

B.A. /B.Sc. Sem IV General Examination 2024 (Under CBCS)

Subject: Physics

PaPer: CC/GE-4, Wave and Optics

General Instruction for the Examiners

1. Time of examination :
1st half 11:00 am to 2:00 pm
2nd half 2:00 pm to 5:00 pm

2. Division of marks :

| LNB | VIVA | EXPERIMENT |
|-----|------|------------|
| 5 | 5 | 20 |

Marks division for each question : (Experiment part : total 20)

- a) Determination of the focal length of a concave lens by auxiliary lens method : Theory :4, Main table (at least two sets of data) :8, Calculation :3, Result :3, Comment/ Accuracy:2
 - b) Determination of the frequency of a tuning fork with the help of sonometer: Theory: 4, Main table : 7, graph :3, frequency vs resonant length value (n λ value) :1, calculation of unknown :2, Result :2, Accuracy/ Comment :1
 - c) Determination of radius of curvature of plano convex lens/ wavelength of a monochromatic or quasi monochromatic light using Newton Ring : Theory: 4, Main table : 7 , Vernier Constant :2 , Graph :3, Calculation :2, Result and Accuracy :2
 - d) Measurement of thickness of a paper from a wedge shaped film : Theory : 4, Vernier : 2, Main table : 8, Calculation :3 , Result and Accuracy/ Comment : 3
 - e) Measurement of specific rotation of active solution using polarimeter : Theory : 4, Vernier: 2, Main table :8, Calculation :3, Result and Graph :3.
3. At least one experimental set up to each experiment (listed in syllabus) should be kept working.
 4. Copy of question to be sent along with answer script, Data Sheet, renumeration bill, award list and statement of marks.
 5. Try to set not more than three parallel set up for each question.
 6. Card Drawing : Card drawing must be done at least 15 minutes prior to examination, so that student can start their examination in proper time.

7. Each student should draw one card. If anyone wants to draw more than two times then 2 marks will be deducted for each draw after the initial two.
8. Candidates are required to produce their laboratory Note Book (LNB) in which Lab works are reported during classes and checked thoroughly.
9. Any type of note book other than standard Laboratory note book can be assessed as usual. However if the candidate fails to produce LNB then he/she shall not be allowed to appear at examination and that should be reported to the Head examiner.
At least one data should be recorded for each table.

Parikshit Dutta

Department of Physics
Asutosh College
17.07.2024