

GREENLAWNS HIGH SCHOOL
SEMESTER II EXAMINATION
BIOLOGY
VIII – 23/02/24

Maximum Marks: 80

Time allowed: Two hours

Answers to this Paper must be written on the paper provided separately.

The time given at the head of this Paper is the time allowed for writing the answers.

Section A is compulsory. Attempt any four questions from Section B.

The intended marks for questions or parts of questions are given in brackets [].

SECTION A
(Attempt all questions)

Question 1

Choose the correct answers to the questions from the given options.

(Do not copy the question, Write the correct answer only.)

[15]

- (i) The yeasts undergo fermentation in the presence of sugar solution to produce
- | | |
|---------------------------------------|--|
| (a) ethyl alcohol and CO ₂ | (b) methyl alcohol and CO ₂ |
| (c) ethyl alcohol and O ₂ | (d) methyl alcohol and O ₂ |
- (ii) The place where bees are kept is called as
- | | |
|---------------|--------------|
| (a) bee-house | (b) bee-mold |
| (c) apiary | (d) apillary |
- (iii) Chemical coordination is brought about through
- | | |
|-------------|--------------|
| (a) enzymes | (b) hormones |
| (c) neurons | (d) glands |
- (iv) Cerebellum gets negatively affected by
- | | | | |
|--------------|--------------|-------------|-------------|
| (a) caffeine | (b) nicotine | (c) glucose | (d) alcohol |
|--------------|--------------|-------------|-------------|

- (v) Removes bacteria from the tissues
- (a) platelets (b) lymph nodes
(c) lymphocytes (d) antigens
- (vi) Circulatory system in which blood flows from the heart to the tissues without vessels.
- (a) open system (b) close system
(c) double system (d) single system
- (vii) Over secretion of thyroid hormone causes.
- (a) decreased heart beat (b) weight loss
(c) weight gain (d) calmness
- (viii) Wind pollinated plants produce
- (a) dry and light pollens (b) sticky and light pollens
(c) dry and bulky pollens (d) sticky and bulky pollens
- (ix) Flowers bearing both male and female parts are called
- (a) unisexual (b) monosexual
(c) disexual (d) bisexual
- (x) Process that helps to maintain concentration of the sap inside the plant body
- (a) translocation (b) transportation
(c) transpiration (d) transformation
- (xi) The rings seen in the transverse section of tree trunk are
- (a) phloem rings (b) companion ring
(c) sieve rings (d) xylem rings

- (xii) Flushing of tears to wash your eyes is _____ action.
- (a) natural reflex (b) acquired reflex action
(c) consciously performed (d) coordinated reflex action
- (xiii) In cheese making curd is kept at suitable temperature and humidity during
- (a) curdling (b) processing
(c) ripening (d) salting
- (xiv) Inner part of spinal cord is made up of
- (a) grey matter (b) white matter
(c) axons (d) dendrites
- (xv) As girl attend a puberty her voice becomes.
- (a) melodious (b) low pitched
(c) high pitched (d) hoarse

Question 2

- (i) Complete the following statements. [5]
- (a) _____ nerves emerge from the brain.
(b) _____ are the blood vessels responsible for exchange of nutrients and waste.
(c) _____ part of adrenal gland secretes adrenaline.
(d) Calyx is made up of tiny green leaf-like structure called _____.
(e) Soil water moves into the root hair cell by _____ process.
- (ii) Name the following. [5]
- (a) Male bees present in hive.
(b) Process of recovering silk thread from dead cocoons.
(c) The site of consciousness and will power in the brain.

- (d) Largest artery in human body.
- (e) Sheath that prevents mixing of impulses in the adjacent fibres.

(iii) Match the following [5]

- | | |
|---------------------|-----------------------------|
| (a) metabolites | 1. neurons |
| (b) node of Ranvier | 2. male hormone |
| (c) bread mould | 3. carried by blood vessels |
| (d) oestrogens | 4. drained by lymph |
| (e) androgens | 5. Rhizopus |
| | 6. female hormone |

(iv) Complete the correlation between the given pairs [5]

- (a) Effect of nitrogen deficiency on leaves : Yellowing of leaves , Effect of phosphorus deficiency on leaves : _____
- (b) Maize : wind pollinated , Salvia : _____
- (c) convert glycogen to glucose : _____ , convert glucose to glycogen : insulin
- (d) deep breathing : invoke relaxation response , _____ : improves mood
- (e) rearing of honey bees : apiculture , rearing of silkworm : _____

(v) Write true or false and correct the underline word and rewrite the statement. [5]

- (a) Worker bees are egg-laying female.
- (b) Protozoans play an important role in manufacture of vitamins and proteins.
- (c) Heat act as the stimulus for human body.
- (d) There are twelve pairs of spinal nerves.
- (e) Stress in simple terms is known as tension.

SECTION B

Question 3

- (i) Name the common species of the Indian variety of honeybee. [1]
- (ii) What is synapse? What happens at synapse junction? [2]
- (iii) Give location of thyroid and adrenal glands in human body. [2]
- (iv) Discuss the composition of lymph? [2]
- (v) [3]



A



B

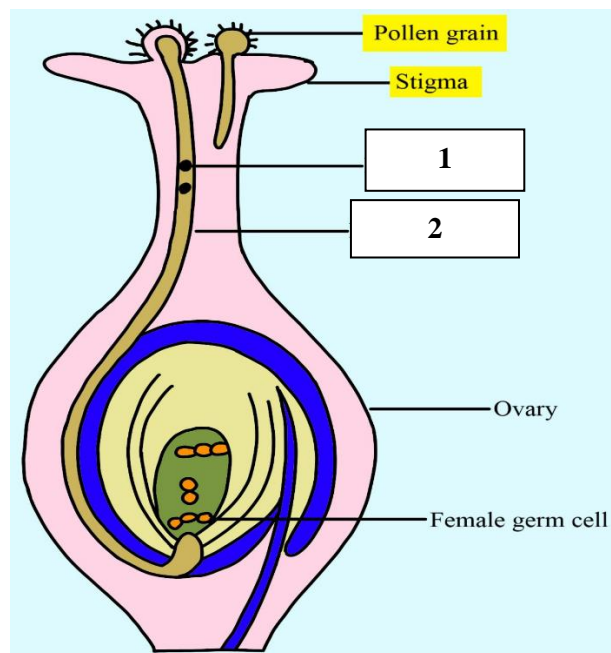
- (a) Fig. A is a fresh water fish farm nursery to obtain fish eggs. These nurseries are known as _____.
- (b) Identify the branch of aquaculture carried out in fig. B.
- (c) What is an aquaculture?

Question 4

- (i) Define nerve. [1]
- (ii) Give 2 functions of phloem. [2]
- (iii) Name two bacteria used in the process of making curd. [2]
- (iv) Explain how heart attack causes permanent damage to the heart. [2]
- (v) Describe three ways how insulin lowers glucose from the blood stream? [3]

Question 5

- (i) Define adolescence. [1]
- (ii) Give full form and one function of : FSH [2]
- (iii) Write 2 characteristics of water pollinated plants. [2]
- (iv) Explain why fungi are referred as saprophytes. [2]
- (v) Observe the diagram carefully and answer the questions given below: [3]



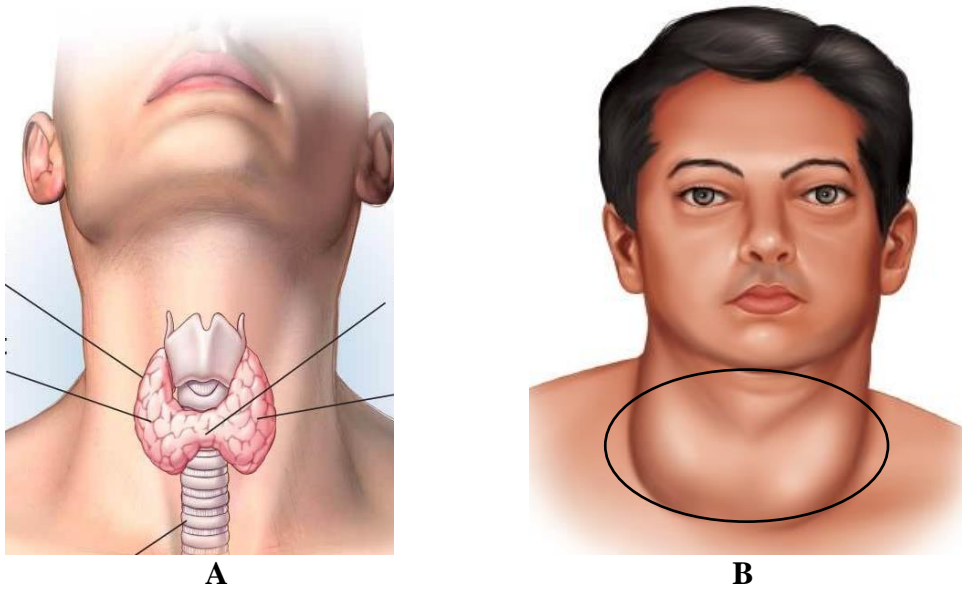
- (a) Identify 1 and 2. (b) Define fertilization.

Question 6

- (i) Give reason why transpiration is faster when wind is blowing faster. [1]
- (ii) Give two forms of sugar present in honey. [2]
- (iii) Explain the flow of blood in pulmonary circulation. (mention clearly the supplying and receiving chambers) [2]
- (iv) Write the name of a floral part responsible for : [2]
 - (a) attaching flower to the shoot.
 - (b) storage of egg cell which later develops into a seed.

(v) Observe the diagram carefully and answer the questions given below:

[3]



- (a) Name the hormone produced by the gland shown in fig. **A**
- (b) What is cretinism?
- (c) Write the name of the ailment shown in fig. **B** above.

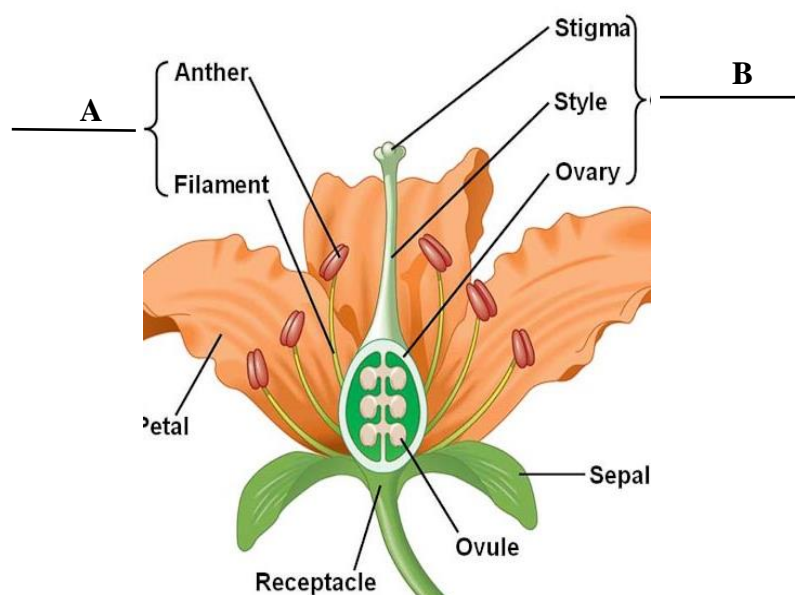
Question 7

(i) Give reason why pituitary gland is also called as the master gland.

[1]

(ii) Label parts marked as **A** and **B** in the figure given below:

[2]



- (iii) Briefly describe ascent of sap in plants. [2]
- (iv) What is an adulthood? Name the prime priorities during adulthood. [2]
- (v) Give three functions of circulatory system, apart from transportation of nutrients and removal of waste. [3]