

## B.Sc. (NEP) Sem.-5 Examination

DSC-M-354

Electronics

November-2025

Time : 2-00 Hours]

[Max. Marks : 50

Instructions: (1) Symbols used here have their usual meanings.  
(2) Figures to the right indicate marks.

- Q-1 (a) Write a short note on World Wide Web (WWW). (5)  
(b) Describe in brief different types of internet addressing schemes. (5)  
OR  
(a) Describe technological challenges for wireless communication and write their solutions. (5)  
(b) Explain cellular technology concept. (5)
- Q-2 (a) Explain trans-conductance amplifier (V-to-I converter) with grounded load. (5)  
(b) Explain Half-wave rectifier circuit using Op-Amp. (5)  
OR  
(a) Describe the application of V-to-I converter as Zener diode tester. (5)  
(b) Prove that the output voltage of a Log amplifier circuit (using Op-Amp) is proportional to the logarithm of input voltage. (5)
- Q-3 (a) Write a program in C, which performs addition of two numbers and displays the result. (5)  
(b) Explain briefly Basic structure of C Program. (5)  
OR  
(a) Write a short-note on C character set (5)  
(b) What is constant in C programming? Explain Brief classification of basic types of C constants. (5)
- Q-4 (a) Explain different data types used in ANSI C. (5)  
(b) Write a program in C to calculate the average of a set of N numbers. (5)  
OR  
(a) Explain basic concept of arithmetic operators in C programs. (5)  
(b) Write a short-note on relational operators used in C programs (5)
- Q-5 Attempt any Ten out of Twelve. (10)  
(1) Write the full form of WLAN.  
(2) What is URL?  
(3) Write any two parameter names on which the working range of a cell site depends.  
(4) Design an adder circuit using an Op-Amp to get the output expression as  $V_o = (0.1V_1 + V_2 + 10V_3)$ . Where  $V_1$ ,  $V_2$  and  $V_3$  are the inputs.  
(5) Mention any two applications of Op-Amp circuits using diodes.  
(6) Draw the transfer characteristics for an ideal comparator circuit.  
(7) Write the full form of ANSI.  
(8) How many keywords are there in ANSI C?  
(9) What is subroutine in the C programming?  
(10) What is "token" in C?  
(11) Define variable in C.  
(12) What are the trigraph characters?

