

SCHOOL NAME**CHAPTER TEST****DO NOT OPEN THIS BOOKLET UNTIL ASK TO DO SO**

Total Questions: 50 | Time: 1 hr.

Name Test Code

Roll No Section Contact Number

Guideline for the candidate

1. You will get addition 5 minutes to fill up information about your self on the OMR sheet, before the start exam
2. Write your **Name, Class, Section, Roll Number** and **Mobile Number** clearly on the **OMR sheet** and do not forget to sign it.
3. The Question Paper comprises two sections:

Science Section (45 Questions), and **Achiever section** (5 Questions)

Each Question in Achiever Section Carries 3 marks, where as all other Question carry one mark each

4. All Questions are compulsory. There is no negative marking. Use of calculator is not permitted.
5. There is only one correct answer. Choose only ONE option for answer
6. To mark your choice of answer by darkening the circles on the OMR sheet, use **HB Pencil/ Black ball point pen** only.
7. Return the OMR sheet to the invigilator at the end of the exam.
8. Please fill in your personal details in the space provided on this page before attempting the paper.

Students signature..... Invigilator Signature;

CHAPTER TEST (Foundation)

Topic: Life Processes

Subject: Science (Biology)

Time Allowed: 60 min

TEST CODE:F-SC-10-CT-05

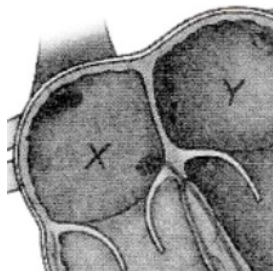
Maximum Marks – 60

- The pancreas pour the secretions into the:
(A) Large intestine (B) Stomach
(C) Stomach (D) Small intestine
- Which component of blood transports, carbon dioxide, and nitrogenous wastes in dissolved form?
(A) RBC (B) Plasma
(C) Platelets (D) WBC
- A black strip of paper was clipped onto a destarched leaf in a potted plant to cover a part of the leaf. The plant was then exposed to sunlight for four hours, the paper strip was removed and the leaf was tested for starch. When iodine solution was added:
(A) The entire leaf turned blue – black.
(B) The uncovered part of the leaf became blue – black.
(C) The colour of the iodine solution remain unchanged.
(D) The covered part of the leaf became blue – black.
- The chemical required in the experiment to show that carbon dioxide gas is released during respiration is
(A) Potassium dichromate
(B) Potassium hydroxide
(C) Potassium bicarbonate
(D) Potassium permanganate
- The digestion of which food component begins in the stomach?
(A) Starch (B) Fats
(C) Proteins (D) Carbohydrates
- Oxygen liberated during photosynthesis comes from
(A) Carbon dioxide
(B) Water
(C) Glucose
(D) Chlorophyll
- In which of the following groups of animals, the heart does not pump oxygenated blood to different parts of the body?
(A) Pisces only
(B) Amphibians only
(C) Pisces and amphibians
(D) Amphibians and reptiles only
- One of the events that does not occur during photosynthesis is:
(A) Chlorophyll absorbs solar energy.
(B) Carbon dioxide is released during the process.
(C) Oxygen is released during the process.
(D) Carbon dioxide is absorbed during the process.
- In which kind of respiration more energy is released?
(A) All of these
(B) Photorespiration
(C) Aerobic respiration
(D) Anaerobic respiration
- Which of the following is most appropriate for aerobic respiration?
(A) Glucose $\xrightarrow{\text{cytoplasm}}$ pyruvate $\xrightarrow{\text{mitochondria}}$ $\text{CO}_2 + \text{H}_2\text{O} + \text{Energy}$
(B) Glucose $\xrightarrow{\text{mitochondria}}$ pyruvate $\xrightarrow{\text{cytoplasm}}$ $\text{CO}_2 + \text{H}_2\text{O} + \text{Energy}$
(C) Glucose $\xrightarrow{\text{cytoplasm}}$ pyruvate + Energy $\xrightarrow{\text{mitochondria}}$ $\text{CO}_2 + \text{H}_2\text{O}$
(D) Glucose $\xrightarrow{\text{cytoplasm}}$ pyruvate + Energy $\xrightarrow{\text{mitochondria}}$ $\text{CO}_2 + \text{H}_2\text{O} + \text{Energy}$
- In which part of the alimentary canal food is finally digested?
(A) Stomach
(B) Mouth cavity
(C) Small intestine
(D) Large intestine

12. A well – stained leaf peel preparation when focused under the high power of the microscope would show
- epidermal cells, stomata, guard cells each with one nucleus and many chloroplasts
 - epidermal cells, stomata, guard cells with many nuclei and one chloroplast each
 - stomata and guard cells without nuclei or chloroplast
 - stomata but no guard cells or epidermal cells


13. Which of the following component of our food is digested by an enzyme which is present in saliva as well as in pancreatic juice?
- Minerals
 - Proteins
 - Carbohydrates
 - Fats

14. Refer to the given figure of heart and select the correct statement.



- Q receives deoxygenated blood from Y.
 - Y receives blood from lungs.
 - The blood from Y reaches lungs.
 - The blood from body enters heart through P.
15. What is correct about human kidney?
- Each kidney has 2 ureters
 - It is cylindrical
 - It has 100 nephrons
 - It is bean shaped
16. The product of fermentation is _____.
- Methanol
 - Formic acid
 - Citric acid
 - Ethanol
17. Name the passage that leads bile from the liver into the gall bladder.
- Colon
 - Cystic duct
 - Caecum
 - Rectum

18. An organism which breaks down the food material outside the body and then absorbs it is
- an animal parasite, Tapeworm
 - a fungi, Rhizopus
 - a bacteria, Rhizobium
 - a plant parasite, Cuscuta
19. The energy – rich compound produced through respiration is
- ADP
 - Pyruvic acid
 - AMP
 - ATP
20. The process by which blood is cleared of metabolic wastes in case of kidney failure is called:
- dialysis
 - filtration
 - transplantation
 - artificial kidney
21. The blood leaving the tissues becomes richer in
- Oxygen
 - Haemoglobin
 - Water
 - Carbon dioxide
22. The opening and closing of the stomatal pore depends upon
- Oxygen
 - Water in guard cells
 - Concentration of CO₂ in stomatal
 - Temperature
23. What is the mode of nutrition seen in Amoeba?
- Parasitic
 - Holozoic
 - Saprotrophic
 - Autotrophic
24. Name a body part where anaerobic respiration takes place.
- Mitochondria
 - Chloroplast
 - Protoplasm
 - Cytoplasm
25. During contraction of heart, what prevents back flow of blood?
- Valves in heart
 - Thin walls of atria
 - Thick muscular walls of ventricles
 - All of the these
26. Which of the following does not respire through the lungs?
- Duck
 - Frog
 - Whale
 - Tadpole

27. Where are proteins first digested in the alimentary canal?
 (A) Oesophagus (B) Small intestine
 (C) Stomach (D) Mouth
28. Anaerobic process
 (A) takes place in yeast during fermentation
 (B) produces ethanol, oxygen, and energy
 (C) takes place in the presence of oxygen
 (D) produces only energy in the muscles of human beings
29. The filtration units of kidneys are called
 (A) Neurons (B) Nephrons
 (C) Urethra (D) Ureter
30. The inner lining of stomach is protected by one of the following from hydrochloric acid. Choose the correct one
 (A) Salivary amylase (B) Pepsin
 (C) Mucus (D) Bile
31. Which of these is not a part of the small intestine?
 (A) Jejunum (B) Rectum
 (C) Duodenum (D) Ileum
32. The given figure is a demonstration of an experiment to show that carbon dioxide is essential for photosynthesis. What is the substance X, kept in watch – glass?
- 
- (A) Sodium bicarbonate
 (B) Sodium carbonate
 (C) Potassium sulphate
 (D) Potassium hydroxide
33. When air is blown from mouth into a test – tube containing lime water, the lime water turned milky due to presence of –
 (A) water vapours
 (B) nitrogen
 (C) oxygen
 (D) carbon dioxide
34. Name the blood vessel which carries deoxygenated blood from the heart to the lungs.
 (A) Capillaries (B) Pulmonary vein
 (C) Pulmonary artery (D) Aorta
35. The xylem in plants are responsible for:
 (A) transport of amino acids
 (B) transport of oxygen
 (C) transport of food
 (D) transport of water
36. Which is the vestigial part of the human alimentary canal?
 (A) Epiglottis
 (B) Pineal gland
 (C) Thymus gland
 (D) Vermiform appendix
37. Which of the following enzyme helps in breaking sucrose into glucose and fructose?
 (A) Invertase (B) Diastase
 (C) Zymase (D) Maltase
38. **Assertion (A):** Interauricular septum separates left from right atrium.
Reason(R): Interventricular septum separates left from right ventricle.
 (A) Both A and R are true and R is the correct explanation of A.
 (B) Both A and R are true but R is not the correct explanation of A.
 (C) A is true but R is false.
 (D) A is false but R is true.
39. **Assertion (A):** The walls of atria are thicker than those of the ventricles.
Reason (R): Ventricles have to pump blood into various organs at high pressure.
 (A) Both A and R are true and R is the correct explanation of A.
 (B) Both A and R are true but R is not the correct explanation of A.
 (C) A is true but R is false.
 (D) A is false but R is true.

40. **Assertion (A):** Plants lack excretory organs.
Reason (R): Plants usually absorb essential nutrients.

(A) Both A and R are true and R is correct explanation of the assertion.
 (B) Both A and R are true and R is not correct explanation of the assertion.
 (C) A is true but R is false.
 (D) A is false but R is true.

41. **Assertion (A):** Blood takes up oxygen from the alveolar air and release CO₂ during exchange.

Reason (R): The concentration of O₂ is more in alveolar air.

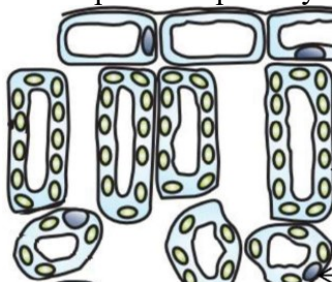
(A) Both A and R are true and R is the correct explanation of A.
 (B) Both A and R are true but R is not the correct explanation of A.
 (C) A is true but R is false.
 (D) A is false but R is true.

42. **Assertion (A):** Lymph, also known as tissue fluid is colourless.

Reason (R): It lacks erythrocytes.

(A) Both A and R are true and R is the correct explanation of A.
 (B) Both A and R are true but R is not the correct explanation of A.
 (C) A is true but R is false.
 (D) A is false but R is true.

43. In the following diagram, identify the cells through which massive amounts of gaseous exchange takes place for photosynthesis:



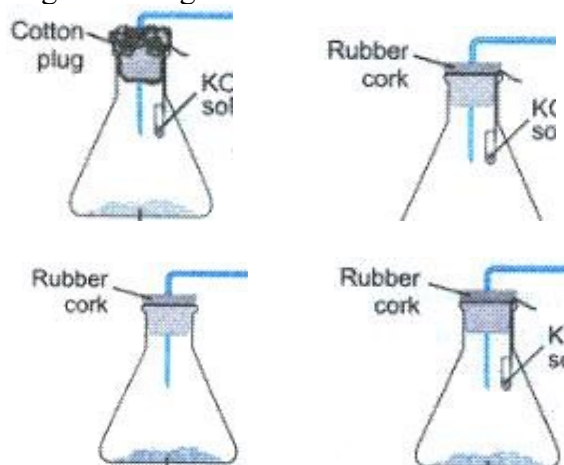
(A) I
 (B) III
 (C) IV
 (D) II

44. In the diagram of the stomatal pore given below, the marking corresponding to the chloroplast is :



(A) B
 (B) C
 (C) D
 (D) A

45. Out of the four experimental set – up shown below, which one will demonstrate the evolution of carbon dioxide during respiration of germinating seeds ?



(A) III
 (B) II
 (C) IV
 (D) I

ACHIEVERS SECTION

46. Which of the following statements are correct regarding transpiration?

(i) The rate of transpiration is directly proportional to the relative humidity.
 (ii) It regulates plant temperature.
 (iii) Very low temperature, closes stomata and hence decreases rate of transpiration.
 (iv) It causes ascent of sap.
 (A) (i), (ii) and (iv) only
 (B) (i), (ii) and (iii) only
 (C) (i) and (iv) only
 (D) (ii), (iii) and (iv) only

47. Which is the correct sequence of parts in the human alimentary canal?

- (A) Mouth → stomach → small intestine → oesophagus → large intestine
- (B) Mouth → oesophagus → small intestine → large intestine
- (C) Mouth → oesophagus → stomach → large intestine → small intestine
- (D) Mouth → oesophagus → stomach → small intestine → large intestine

48. Which is the correct sequence of air passage during inhalation?

- (A) Nasal passage → trachea → pharynx → larynx → alveoli
- (B) Nostrils → larynx → pharynx → trachea → lungs
- (C) Nostrils → pharynx → larynx → trachea → alveoli
- (D) Larynx → nostrils → pharynx → lungs

49. Match the following with correct response

Column I	Column II
(i) Insects	(a) Gills
(ii) Earthworm	(b) Trachea
(iii) Fishes	(c) Lungs
(iv) Mammals	(d) Skin
(A) (i) – (a), (ii) – (c), (iii) – (b), (iv) – (d)	
(B) (i) – (d), (ii) – (a), (iii) – (c), (iv) – (b)	
(C) (i) – (c), (ii) – (b), (iii) – (d), (iv) – (a)	
(D) (i) – (b), (ii) – (d), (iii) – (a), (iv) – (c)	

50. Match the following with correct response.

Column I	Column II
(i) The red colour of human blood	(a) Chlorophyll
(ii) The pigment which absorbs solar energy	(b) Heart
(iii) The largest gland of the human body	(c) Liver
(iv) Pumping organ of the body	(d) Haemoglobin

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