

2 / OCT 2020

M.Sc (Life Sc) Sem. II

Environmental

: નોંધ :

Biology

Sub. Code. 2947

૧. દરેક પ્રશ્નનો [a] અથવા [a(i)] અને [a(ii)] ૪ લખવાના રહેશે.

૨. પ્રશ્ન : ૧[a] અથવા ૧[a(i)] અને ૧[a(ii)] તથા ૨[a] અથવા ૨[a(i)] અને ૨[a(ii)] ના 14 માર્ક્સ ના બદલે ૧૮ માર્ક્સ રહેશે.

૩. પ્રશ્ન : ૩[a] અથવા ૩[a(i)] અને ૩[a(ii)] તથા ૪[a] અથવા ૪[a(i)] અને ૪[a(ii)] ના 14 માર્ક્સ ના બદલે ૧૭ માર્ક્સ રહેશે.

૪. દરેક પ્રશ્નનો પ્રશ્ન નં ૧(b), પ્રશ્ન નં ૨(b), પ્રશ્ન નં ૩(b) તથા પ્રશ્ન નં ૪(b) (ટુંકા પ્રશ્નો) વિદ્યાર્થીએ લખવાના નથી.

(2) Draw labeled diagram where necessary.

Q:1 (A) Describe role of WRF in water treatment.

OR

Write on (i) PAHs toxicity in water.
(ii) Noise pollution.

14

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07

(B) Write answer in short (Any four)

04

(a) What is pollution?

(b) Write a criterion to declare polluted land area.

(c) Define: Secondary water treatment.

(d) Name any two biocides.

(e) Define: TDS.

(f) Define: ppm.

Q:2 (A) Explain air pollution control device: Absorption & Wet Scrubbing Equipment.

OR

Write on (i) ESPs.

(ii) Bio-filters.

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(B) Write answer in short (Any four)

04

(a) Distinguish: Green house effect and Global warming.

(b) Which disease is caused by Aldehydes pollution in air?

(c) Give reason why oleander plants grown at highways?

(d) What is Particulate matter?

(e) What are SO_x?

(f) Dose CO₂ is Green house gas?

Q:3 (A) Describe in detail: YAC.

OR

Write note on (i) DNA Microarrays.

(ii) Site directed mutagenesis.

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(B) Write answer in short (Any three)

03

(a) What is a Selectable marker?

(b) Distinguish: Biotechnology and Genetic engineering.

(c) What is Plasmid incompatibility?

(d) Define: RDT.

(e) Define: Bio-informatics.

Q:4 (A) Write on: Detail account of Ti plasmid.

OR

Write on (i) Microinjection techniques.

(ii) Production of protein β -Lactalbumin by transgenic animal.

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(B) Write answer in short (Any three)

03

(a) Write use of DMSO.

(b) Write any two application of Biotechnology.

(c) Name transgenic Plant that resists to herbicides.

(d) Define: Electroporation.

(e) What is transgenesis?