

MP Board 12th Biology 2024 Answer Key (Unofficial)

1. (i) The product released in the blood by the malaria mosquito which causes chills and fever -
- (a) Homatin
 - (b) Ruffner's point
 - (c) Haemozoin
 - (d) Haemotoxin

Answer: (a) Homatin

(ii) DNA in agarose gel electrophoresis. On what basis does the separation of molecules occur?

- (a) only charge
- (b) Only measurement (size)
- (c) Volume only
- (d) charge and shape

Answer: Only measurement (size)

(iii) Mycorrhiza is example

- (a) Parasitism
- (b) Cooperativeness
- (c) Commensalism
- (d) Decomposer

Answer: Commensalism

(iv) How many chromosomes are there in the embryo (enveloped sperm)?

- (a) n (unmultiplied)
- (c) $3n$ (triplet)
- (b) $2n$ (double)
- (d) $4n$ (quadrupled)

Answer: (c) $3n$ (triple)

(v) What is the residual sporophyte in the seed called?

- (a) The nucleus
- (c) Division
- (b) Inner armor

(d) Periembryonic nutrition

Answer: Periembryonic nutrition

(vi) In sickle cell anaemia, glutamic acid is replaced by valine. Which one of the following triplets is the code for valine?

(a) GGG

(b) AAG

(c) GAA

(4) GUG

Answer: GUG

2 Fill in the blanks with the correct answer:

(i) Proinsulin contains _____ which is not found in mature insulin.

Answer: C-peptide

(ii) _____ is caused by a mutation in a gene related to the adenosine deaminase enzyme.

Answer: SCID

iii) The green plant in the ecosystem are called _____

Answer: Producer

(iv) The process of release of ovum from a mature follicle is called _____

Answer: Ovulation.

(v) DNA fingerprinting involves identifying differences in some specific regions in Sequence called _____

Answer: Repetitive DNA

(vi) Lactic acid bacteria convert milk into _____

Answer: Curd

3. Write True/False:

(i) *Clarias gariepinus* for aquaculture purposes is posing a threat to the indigenous catfishes in our rivers.

Answer: True

(ii) Humans are oviparous.

Answer: False

(iii) Syphilis is a sexually transmitted disease.

Answer: True

(iv) Lichens cannot be used as industrial pollution indicators.

Answer: False

(v) Genes that cause cancer are called oncogenes.

Answer: True

(vi) Each interferon has its own specialty

Answer: True

A	B
(i) PBR322	(a) detrimental interaction
(ii) Corona radiata	(b) z. y and a
(iii) Structural genes	(c) bone marrow
(iv) T-Lymphocytes	(d) vectors
(v) Competition	(e) ovum
	(f) RBCs

(i) PBR322 -(d) vectors

(ii) Corona radiata – (e) ovum

(iii) Structural genes-(b) z. y and a

(iv) T-Lymphocytes -(c) bone marrow

(v) Competition-(a) detrimental interaction.

5. Write answer in the one sentence:

(i) How do cytokine barriers provide innate immunity in humans?

Answer: Interferons

(ii) Write down the name of the bacterium which produces 'Bt' toxin.

Answer: Bacillus thuringiensis (Bt)

(iii) What is called 'lungs of the earth'?

Answer: Amazon Tropical rainforests

(iv) Write the full form of ZIFT.

Answer: Zygote intrafallopian transfer (ZIFT)

(v) What substances did Miller take in his experiments?

Answer: methane, water, hydrogen, and ammonia

