



Semester B.C.A. Examination, February/March 2024  
(NEP Scheme) (Freshers)  
**COMPUTER SCIENCE**  
**Quantitative Techniques**

Time : 2½ Hours

Max. Marks : 60

**Instruction : Answer any four from each Section.**

## SECTION – A

I. Answer any four questions. Each question carries 2 marks. (4×2=8)

- 1) What is the divisibility rule of 8 ? Give example.
- 2) What is the LCM of  $\frac{36}{225}$ ,  $\frac{48}{150}$ ,  $\frac{72}{65}$  ?
- 3) What is the value of  $\sqrt{5184}$  and  $\sqrt[3]{97336}$  ?
- 4) Find the value of  $\log\left(\frac{15}{16}\right) - \log\left(\frac{27}{45}\right) + \log\left(\frac{48}{75}\right)$ .
- 5) Pointing to a boy Mahesh said "He is the son of the only son of my mother".  
How is Mahesh related to the boy ?  
a) Father      b) Cousin      c) Grandmother      d) None of these
- 6) How many ways the word "EQUATION" can be arranged in non-repeated letters ?

## SECTION – B

II. Answer any four questions. Each question carries 5 marks. (4×5=20)

- 7) Which least number when divided by 36, 24, 16 leaves 11 as remainder in each case ?
- 8) Of the three numbers the first is twice the second and the second is thrice the third. If the average of the three numbers is 10. What is the largest number ?
- 9) Find the value of  $\log_{\sqrt{7}}\left(\frac{1}{343}\right)$  and  $\log_2\left(\frac{512 \times 256}{32}\right)$ .



- 10) Which day of the week was 12 March 1940 ?
- 11) Explain Article, Workshop and Seminar.
- 12) Define Teaching. Explain the characteristic involved in Teaching.

## SECTION – C

III. Answer **any four** questions. Each question carries **8** marks. (4×8=32)

- 13) How many ways the word "ANIMATION" can be arranged such that
    - 1) Repeated letters 8
    - 2) Vowels comes together
    - 3) Consonants comes together
    - 4) Vowels never comes together. 8
  - 14) a) Explain Research. Give the characteristic and steps involved in Research. 6  
b) Define Thesis writing. 2
  - 15) a) Explain the characteristic involved in communication. 4  
b) Discuss about effective classroom communication. 4
  - 16) a) At what does of April 2001 did Wednesday fall ? 4  
b) The sum of two numbers is 40 and differences between them is 4. Find the numbers in ratio. 4
  - 17) a) At what time between 30' clock and 40' clock the hands of the clock be together ? 4  
b) A pot has 2 white, 6 black, 4 grey and 8 green balls. If one balls is picked randomly from the pot. What is the probability of being black or green ? 4
  - 18) a) Two pipes A and B can fill the tank in 4 hours and 5 hours respectively. If they opened on alternate hours and if pipe B is opened first. How many hours it will take to fill the tank ? 4  
b) Dinesh deposit an amount of Rs. 65,800 to obtain simple interest at 14% per annum for 4 years. What is the total amount will Dinesh get at the end of 4 years ? 4
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