

D.R.A Government Degree College, Bisauli, Budaun

Affiliated with M.J.P. Rohilkhand University, Bareilly

BSc III (PHYSICS) Year Lab Assignment

MM: 55 (70% of the total allocated marks)

Time: 24 hrs.

Pattern: Based on Open Book System

Note: Attempt all task; Each task carries marks as per details give below:-

[1 for each MCQ; 1.5 mark for each one line answer and 3 marks for each 2-4 line answer]

[PART-A]

Multiple Choose Questions:

1. The number of Boolean function that can be generated by n variables is equal to
(a) 2^n (b) 22^n (c) 2^{n-1} (d) -2^n
2. In terms of energy bands, insulators have
(a) Full Conduction Band (b) Very Small Energy Gap (c) Full Valence Band
(d) Moderate Energy Gap
3. The Tunnel Diode is best suited for
(a) Amplifier limiters (b) Amplifier (c) Oscillator (d) Rectifier
4. Sound waves of frequency less than 20 Hz is known as _____
(a) Ultrasonic (b) Audible (c) Infrasonic (d) Supersonic
5. The B/H characteristics can be determined using
(a) Ammeter (b) Fluxmeter (c) Voltmeter (d) Multimeter

One line Answer Type Questions:

6. NAND and NOR Gate is also known as _____.
7. The depletion layer of the Tunnel diode is very _____.
8. Maximum efficiency of half wave rectifier is _____.
9. Tunnel Diode operates very fast in _____ region.
10. In RC coupling, the coupling capacitor must be _____.

Two to Four line Answer Type Questions:

11. What is the basic working principle of Maxwell's bridge?
12. In order to minimize Hysteresis loss, what type of magnetic material should use and why?
13. What is frequency response of RC coupled amplifier?
14. Write three advantages of JFET over MOSFET.
15. Define Voltage regulation and ripple factor of Full wave rectifier.

[PART-B]

Note:- 15 questions of the same type should be done by student by themselves on A4 sheet paper.

छात्र/ छात्राओं हेतु निर्देश: - Covid – 19 गाइडलाइन के अनुसार इस वर्ष विश्वविद्यालय द्वारा प्रयोगात्मक परीक्षा Open book system व आंतरिक मूल्यांकन के आधार पर संपादित कराई जा रही है। कुल 75 अंको में से 20 अंक practical record and Attendance के आधार पर शेष 55 अंको का दो भाग A & B में लिखित परीक्षा (open book) के आधार पर मूल्यांकन होगा। Part A महाविद्यालय द्वारा तैयार किया गया है ठीक ऐसा ही Part B आपको खुद तैयार करना है और दोनों को पूरा करके परीक्षा के 24 घंटे में महाविद्यालय में जमा करना है।