

NP – 402

V 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.

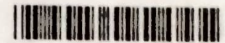
SECTION – A

- 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 of 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 $\log_2\left(\frac{512 \times 256}{32}\right)$.

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- 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
 - 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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