

B. Sc. IV SEMESTER EXAMINATION – 20xx

Honors Course

BOTANY

Time: 2 hr. 30 min.

Max. Marks: 60 :: Min. Passing Marks: 21

ukv & सभी पाँच प्रश्नों का उत्तर दीजिए । सभी प्रश्नों का अंक समान है तथा आन्तरिक प्रश्नों का अंक वितरण अंकित है ।
Note – Attempt all five questions. All questions carry equal marks and intra-question marks distribution is mentioned.

इकाई- I / UNIT - I

Q.1. निम्न प्रश्नों का उत्तर तदनुसार दीजिए @ Answer the following questions accordingly -

- (a) i. fdllgha , d tyh; ck; kQkbV dk uke fyf[k, A 1
 Write the name of any one aquatic bryophyte.
 ii. fdl ck; kQkbV ds Li kj kQkbट में श्यूडोइलेटर्स पाया जाता हैA 1
 In sporophyte of which bryophyte, pseudo-elaters are found?
 (b) i. ck; kQkbV e LFkyh; okl LFkku dh i कृति प्रदर्शित करने वाले विशेष लक्षणों को लिखिएA 2
 Point out the specific features of Bryophytes showing the nature of land habitat.
 ii. i fjLVkæ D; k gS ? bl ds egRo dks fyf[k, A 2
 What is Peristome? Point its significance.
 (c) प्रगतिशील विकास की अवधारणा के दृष्टिगत ब्रायोफाइटों में Li kj kftul mRrd dk 6
 clU?; kdj .k dh foopuk mi ; Pr fp=k dh l gk; rk l s dhft, A
 As a concept of progressive evolution discuss the sterilization of sporogenous tissue in
 Bryophytes with help of suitable diagrams.

vFkok @OR

निम्न प्रश्नों का उत्तर तदनुसार दीजिए @ Answer the following questions accordingly

- (a) i. fdl ck; kQkbV ds Li kj kQkbV e v?kkjh; bysVj kQkl l i k; k tkrk gA 1
 In sporophyte of which bryophyte, basal elatrophores are found?
 ii. fdl ck; kQkbV ds Li kj kQkbV e l hvk vuq fLFkr gkrk gA 1
 In sporophyte of which bryophyte, seta is absent?
 (b) i. LOXkUke ds dSl ny dk ukekfd r fp= cukb, A 2
 Draw a well labeled diagram of the capsule of Sphagnum.
 ii. tæjefu; sI ds y{k. kks dk mYys[k dhft, A 2
 Point out the features of Jungermaniales.
 (c) fgi kfVdkll l hMk e xfeV kQkbV dk fodkl dk l f{klr foopuk nht, A 6
 Give a brief account of evolution of gametophytes in Hepaticopsida.

इकाई- II / UNIT - II

Q.2. निम्न प्रश्नों का उत्तर तदनुसार दीजिए @ Answer the following questions accordingly

- (a) i. i Fke Hkfe l ægfu i kni fdl , i kp fodfl r gvk FkA 1
 First land vascular plant was developed in which epoch?
 ii. l kbykVe e Li kj flt; e ds fy, किस शब्द का प्रयोग किया जाता हैA 1
 What term used for sporangium in Psilotum?
 (b) i. साइलोफाइटेलस का विशिष्ट लक्षण. kks dks fyf[k, A 2
 Write the specific features of Psilophytales.
 ii. l ksyukLVhy D; k gS ? इसके महत्व स्पष्ट कीजिएA 2
 What is solenosteles? Point out its significance.
 (c) Vhykæ vo/kkj. kk D; k gS ? Vhykæ F; kjh dh l f{klr foopukA 6
 What is Telome concept? Briefly discuss the Telome theory.

vFkok @OR

- निम्न प्रश्नों का उत्तर तदनुसार दीजिए @ Answer the following questions accordingly
- (a) i. fdl i idkj ds ikni LVhy ea vusd fjDr LFkku ik; k tkrk gA 1
In which type of plant stele the multiple gaps are found?
- ii. fdl Vvfj MksQkbVt dh fLFkr ; Li kj fUt ; sh , oa YkdVkdLi kj fUt ; sh ds e?; ea gA 1
The status of which pteridophytes is between Eusporangiate and Leptosporangiate.
- b) i. QkL& tujk , oa QkL& Li fl t l s vki D; k l e>rs gA 2
What do you mean by 'Form-genera' and 'Form-species'.
- ii. ykbadki kFM; e ea fdl i idkj ds LVhy l ik; s tkrk gA 2
Which types of steles are found in Lycopodium?
- c) Ckht LoHkko l s vki D; k l e>rs gA Ikni ds Ckht LoHkko ds दृष्टिगत हेटेरोस्पोरी की vo/kkj .kk dh l f{klr foopuk dhft, A 6
What do you mean by 'Seed habit'? Discuss the concept of heterospory in view of seed habit of plants.

इकाई- III / UNIT - III

Q.3. निम्न प्रश्नों का उत्तर तदनुसार दीजिए @ Answer the following questions accordingly –

- (a) i. fdl fteukLi el ds Nky l s d j jkdFkke dh nok iklr dh tkrh gA 1
From the bark of which Gymnosperm the anti-cancerous drugs is obtained?
- ii. ftEukLi el ds , d i kys dk uke fyf[k, ftl l s rkji u sy iklr fd; k tkrk gA 1
Write a name of Gymnosperm plant from which Turpentine oil is derived.
- (b) i. l kbd l ds cht dk ukefdr fp= cukb, A 2
Draw a well labeled diagram of the seed of Cycas.
- ii. uhVe ds fof' k"V , fUt ; kLi feId y{k. kka dks fyf[k, A 2
Point out the specific angiospermic feature of Gnetum.
- (c) ^ ftUxks ckbykck^ , d thfor thok'e g^ & vkfpr; i k l foopuk dhft, A 6
"Ginkgo biloba is a living fossil" – discuss and justify.

vFkok @OR

निम्न प्रश्नों का उत्तर तदनुसार दीजिए @ Answer the following questions accordingly –

- (a) i. fdl ftEukLi el ikni ea , okfVb fctk. M ik; k tkrk gA 1
Abortive ovule is found in which gymnosperm plant?
- ii. fdl ftEukLi el ikni ea ia[knkj ijkd.k ik; k tkrk gA 1
Winged pollen-grains are found in which Gymnospermic plant?
- (b) i. dkj yk; M tM+ ij l f{klr Vhli .kh dhft, A 2
Briefly comment on coralloid roots.
- ii. ftEukLi el ea oM ds fo' k'k y{k. kka dks fyf[k, A 2
Point out the specific feature of wood in Gymnosperm.
- (c) ftEukLi el ikni ds vkfKId egRo dk l f{klr foopuk dhft, A 6
Give a brief description of 'Economic importance of Gymnosperm plants'.

इकाई- IV / UNIT - IV

Q.4. निम्न प्रश्नों का उत्तर तदनुसार दीजिए @ Answer the following questions accordingly –

- (a) i. us'kuy ckWuhdy xkMlu fdl LFkku ij fLFkr gA 1
At which place the National Botanical Garden is situated?
- ii. fdl h vkfKj }kj k , d fo" k; @i kys ij fyf[kr j puk grq fdl 'kCn dk mi ; ksx gkrk gA 1
What term is used for a text comprises detail account of a single aspect or plant by a single author.
- b) i. VDI kukfed inl ki ku ij l f{klr Vhli .kh dhft, A 2
Briefly comment on Taxonomic hierarchy.
- ii. oply gjcfj ; e l s D; k l e>rs gA bl ds egRo Li "V dhft, A 2
What do you mean by Virtual herbarium? Point out its significance.

- c) What do you mean by 'Biosystematics'? Discuss the role of Cytology and Biochemistry in taxonomy of plants.

6

वफ़क़ @OR

निम्न प्रश्नों का उत्तर तदनुसार दीजिए @ Answer the following questions accordingly –

- (a) i. Who is regarded as father of Plant taxonomy?
ii. What term is used for the family in which single genus exists.
- (b) i. What do you mean by Journals? Point out its significance.
ii. Briefly comment on Plant nomenclature.
- (c) What is 'Herbarium'? Give a brief account of important herbaria in India and point its significance.

इकाई- V / UNIT - V

Q.5. निम्न प्रश्नों का उत्तर तदनुसार दीजिए @ Answer the following questions accordingly –

- (a) i. At which place the first International Botanical Congress was held? 1
ii. What type is called to any duplicate specimen determined by the author? 1
- (b) i. Point out the difference between Phenograms and Cladograms. 2
ii. What are the important 'Rules' of International Code of Botanical Nomenclature? 2
- (c) Give analytical account of 'Origin and evolution of Angiosperm' based on proposed theories. 6

वफ़क़ @OR

निम्न प्रश्नों का उत्तर तदनुसार दीजिए @ Answer the following questions accordingly –

- (a) i. In which article of ICBN the effective publication is mentioned? 1
ii. Write the full form of 'OTUs'. 1
- (b) i. Comment on the 'Principle of priority'. 2
ii. Define the cladograms and point out its significance. 2
- (c) Write a brief about the Principles of ICBN, Rank of Taxa, Typification and Valid publication. 6

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