24. What is autoradiography ? What are its applications ?

25. Describe important types of centrifuges.

26. What is the difference between system software and application software ?
Give examples for each. (6×2=12)

## SECTION – E

Answer **any one** :

Essay type questions ; **each** question carries a weightage of **4** :

27. Explain the issues and concerns associated with cyber world.

28. What are stains ? Explain the use of stains in microtechnique. Mention the composition of any one stain studied by you.

29. What is e-Governance ? Explain various e-Governance applications in India.
(1×4=4)

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Reg. No. : ...............................

Name : ...............................

## II Semester B.Sc. Degree (CCSS – Reg./Supple./Improv.) Examination, May 2014
### Core Course in Botany/Plant Science
### 2B02 BOT/2B01 PLS : General Informatics and Instrumentation
#### (2012 Admn. Onwards)

Time: 3 Hours                                                                 Total Weightage: 30

## SECTION – A

Objective questions. (Multiple choice/One word/sentence/Fill in the blanks/Match the following, true or false etc.) in cluster of **four**. **Each** cluster carries a weightage of **one** :

1. Choose the correct answer :

    i) 'Which of the following is free software' ?

    a) Intel          b) AMD          c) Microsoft          d) Linux

    ii) Which protocol is used by browsers to communicate between two machines ?

    a) Fttp          b) ssl          c) tcp          d) http

    iii) The amount of light absorbed by a material is proportional to the concentration of absorbing solution is termed as

    a) Beer-Lambert's law

    b) Poisson's law

    c) Boger's law

    d) None of the above

    iv) Ultra structure of a cell can be viewed by

    a) TEM

    b) Phase contrast microscope

    c) Compound microscope

    d) Dissection microscope

2. State **true** or **false** :

   i) The most common computer pointing device is your finger.

   ii) FORTRAN is a high level language.

   iii) Chromophore is the part of a molecule responsible for its colour.

   iv) A good preservative should neither shrink nor swell tissue.

3. Fill in the blanks :

   i) Phase contrast microscope was invented by _____

   ii) One Kilobyte is equal to _____ bytes.

   iii) The free software movement was conceived and developed in 1983 by

   _____

   iv) Abbe condenser is placed between stage and _____

4. Answer in **one** word or in **one** sentence :

   i) USB

   ii) LAN

   iii) Camera lucida

   iv) PAGE.

5. Match the following :

| A | B | C | |
|---|---|---|---|
| i) Mouse | UV radiation | Natural Dye | |
| ii) Centrifugation | Input device | Sedimentation of organelles | |
| iii) Carmine | Gravity | Sterilization | |
| iv) Laminar Air Flow | Insect | Douglas Engelbart | (5×1=5) |

SECTION – B

Answer **any four** :

Differentiate the following : **Each** question carries a weightage of **1** :

6. Dial-up and Wi-Fi.

7. Cyber Ethics and Cyber Crime.

8. FAA and DPX.

9. Phase contrast microscopy and fluorescence microscopy.

10. Colorimeter and spectrophotometer.

11. RAM and ROM.                                                    (4×1=4)

SECTION – C

Answer **any five** :

Short answer questions ; **each** question carries a weightage of **1** :

12. What is E-learning ?

13. What do you mean by fixation ? Give two commonly used fixatives.

14. What is the principle behind colorimetry ?

15. What is an operating system ? Mention one popular OS used in computers.

16. What is double staining ?

17. Write short note on academic search engines.

18. What is bio-computing ?                                                    (5×1=5)

SECTION – D

Answer **any six** :

Short answer questions ; **each** question carries a weightage of **2** :

19. Explain the difference between hardware and software with their definition and uses.

20. Explain the use of IT in teaching and learning.

21. What is chromatography ? What are its applications ?

22. What are secondary storage devices of a computer system ? List any two.

23. What are buffers ? What is its function in biological systems ?