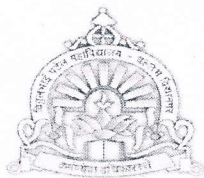


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A Charutar Vidya Mandal's Institution
V.P. & R.P.T.P. SCIENCE COLLEGE
(AUTONOMOUS) (Grant-in-Aid)
Affiliated to Sardar Patel University
VALLABH VIDYANAGAR-388120



Bachelor of Science (Semester II) Internal Examination - 2025

US02IDPHY01: SUBJECT NAME: PHYSICS

Date: 06-03-2025

Day: Thursday

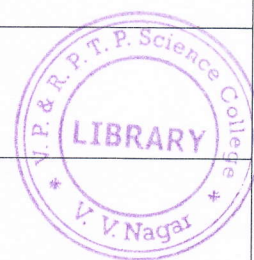
Time: 12:45 to 01:45 pm

Total marks :20

Note: Figures to the right indicate marks of the question.

Q. 1. Write the most appropriate answer from the following multiple-choice questions. [06]

1.	The circuit which converts ac voltage into dc voltage is called as ____ ? (a) transformer (b) inductance (c) resistance (d) rectifier
2.	Which of the following diodes is used in display units? (a) varactor (b) power (c) signal (d) LED
3.	Which part of a transistor is the largest in size? (a) base (b) collector (c) emitter (d) battery
4.	A point in a network where two or more circuit elements are joined is called as ____. (a) mesh (b) node (c) branch (d) tree.
5.	Which bridge is used to determine the capacitance of a capacitor? (a) Wien (b) Maxwell (c) Ampere (d) Schering
6.	Which bridge is used to determine the frequency of ac source? (a) Wien (b) Maxwell (c) Ampere (d) Schering



Q. 2	What is a Half-Wave rectifier? With proper diagram explain its construction and working. Mention its PIV and output dc voltage. (07) OR What is a Full-Wave rectifier? With proper diagram explain its construction and working. Mention its PIV and output dc voltage (07)
Q. 3	Define mesh of a network. With example explain mesh current analysis method For a two mesh network. (07) OR What is a Maxwell bridge? Explain its construction and working with diagram. (07)