

Model Question of SSC Examination 2020 for All Board

Biology

Subject Code

1	3	8
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Time — 2 hours 35 minutes

Creative Essay Type

Full marks — 50

[N.B. -The figures in the right margin indicate full marks. Read the stems attentively and answer any five of the following questions.]

1. ►



Fig-A



Fig-B

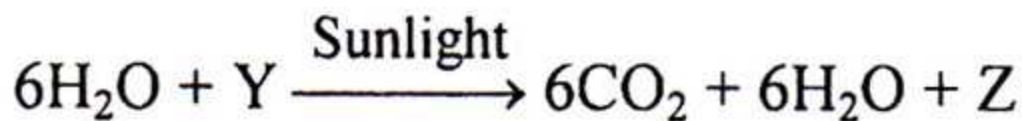
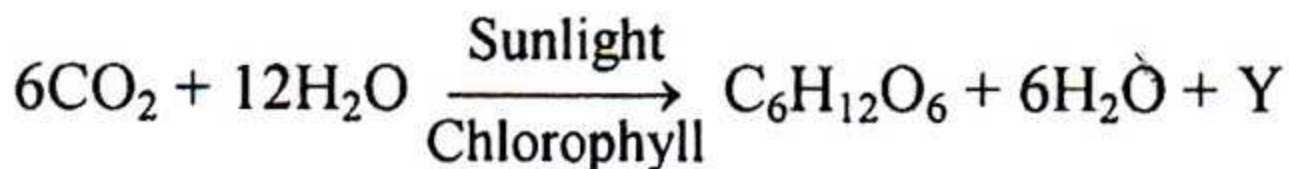
- What is stamen? 1
- What is endosperm? Explain. 2
- How does Fig-A turn into Fig-B? Explain. 3
- Analyze the role of different animals for the above change. 4

2. ► Teacher informed in class ten that in 22 January 2014. The government of Bangladesh introduced the Bt brinjal for cultivation. Bt brinjal is an insect resistant variety.

- What is tissue culture? 1
- What is meant by GMO? 2

- c. Explain the procedure of production of above crop. 3
- d. "Crop given in stem is harmful for insects, not for human beings" -Analyze with logics. 4

3. ►

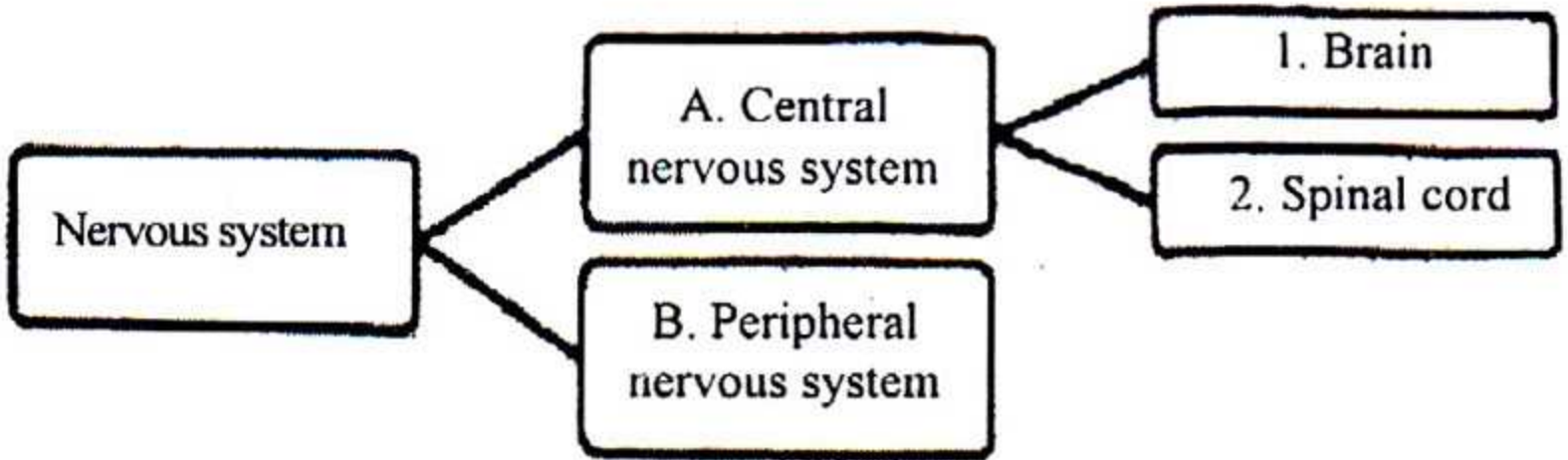


- a. What is CAM? 1
- b. Describe photolysis. 2
- c. How does second reaction will be changed in absence of Y? 3
- d. Both Y and Z are most essential for our survival -Analyze with logics. 4

4. ★ Kamal does not able to differentiate the green and red colour. Jamal is suffering from hemoglobin related genetic disease. This disease has different types.

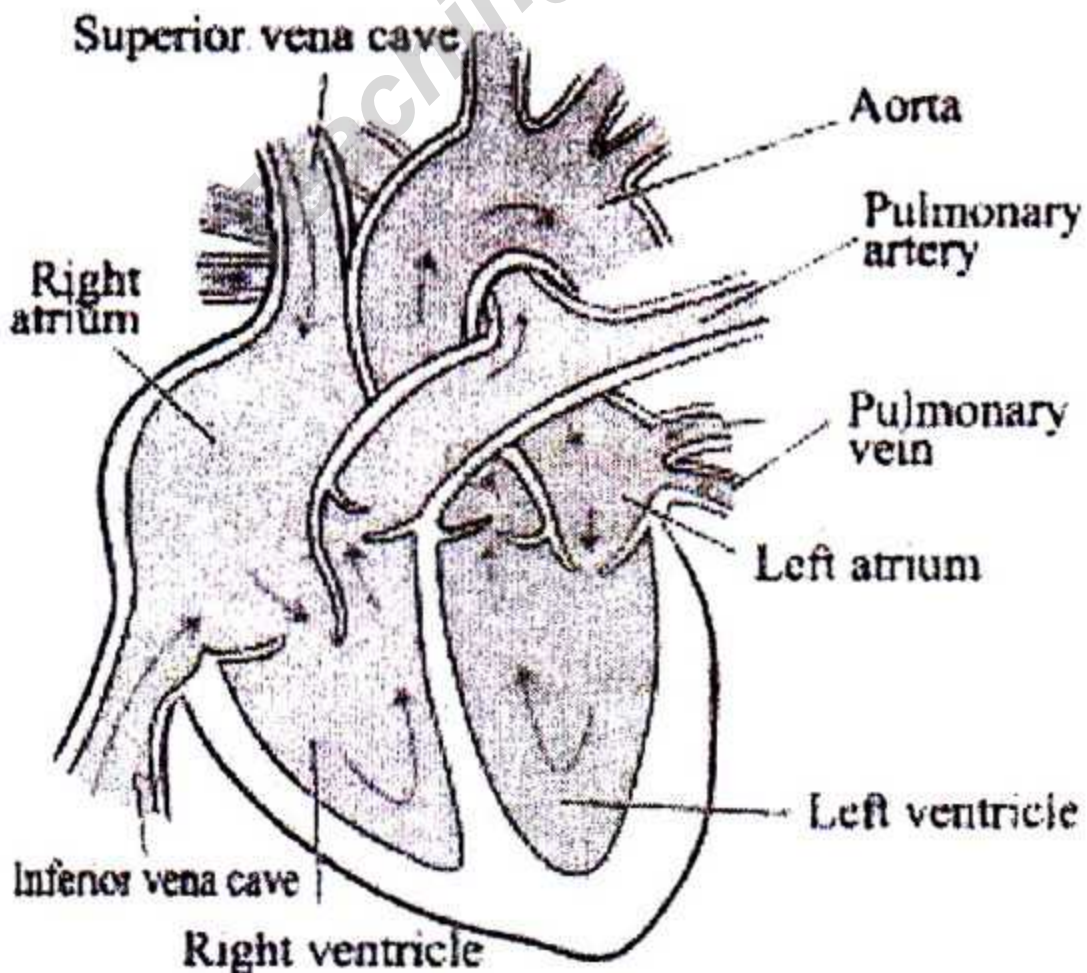
- a. What is gene? 1
- b. Describe about DNA test. 2
- c. Why do females are less suffering from the Kamal's disease? Discuss the reason. 3
- d. Analyze the types of Jamal's disease and comment which type is more fatal for human beings. 4

5. ►



- a. What is epilepsy? 1
- b. What are symptoms of diabetes? 2
- c. Draw the label diagram of part 1 of above stem? 3
- d. Describe the structure function of part 1 of above stem? 4

6. ►



- a. What is antibiosis? 1
- b. What are the symptoms of brain hemorrhage? 2
- c. Draw the label diagram of L.S of above figure. 3
- d. How does blood circulate through above figure? 4

7. ► Mamun is a poultry farmer. He was suffering from cough and fever and went to doctor. After diagnosis his blood doctor told him that he has affected with tubercle bacillus.

- a. What is BMI? 1
- b. What do you mean by appendicitis? 2
- c. Write down the symptom of Mamun Disease. 3
- d. How will he recover from this disease? 4

8. ★ Mr. Mizan is a diabetic patient. One day he feels severe pain in his lower abdomen. He is sent to hospital. Doctor diagnoses his body and give report that Mizan's both kidney are failed. As soon as possible his blood should be purified otherwise he will be die.

- a. What is reflex action? 1
- b. What do you mean by food web? 2
- c. What are the causes associated with Mizan's organ failure? 3
- d. Which process is suitable for purification of Mizan's blood. 4

[NB. Answer all the questions. Each question carries one mark. Block fully, with a ball point pen, the circle of the letter that stands for the correct/best answer in the "Answer Sheet" for the Multiple Choice Questions Examination.]

1. Which one found in root?

- (a) centrosome
- (b) leucoplast
- (c) chloroplast
- (d) chromoplast

2. ★ Which symptom occurs due to absence of Potassium?

- (a) fruits may be fallen
- (b) leaves turn yellow
- (c) lateral bud become dead
- (d) leaves turn purple

Answer 3 and 4 from the given stem—



3. The parts include in above figure —

- i. cisternac
- ii. matrix
- iii. chromonema

Which one is correct?

- (a) i & ii
- (b) i & iii
- (c) ii & iii
- (d) i, ii & iii

4. Which one is applicable for above figure?

- (a) It is found in resting period of cell
- (b) It occurs in the time of cell division
- (c) It number is not fixed in a specific species
- (d) It is chemical basis of heredity

5. In Prometaphase —

- i. chromatin fibers start condensing
- ii. Chromosomes start assembling is equator
- iii. nucleolus begin to disappear

Which one is correct?

- (a) i & ii
- (b) i & iii
- (c) ii & iii

(d) i, ii & iii

6. ★ Which one is responsible for prevents the premature shed of fruits?

- (a) auxin
- (b) abscisic acid
- (c) cytokinin
- (d) gibberellins

7. First stable compound of C_3 plants is—

- (a) Oxaloacetic acid
- (b) 3-phosphoglyceraldehyde
- (c) 3-phosphoglyce acid
- (d) pyruvic acid

8. Which one is short day plant?

- (a) Lettuce
- (b) Jhinga
- (c) Sunflower
- (d) Dahlia

9. Which one is Zoophilic flower?

- (a) Pea
- (b) Hibiscus
- (c) Paddy
- (d) Kadam

10. Which GM plants are both herbicide and insect tolerant?

- (a) rice and tomato
- (b) cotton and tobacco
- (c) corn and cotton
- (d) soybean and canola

Answer 11 and 12 from the given stem.

Abir purchased some leafy vegetable in a poly bag. He found some water droplets inside the bag in home.

11. The physiological process of stem occur in —

- i. young stem
- ii. sepals of flower
- iii. petals of flower

Which one is correct?

- (a) i & ii
- (b) i & iii
- (c) ii & iii
- (d) i, ii & iii

12. Which one applicable for the process of stem —
- 80% of the process occurs through the stomata
 - Wind velocity increase the rate of the process
 - Low temperature accelerated the process
 - Presence of light decrease the process
13. ★ Darwin as a natural expert of a ship named H.M.S Beagle traveled —
- Tahiti
 - New Zealand
 - Fiji
- Which one is correct?
- i & ii
 - i & iii
 - ii & iii
 - i, ii & iii
14. How many books of 'The Origin of Species by Means of Natural Selection' were sold on its first day of publication?
- 1100
 - 1150
 - 1200
 - 1250
15. Dopamine is produced from —
- Neurone
 - Alveolus
 - Tendon
 - HIV virus
16. Growth of sex organ is caused by —
- Thyroid gland
 - Thymus
 - Adrenal gland
 - Islets of Langerhans
17. To menopause stage which symptom is seen in female?
- bones become brittle
 - joint swelling loss of appetite
 - bones
 - enhance bones
18. ★ Where is the location of hypophysis?
- Brain
 - Kidney
 - Pancreas
 - Gonad
19. Calcium deficiency disease is a —
- Osteoporosis
 - Arthritis
 - Rheumatic fever
- Which one is correct?
- i
 - ii
 - i, ii & iii
 - iii
20. ★ Intestinal peristalsis is occurred by —
- Skeletal muscle
 - Smooth muscle
 - Cardiac muscle
- Which one is correct?
- i
 - ii
 - ii & iii
 - i & iii
21. *Periplaneta americana* is a scientific name of —
- Tiger
 - Hilsha
 - Honey bee
 - Cockroach
22. Which one protects the bone from rubbing?
- Flagellated epithelial tissue
 - Simple epithelial tissue
 - Stratified epithelial tissue
 - Cartilage
23. Which one found in collecting tubules of the kidney?
- Squamous epithelial tissue
 - Cuboidal epithelial tissue
 - Columnar epithelial tissue
 - Pseudo stratified epithelial tissue
24. ★ Pseudo stratified epithelial tissue is found in —
- Intergument
 - kidney tubules
 - Trachea
 - intestine
25. Mast cell is found in —
- Connective tissue
 - Reproductive tissue
 - Nerve tissue
 - Muscular tissue

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