxide and perform photosynthesis?

Q11. In an experiment to prepare temporary mount of leaf peel, staining of leaf peel is done before putting a drop of glycerine. Explain why?

Q12. In the experiment to prepare temporary mount of leaf peel, which stain is preferred and how is extra stain on the slide removed. What possible outcome would be observed if it is removed with cotton wool?

Q13.Why turgid leaf is selected for the preparation of temporary mount of a leaf peel?

Q14. David observed temporary mount of leaf peel under the high power of microscope. He found two types of nucleated cells. Name the cells observed by him.

Q15. You have been provided with a freshly plucked leaf of *Rhoeo* or Lily. What will you do to obtain a transparent leaf peel?

Q16. In an experiment to prepare temporary mount of a leaf peel to show its stomata Ram was provided with a monocot leaf whereas Shyam, a dicot leaf. Mention the ideal location where you would expect them to obtain the leaf peel for the experiment.

Q17. Mention the shape of guard cells (monocot and dicot) and write their constituents.

Q18. State any two functions of the cells that surround the stomata.

Q19. Explain why leaf is preferred for preparation of temporary mount to show stomata.

Q20. Mention the materials required to prepare a temporary mount of leaf peel to show stomata.

Q21. Name the observed parts of a temporary mount of a leaf peel when it is focused under:

(a) Low power (b) High power

Q22. What type of nutrition is present in Bread mould?

Q23. Explain an activity with diagram to show that chlorophyll is essential for photosynthesi.

Q24. Explain parasitic mode of nutrition with two examples

TOPIC : ANIMAL NUTRITION

Q1. (a) Draw a diagram to show the human alimentary canal and label on it the following:
- (i) Part in which bile is stored
- (ii) Stomach,
- (iii) the largest gland,
- (iv) the gland that secretes digestive enzymes as well as hormones,
- (v) the digested food is absorbed
- (vi) Part in which starch digestion starts
- (vii) Part in which water is absorbed

(b) Name the longest part of the alimentary canal.

Q2. (a) List two differences between 'holozoic nutrition' and 'saprophytic nutrition'. Give two examples each of these two types of nutrition.

(b) State the roles of liver and pancreas.

(c) Name the organ which performs the following functions in humans:
- (i) Absorption of digested food
- (ii) Absorption of water

(d) Explain the statement, "Bile does not contain any enzyme but it is essential for digestion".

Q3. What are villi? Mention their functions.

Q4. (a) What is emulsification of fat? Why is it necessary?

(b) On which type of food does salivary amylase act in buccal cavity and write the name of initial product due to the action of amylase.

(c) Where do carbohydrates, proteins and fats get digested in human beings?

Q5. Name the enzyme present in saliva. Why is it important?

Q6. What are the end products of digestion of carbohydrates, proteins and fat in human beings?

Q7. (a) Draw diagram to show nutrition in *Amoeba* and label the part used for this purpose. Mention a purpose served by this part other than nutrition.

(b) Name the glands associated with digestion of starch in human digestive tract and mention their role.

(c) How is pH maintained in the stomach and small intestine?

Q8. Name any two parasitic plants and two parasitic animals.

Q9. (a) Mention the role of Hydrochloric acid in stomach.

(b) What function is served by (i) Gastric sphincter (ii) Anal sphincter

Q10. (a) Some finger-like projections are present in the inner wall of small intestine. Write their name. Why are they important?

Q11. (a) Explain the process of nutrition in *Amoeba* with the help of diagram.

(b) Explain how does *Paramecium* obtain its food?

(c) Name the form in which the following are stored-
- (i) Unused carbohydrates in plants
- (ii) The energy derived from food in humans.

Q12. (a) Name the part of the alimentary canal where
- (i) food is completely digested
- (ii) secrete juice that has trypsin

(b) Mention the names of any two secretions by the gastric glands and state role played by each in our body

Q13. (a) Explain the process of digestion of proteins in the stomach and small intestine.

(b) How is small intestine designed to absorb digested food?

Q14. Mention the location of four major glands associated with digestive system of humans and explain function of each.

Q15. The pH of the mouth of a person is lower than 5.5. What changes will occur in his mouth? How can these changes be controlled? Write any two reasons.

Q16. Assume you are a veterinary doctor and you had to remove a good length of small intestine of a bear that was suffering from an intestinal tumour. Now, would you suggest a plant based or a meat based diet for the bear after its recovery? Give reason for your suggestion.

Q17. List the role of the following in our digestive system:

(i) Muscles of stomach wall

(ii) Hydrochloric acid

(iii) mucus

Q18. Pancreas acts both as endocrine and exocrine gland. Justify giving reasons.

Q19. Small intestine receives the secretions of which two organs. Which organ secretes trypsin?

Q20. (a) Why does a piece of bread taste sweet when chewed for some time?

(b) Cellulose acts as a roughage in man but serves as a source of nutrient in cow. Justify.

Q21. Explain why digestion of food is essential for all living things? Mention the form in which energy Derived from the food is stored.

Q22. Explain the significance of peristaltic movement that occurs all along the gut during digestion.

Q23. Tooth enamel is the hardest substance in our body. Name the compound of which it is made up of. At what pH of the mouth it gets corroded? State the role of bacteria present in the mouth.Suggest a method to prevent tooth decay.

TOPIC : RESPIRATION

Q1. (a) Draw a neat diagram of human respiratory system. Label

(i) Part through which air is taken in

(ii) Part which protects the lungs

(iii) Part which carries air into the lungs

(iv) Part where air is filtered by fine hair and mucus

(v) Part which terminates in balloon-like structures

(vi) Balloon-like structures where exchange of gases take place

(vii) Part which separated chest cavity from abdominal cavity

(viii) Organ that is surrounded by cartilaginous rings

(ix) Voice-box

(x) Muscular structure that flattens during inhalation

(b) Why do aquatic animals breathe faster than terrestrial animals?

(c) How are lungs designed in human beings to maximize the area of exchange of gases?

Q2. (a) Name the substance that is oxidized in the body during respiration.

(b) Why are lungs divided into very small sac-like structures?

Q3. Name the respiratory pigment in human beings and discuss its role.

Q4. What are alveoli? Mention their role in respiration.

Q5. Where is respiratory pigment present in our body?

Q6. What is the role of residual volume of air in lungs?

Q7. State how is the process of breathing brought about in our body.

Q8. Why are nostrils lined with mucus?

Q9. Differentiate between aerobic and anaerobic respiration.

Q10. Give reason for the following:

(a) Glottis is covered by epiglottis

(b) Lung alveoli are covered with capillaries

(c) The wall of trachea is supported by cartilage rings

Q11. When a sportsman runs, he gets muscle cramps. Why?

Q12. "Breathing cycle is rhythmic but exchange of gases is a continuous process". Justify the statement.

Q13. With the help of a schematic flow chart, show the breakdown of glucose in a cell to provide energy:

(i) In the presence of oxygen (ii) In the absence of oxygen (iii) When there is lack of oxygen

Q14. (a) Why is diffusion insufficient to meet the oxygen requirements of large multicellular organisms like humans?

(b) What type of arrangement exists in the bodies of large animals to meet their oxygen requirement adequately?

Q15. List three characteristics of lungs which make them an efficient respiratory surface.

Q16. Write other names of the following (i) Alveolar sac (ii) Voice-box

Q17. Explain why respiration through mouth is harmful. Mention the special features of nasal respiration that makes it a safer process.

Q18. Explain the structure of bronchi with the help of neat diagram and label on it
(i) Trachea (ii) Bronchiole

Q19. What is the function of trachea? Why do the walls not collapse even when there is less air in it?

TOPIC : HUMAN TRANSPORTATION

Q1. Why is it necessary to separate oxygenated and deoxygenated blood in mammals and birds?

Q2. (a) Draw sectional view of human heart and label (i) Pulmonary artery (ii) Aorta (iii) Septum (iv) Ventricles (v) right auricle (vi) Vena Cava (vii) Pulmonary vein
(b) Arteries have thick walls while veins have valves. Explain.
(c) Why are valves needed in the heart and veins?
(d) Leakage of blood from vessels reduces the efficiency of pumping system. How is the leakage prevented?

Q3. Draw a neat diagram of internal structure of human heart and label the parts which do the following functions:
(i) Chamber where oxygenated blood from lungs is collected
(ii) Largest blood vessel in our body
(iii) Muscular wall separating right and left chambers
(iv) Blood vessel that carries blood from heart to lungs
(v) Receives deoxygenated blood from vena cava
(vi) Sends deoxygenated blood to lungs through pulmonary artery
(vii) Sends oxygenated blood to all parts of the body through aorta
(viii) Structure / part that divides the heart into right and left halves and prevents mixing of oxygenated and deoxygenated blood
(ix) Part that prevents backflow of blood
(x) Chamber that receives deoxygenated blood from various parts of the body
(xi) Chamber from where oxygenated blood is pumped out to various parts of the body

Q4. Write the function of any two chambers of human heart.

Q5. List and describe in brief in tabular form any five functions of blood.

Q6. What does blood consists of?

Q7. Draw a schematic representation of transport and exchange of O_2 and CO_2 in human body.

Q8. How many times the blood goes through the heart during one cycle in fish and why?

Q9. (a) Explain in brief the mechanism of circulation of blood in the human body.
(b) "Lymph is another type of fluid involved in transportation". Justify the statement by explaining the process.

Q10. Explain why ventricles have thick muscular walls than the atria?

Q11. What is lymph? How is composition of lymph different from blood plasma? What is the direction of its flow? List two functions of lymphatic system.

Q12. What do the following transport:
(i) Pulmonary vein (ii) Vena cava

Q13. Write two points of differences between pulmonary artery and pulmonary vein.

Q14. When is blood clotting useful? In a flow chart illustrate the four major events involved in blood clotting.

Q15. What do you mean by double circulation of blood? Why is it necessary?

Q16. List three kinds of blood vessels of human circulatory system and write their functions in a tabular form.

Q17. Explain why is the transportation of materials necessary in animals?
Q18. Mention the three kinds of cells present in blood. Write one function of each.
Q19. State two differences between arteries and veins.

TOPIC : PLANT TRANSPORTATION

Q1. What are the factors needed for maintaining direction of diffusion in plants?
Q2. (a) Draw a schematic representation of movement of water in plants during transpiration and explain it.
(b) Explain transport of food and other substances in plants.
(c) Diffusion will not be sufficient to provide raw materials in leaves and energy in roots of plants. Therefore, a proper system of transportation is essential. Explain.
Q3. (a) List in tabular form two ways in which transpiration is different from translocation?
(b) Why do plants have slow transport system?
Q4. What do the following transport:
(i) Xylem (ii) Phloem
Q5. (a) It was found that the leaves of a plant started getting wilted. Name the tissue which might have been blocked. State its role of this tissue in plants.
(b) Name the physical phenomenon by which exchange of gases occurs between plant body and atmosphere.
Q6. (a) Explain how the exchange of gases occurs in plants across the surface of stem, roots and leaves.
(b) How are water and minerals transported in plants?
Q7. (a) The upward movement of water normally requires a pump in our houses, but in tall trees water rises up without any external support. Explain the mechanism.
(b) State three points of differences between the transport of materials in xylem and phloem tissues.
Q8. (a) Why is transpiration important for plants?
(b) Why plants generally wilt in the afternoon and regain their freshness in the next morning?
Q9. (a) What is translocation? Why is it essential for plants?
(b) Where the substances translocated by phloem delivered?
Q10. Explain why is the transportation of materials necessary in animals?
Q11. Explain giving three reasons the significance of transpiration in plants.
Q12. Explain why there is need for transportation system with special tissues or organs in plants and animals?
Q13. Which mechanism plays an important role in transportation of water in plants
(a) During daytime (b) At night

TOPIC : EXCRETION

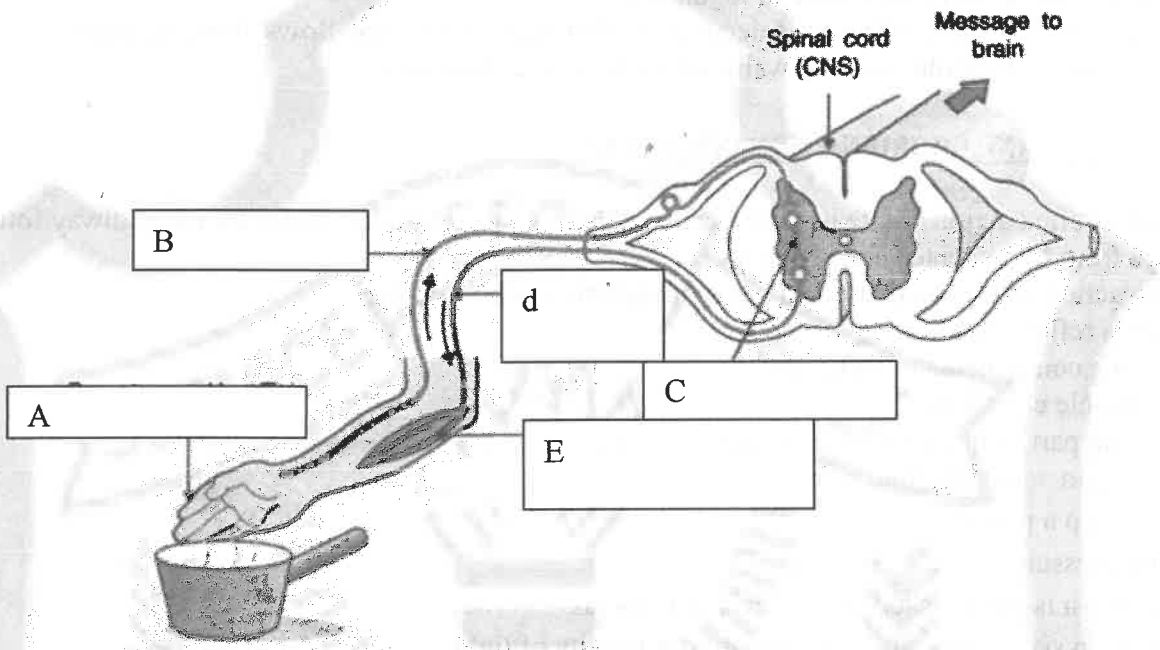
Q1. (a) Draw human excretory system and label
(i) Left kidney (ii)Ureter (iii)Urinary bladder (iv)Vena Cava (v)Part in which urine is produced
(vi) Part which stores the urine (vii) Part which connects (v) and (vi)
(viii) Part from which urine is passed out
(b) What is the main toxic waste kidney filters from blood?
(c) Name any two substances which are selectively reabsorbed from the tubules of a nephron.
Q2. Draw a neat diagram of human excretory system and label the part that
(i) Produces urine
(ii) Releases urine to the outside
Q3. (a) How is urine produced?
(b) Name two excretory products other than O_2 and CO_2 in plants.
Q4. (a) Draw a diagram of an excretory unit of human kidney and label the following:
(i) Bowman's capsule (ii) Glomerulus (iii) collecting duct (iv) Renal artery
(b)Write the important function of structural and functional unit of kidney.
(c) Write any one function of an artificial kidney.
Q5. (a) What happens to glucose, amino acids, salts and water that enter the nephron alongwith filtrate.
Q6. (a) Explain the excretory system in human beings.
(b) List four strategies used by plants for excretion.

Q7. Mention the purpose of making urine.
Q8. (a) List the major steps involved in formation of urine and state in brief their functions.
Q9. State the function of renal artery, kidney, ureter and urinary bladder in human excretory system.
Q10. What is selective reabsorption and how does it takes place?
Q11. Draw a well labeled diagram of nephron.
Q12. List two vital functions of kidney.
Q13. Name the various excretory organs present in plants.
Q14. "About 180 litres of filtrate is produced each day but only 1.5 litres of urine is excreted out". Justify this statement
Q15. Define excretion. How do unicellular organisms remove their wastes?
Q16. Compare alveoli in the lungs and nephrons in the kidneys with respect to their structure and functioning.
Q17. Name one nitrogenous waste present in urine. What is the basic unit of kidney? How is the amount of urine produced regulated?
Q18. Name any two substances that are selectively reabsorbed as the urine flows along the tube.
Q19. Give reason- The capillaries have walls which are one-celled thick.

TOPIC : CONTROL AND COORDINATION IN HUMANS

Q1. (a) What is reflex action? State its significance. Give its two examples. Illustrate the pathway followed by a message from the receptor in a reflex arc.
(b) Name the actions of sympathetic and parasympathetic systems on eye.
Q2. (a) What is reflex arc?
(b) What are the components of reflex arc?
(c) How do muscle cells move?
Q3. Mention the part of brain involved in the following:
(i) Walking in a straight line.
(ii) Picking up a pencil
(iii)Blood pressure
(iv)A question is being asked by the teacher in a class
(v) Change in size of the pupil in response to intensity of light
Q4. (a) State two points of difference between cerebrum and cerebellum.
(b) Explain the mechanism of reflex action.
Q5. Define reflex arc. Draw a flow chart showing the events which occur during sneezing.
Q6. (a) Define nerve impulse.
Name the structure that helps to conduct a nerve impulses (i) Towards cell body
(ii) Away from cell body
(b) Why have organisms adapted to use electrical impulse to transmit messages.
(c) State two limitations about the use of electrical impulses.
Q7. (a) If the cerebellum is not functioning properly, what are the activities of our body affected?
(b) How do muscle cells move?
Q8. Which part of the nervous system controls reflex arcs? With the help of a diagram trace the sequence of events which occur when we touch a hot object. Mention the pat of the neuron that acquires information and the form in which information travels.
Q9. (a) What is the structural and functional unit of nervous system? Name any two components.
(b) Which structure in a neuron helps to conduct a nerve impulse?
(i) towards the cell body
(ii) away from the cell body
Q10. Ram has met with an accident. After that he has lost the capacity to (i) walk in a straight line (ii) smell anything (iii) does not feel full after eating. Which part of the brain is damaged in each case?
Q11. (a) How is brain protected in our body?
(b) Name the part of brain responsible for precision of voluntary actions and maintaining body posture and balance of the body.

Q12. (a) Which part of the brain controls involuntary actions?
(b) Write the function of any two regions of it.
Q13. (a) If the cerebellum is not functioning properly, state the activities of our body that are affected.
(b) How do muscle cells move?
Q14. Why do multicellular organisms need another means of communication between cells besides nervous coordination?
Q15. Draw a diagram of human brain and label cerebrum, cerebellum, medulla and fore brain on it.
Q16. List in tabular form three differences between nervous control and chemical control.
Q17. Draw a diagram of reflex arc and label on it sensory neuron, motor neuron, relay neuron and receptors.
Q18. Mention the role of each of the following: (i) Cerebellum (ii) Fore brain (iii) Medulla
Q19. Draw the structure of a neuron and label the nucleus and cell body. Name the part of neuron (i) Where information is acquired (ii) Through which information travels as an electric impulse.
Q20. In the given diagram of reflex arc (a) Name the parts labelled A, B, C and D. (b) Write the function of b and E.



Q21. (a) How is brain protected from shock and injury?
(b) Name two parts of hind brain and state the function of each.
Q22. (a) Name the part of brain which controls (i) Voluntary actions (ii) Involuntary actions. (b) What is the significance of peripheral nervous system? Name the components of this nervous system and distinguish between the origin of the two.
Q23. (a) How do muscle cells move? (b) Which type of impulses are generally shown by human cells?
Q24. (a) After consuming a lot of alcohol, Manish could not walk properly and was vomiting. His friend Sunil stopped his car and tried to help him by dropping him home (a) which part of the brain gets affected by consuming alcohol? (b) Which part of the nervous system controls the reflex action? (c) Which two values are shown by Sunil by helping him.
Q25. (a) Name the major parts of the brain.
(b) Name the part of brain responsible for maintaining the posture and balance of the body.
Q26. Define nerve impulse.
Q27. With the help of schematic diagram trace the events which occur when you suddenly touch a hot pan. What is the path followed by reflex action known as?
Q28. Write three points of differences between reflex action and walking.
Q29. Mention the part of the brain which (i) enables us to ride a bicycle (ii) changes the size of the pupil of eye (iii) maintains blood pressure of the body (iv) maintains posture and equilibrium of the body (v) regulates respiration (vi) detects the smell of agarbatti

TOPIC : CONTROL AND COORDINATION IN PLANTS

Q1. (a) What is (i) phototropism and (ii) geotropism? With labeled diagrams describe an activity to show that light and gravity change the direction that plant parts grow in.
(b) Mention the role of each of the following plant hormones:
(i) Auxin (ii) Abscisic acid
Q2. Define tropism. Explain four kinds of tropism with one example of each.
Q3. How do plants respond to external stimuli?
Q4. (a) Name one organ where growth hormone is synthesized in plant.
(b) List the sequence of events that occur when a plant is exposed to unidirectional light leading to bending of a growing shoot. Also name the hormone and the type of movement.
Q5. List four plant hormones. Write function of each.
Q6. Define phytohormones. How do plants respond to external stimulus?
Q7. What is phototropism? How does it occur in plants? Describe an activity to demonstrate phototropism.
Q8. What is hydrotropism? Describe an experiment to demonstrate hydrotropism.
Q8. If you keep the potted plant horizontally for 2-3 days, what type of movements would be shown by the shoot and root after 2-3 days. Why?
Q9. Name the hormone synthesized at the shoot tips. How does it help the plant to respond to light?
Q10. (a) Which plant hormone is present in greater concentration in the areas of rapid cell division?
(b) Give one example of a plant growth promoter and plant growth inhibitor.
Q11. Why does the shoot of the plant bend towards light when it is kept inside a card-board box with a small hole?
Q12. (a) What is geotropism?
(b) Describe an experiment to demonstrate positive and negative geotropism.
Q13. List in tabular form three differences in the movement of a touch-me-not plant when touched and movement of a tendril towards a support.
Q14. (a) Name the hormone which is secreted by growing plants when they detect light. Mention its site of secretion in plant. (b) Explain why plants appear to bend towards light?
Q15. Name the property that causes tendril to circle around the object? Explain how it happens and how is plant benefitted by it.
Q16. (a) Complete the following table.

Hormone	Function
Abscisic acid	(i)
(ii)	Cell division in plants
Thyroxin	(iii)
(iv)	Stress hormone

(b) Give an example of chemotropism.
Q17. Which tropic movement is responsible for the growth of pollen tubes towards ovules?
Q18. Illustrate with the help of a diagram the effect of auxin in different parts of a plant.
Q19. How does the plant detect the touch and how do the leaves move in response?
Q20. Write two different types of movements shown by the plants. Explain them by giving one example for each.
Q21. Name and state briefly one function each of any three phytohormones.
Q22. How does the plant shoot bends when the plant is placed in a room having only one open window? Explain briefly.
Q23. Two examples of plant movements are shown

(a) State the stimulus which is common for movement in both the cases.
(b) Mention separately for both, whether the movement takes place away or at the point where stimulus is received.
(c) State one reason for movement in each case.

TOPIC : ENDOCRINE SYSTEM IN HUMANS

Q1. (a) What are hormones?
(b) List four characteristics of hormones.
(c) Name the hormone required for the following:
(i) Functioning of mammary glands
(ii) Regulation of calcium and phosphate
(iii) Lowering of blood glucose
(iv) Development of moustache and beard in human male.
Q2. (a) Name the hormone which is injected to a diabetic patient?
(b) Why should we use iodised salt in our diet?
(c) If iodine is sufficient in one's diet, what might be the deficiency disease and its symptoms.
Q3. Name one organ where growth hormone is synthesized in man
Q4. Name the hormone which is secreted by the adrenal gland. Explain the function of this hormone when we have to deal with scary situation.
Q5. (a) Name the hormone which is released into blood when its sugar level rises. Name the organ which produces the hormone and its effect on blood sugar level. Also mention the digestive enzymes secreted by this organ with one function each.
(b) Explain the need of chemical communication in multicellular organisms.
Q6. Define hormones. Name the hormone secreted by thyroid. Write its functions. Why is the use of iodised salt advised to us?
Q7. Which animal hormone is associated with the following?
(i) Increased sugar level in blood
(ii) Changes at puberty in boys
(iii)Dwarfism
(iv)Goitre
Q8. How does feedback mechanism regulate hormone secretion?
Q9. (a) What is endocrine gland?
(b) Name any two endocrine glands present in a human body and write hormones secreted by them.
Q10. (a) Which hormone is responsible for changes noticed in males at puberty?
(b) Deficiency of which hormone leads to dwarfism?
Q11. How does our body respond when adrenaline is secreted into the blood?
Q12. State the sequence of changes that takes place in a human body when it prepares itself to protect from a scary or dangerous situation.
Q13. (a) Which organ secretes a hormone when blood sugar rises in our body?
(b) Name the hormone and name one enzyme released by this organ.

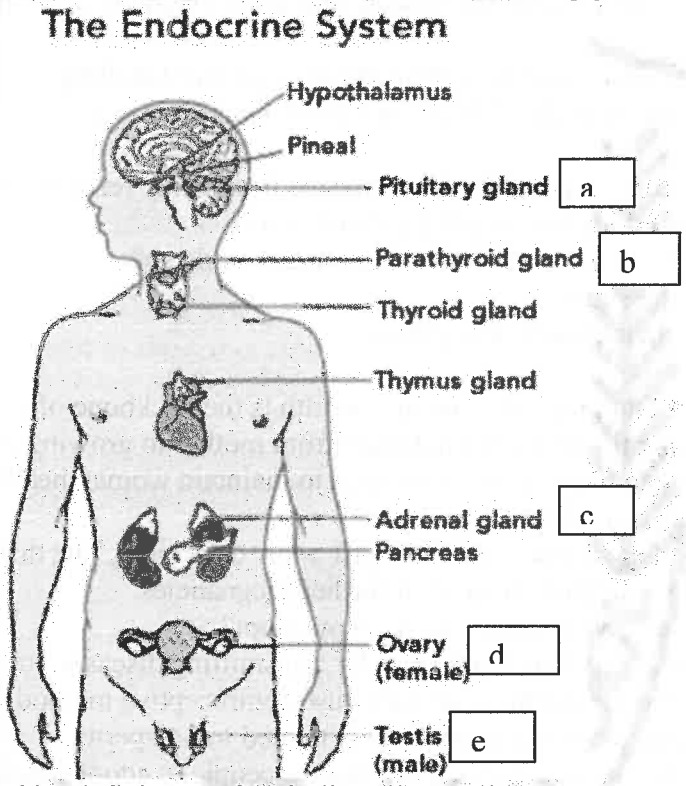
Q14. Name the hormone secreted by thyroid, pancreas and adrenal glands. Write one function of each of these hormones.
Q15. A gland secretes a particular hormone. The deficiency of this hormone in the body causes a particular disease in which the blood sugar level rises.

(i) Name the gland and the hormone secreted by it.

(ii) Mention the role played by this hormone.

(iii)Name the disease caused due to deficiency of this hormone.

Q16. How the timing and amount of hormone released is regulated? Explain with the help of an example.
Q17. Name the system which facilitates communication between central nervous system and other parts of the body. Mention two types of nerves it consists of along with their organs of origin.
Q18. Name the endocrine gland which secretes growth hormone. What will be the effect of the following on the person:
(i) deficiency of growth hormone (ii) excess secretion of growth hormone
Q19. Draw a diagram showing the correct position of pancreas, thyroid gland, pituitary gland, adrenal gland in human being.
Q20. "As the blood sugar level in our body falls, insulin secretion is reduced". Justify the statement in the reference of feedback mechanism that regulates the timing and amount of hormone released.
Q21. Identify and write down their secretion and functions of the following glands.



Q22. Name the diseases caused by deficiency of (i) iodine (ii) Insulin.
Q23. Smita's father has been advised by a doctor to reduce his sugar intake; (i) Name the disease he is suffering from and name the hormone whose deficiency causes it. (ii) Identify the gland that secretes it and mention the function of this hormone. (iii) Explain how the time and amount of secretion of this hormone is regulated in human system.
Q24. (a) Write two points of differences between enzymes and hormones.
(b) Name one endocrine gland in our body which performs dual function . Write its function.

TOPIC:HOW DO ORGANISMS REPRODUCE

Q1. How reproduction helps in stabilizing the population of species?
Q2. Why DNA copying is essential part of the process of reproduction?
Q3. Offsprings and parents of organisms reproducing sexually have the same number of chromosomes. Justify.

Q4. What is placenta?
Q5. Why should we avoid frequent pregnancies?
Q6. Differentiate between:
(i) Pollen tube and style (function)
(ii) ovary wall and egg cell (chromosome no)
(iii) Fragmentation and regeneration (nature of cells)
(iv) Bud of Hydra and Bryophyllum (location)

Q7. Name the following:
(i) the body part where fertilization occurs
(ii)The part of female reproductive system containing a mature egg.
(iii)The period of adolescence when the reproductive tissue begins to mature.
(iv) The accessory fluid in human males that activates the sperms.
(v) The part from where sperms are released out from the body.

Q8. State the different methods of contraception.
Q9. Explain the process of seed and fruit formation in plants.
Q10. A student is observing a permanent slide showing sequentially the different stages of asexual reproduction taking place in yeast. Name the process and draw diagrams of what he observes in a proper sequence.
Q11. (a) Draw the stages of binary fission in Amoeba with proper labellings.
(b) How does Plasmodium reproduce? State its type---sexual/ asexual?

Q12Rohini`s parents received a proposal for her marriage from a boy residing in U.S.A. Before finalizing Rohini`asked her parents asked the boy to get the blood report.
(i) Do you think it was right on the part of Rohini`s parents to do so?
(ii) What moral values did she show?
(iii) Name two STD`s with their causative organisms.

Q13. It is a well-known fact that pregnant woman`s health is the backbone of every family and society.
(i) Which tissue is responsible for providing nutrition from mother to growing embryo?
(ii) According to you, what can likely be the measures to maintain woman health during pregnancy?
(iii) What value do you infer from the passage?
Q14. Mr and Mrs Roy had their second baby born just a few days back, The doctor advised them to make use of available contraceptive methods to control further pregnancies.
(i) Which permanent contraceptive method can Mr Roy adopt?
(ii) Which method can protect Mrs Roy from sexually transmitting diseases and prevent pregnancy?
(iii)(a) State the reason behind the doctor`s advice to use contraceptive methods
(b) How do you think that use of contraceptives is related to prosperity of a family?
(c)What can a student of your age group do to inspire people to adopt small family norms?
Q15. What will happen if Planaria is cut accidentally? Explain it with a diagram
Q16. Draw the L.S. of embryo sac in plants after fertilization.
Q17. List three ways how vegetative propagation takes place.
Q18. What is pollination? State the differences between cross and self pollination.
Q19. Draw a L.S of a flower and mark its whorls. What is their fate after fertilization?

SYLLABUS FOR PERIODIC ASSESSMENT II
UNIT 1- 4--- LIFE PROCESSES
UNIT 5-6---- CONTROL & COORDINATION
UNIT 7-8 --- HOW DO ORGANISMS REPRODUCE