

DR. KANAILAL BHATTACHARYYA COLLEGE

B.Sc HONOURS INTERNAL EXAMINATION (CBCS – SYSTEM) - 2021

SEM - III

SUBJECT - BOTA

PAPER – CC5 (PALEOBOTANY & PLAYNOLOGY)

DATE: 22/02/2021

TIME – 11A.M – 12 P.M

Time: 1Hr

F.M – 25

1. Answer the following question

2X10

- (a) What do you mean by index fossil? Give an example
- (b) What is chemical fossil? Give an example
- (c) What type of rock is best suitable for preservative of fossil?
- (d) Mention the different periods of Palaeozoic era in ascending order
- (e) Distinguish between spore and pollen
- (f) What is the importance of fossil study?
- (g) Mention some anatomical features of *Calamites* stem
- (h) What do you mean by forensic playnology?
- (i) Mention few characters of *Rhynia* plant
- (j) Write down the geological distribution of *Lepidodendron* plant

2. Answer in few words only

1X5

- (i) Draw a diagram of colpate type pollen
- (ii) Give an example of a plant where colpate type of pollen is found
- (iii) Write two characters of *Ptilophyllum* leaf
- (iv) What is aeroplaynology?
- (v) In which period *Lepidodendron* plant was most dominant?

DR. KANAILAL BHATTACHARYYA COLLEGE
B.Sc. Honours Examination (CBCS system) – 2021

Internal Assessment

Semester- III

Subject- BOTA

Paper: CC- 6 (Reproductive biology of angiosperms)

Time: 1hour (11 A.M - 12 P.M)

Date: 23.2.2021

Full marks- 25

1. Answer the following in brief: 1×5
 - a. Define hypanthodium inflorescence.
 - b. What do mean by zygomorphic flower?
 - c. Define nut.
 - d. Give one example of composite fruit.
 - e. Give one example of monochasial cyme.

2. Answer the following in brief: 2×10
 - a. Write the characteristic features of spadix.
 - b. Define berry.
 - c. What is helobial endosperm?
 - d. What is microsporogenesis?
 - e. Define polyembryony.
 - f. What is microgametogenesis?
 - g. Define bisporic type of megagametogenesis.
 - h. Differentiate racemose and cymose inflorescence.
 - i. Write the definition of apospory.
 - j. What is megasporogenesis?

DR. KANAILAL BHATTACHARYYA COLLEGE
B.Sc. Honours Examination (CBCS system) – 2021

Internal Assessment

Semester- III

Subject- BOTA

Paper: CC- 7 (Plant systematics)

Time: 1hour (11 A.M - 12 P.M)

Date: 24.2.2021

Full marks- 25

1. Answer the following in brief: 1×5
 - a. What type of fruit is found in the family Labiatae?
 - b. Name the subfamilies of Leguminosae.
 - c. What type of stipule is found in the family Rubiaceae?
 - d. Name one family where didynamous stamen is found.
 - e. Name one family with monadelphous stamen.

2. Answer the following in brief: 2×10
 - a. Write two functions of herbarium.
 - b. Define holotype.
 - c. What do you mean by plesiomorphy?
 - d. Define pollinia.
 - e. Name two botanical garden of India.
 - f. What do you mean by monophyletic group?
 - g. What is effective publication?
 - h. What do you mean by consolidation phase?
 - i. Define indented key.
 - j. Write the definition of identification.

DR. KANAILAL BHATTACHARYYA COLLEGE

B.Sc HONOURS INTERNAL EXAMINATION (CBCS – SYSTEM) - 2021

SEM - III

SUBJECT - BOTA

PAPER - SEC-A (BIOFERTILIZERS)

DATE: 25/02/2021

TIME – 11A.M – 12P.M

Time: 1Hr

F.M – 25

1. Answer the followings in brief

2X10

- (a) How *Rhizobium* is isolated? Write down very briefly with flow diagram.
- (b) What is used for starter culture of *Rhizobium*? Answer briefly.
- (c) Mention some carrier based inoculum for *Rhizobium* cultivation.
- (d) How *Azospirillum* is isolated draw a flow chart only.
- (e) Write the main composition of Yeast Extract Manitol Agar (YEMA)
- (f) Write down some characteristics of *Azotobacter*.
- (g) How *Azotobacter* is produced in mass multiplication? Write down it by flow chart only.
- (h) What is the main significance of *Cyanobacteria* cultivation? Mention only few points.
- (i) How *Azolla* is cultivated describe it by flow chart only.
- (j) Write down some importance of *Azolla* in Rice field.

2. Answer the followings in few words

1X5

- (a) Name some different types of Mycorrhiza.
- (b) What are organic fertilizers?
- (c) What do you mean by aerobic composting?
- (d) Mention the name of some nutrient components in vermicompost.
- (e) Write down the name of some Biofertilizers