

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023
(Third Semester)

Branch – BOTANY

TRENDS IN PLANT RESEARCH

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

- 1 Which part of the compound microscope helps in gathering and focusing light rays on the specimen to be viewed?
(i) Eyepiece lens (ii) Objective lens
(iii) Condenser lens (iv) Magnifying lens
- 2 Which of the following is not a property or parameter of electromagnetic radiation?
(i) Wavelength (ii) Voltage
(iii) Wave number (iv) Amplitude
- 3 What were the first two results of a central tendency test?
(i) Mean and Mode (ii) Median and Mode
(iii) Mean, Median and Range (iv) None
- 4 Name the following is not type of patent.
(i) Utility patents (ii) Copyright
(iii) Design patents (iv) Plant patents
- 5 The format of thesis writing is the same as in
(i) Writing of Seminar representation
(ii) Preparation of research paper
(iii) Presenting a workshop/conference paper
(iv) A research dissertation

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a Evaluate the principle of Colorimetry.
OR
b Explain the types of electrodes in pH meter. Mention its significance.
- 7 a Discuss the applications of mass spectrometry.
OR
b Evaluate the stationary and mobile phase in chromatography.
- 8 a State merits and demerits on mean deviation.
OR
b Differentiate correlation and regression analysis.
- 9 a Assume the types of trademark with suitable examples.
OR
b Prepare the rules of first aid.
- 10 a Choose the basic concepts of oral presentation.
OR
b Determine the significance of proof correction.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 6 = 30)

11 a Classify the principle, types and applications of centrifuge.

OR

b Design the working mechanism and importance of flame photometer.

12 a Formulate the components, mechanism and application of HPLC.

OR

b Elucidate the instrumentation and importance of FTIR.

13 a Calculate the mean, variance and standard deviation for the following data:

Class interval	0-10	10-20	20-30	30-40	40-50	50-60
Frequency	27	10	7	5	4	2

OR

b Discuss the applications of biostatistics in biological system.

14 a Why is biosafety and bioethics important in biology? – Analyse.

OR

b Assess a guide to good laboratory practice in biology lab.

15 a Determine the types and significance of review of literature.

OR

b Briefly describe the major parts of Thesis. Discuss the significance of each.

Z-Z-Z

END