



NP – 415

V Semester B.C.A. Examination, January/February 2026
(NEP Scheme)
COMPUTER APPLICATION
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 **two** marks. **(4×2=8)**

- 1) Find the largest number that can exactly divide 513, 783 & 1107.
- 2) If PAINT is coded as 74128 and EXCEL is coded as 93596. Then how would you encode ACCEPT ?
- 3) A train travels 82.6 km/hr. How many meters will it travel in 15 minutes ?
- 4) The ratio of the ages of Shruthi and Vedha is 9:10 respectively. Ten years ago, the ratio of their age was 4:5 respectively. What is the present age of Vedha ?
- 5) Find the simple interest when principle is Rs. 4,000 at the rate of interest 4% pa in the duration of 24 months.
- 6) Define research and mention its objectives.

SECTION – B

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

- 7) 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 ?
- 8) The sum of the ages of daughter and her mother is 56 years. After 4 years the age of the mother will be three times that of the daughter. Calculate the age of the mother.

P.T.O.



- 9) The sum of five number is 555. The average of the first two number is 75 and the third number is 115. What is the average of the last two numbers ?
- 10) A can do a piece of job in 10 days and B can do it in 15 days. They work together for 2 days and A goes away. In how many days will B finish the work ?
- 11) Write a note on evaluation system.
- 12) Explain Article, Workshop, Seminar.

SECTION – C

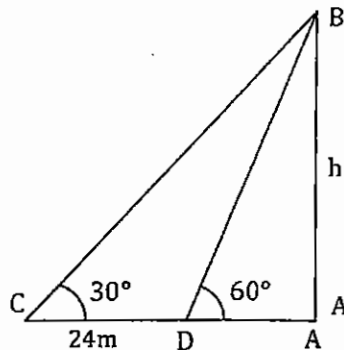
III. Answer **any four** questions. **Each** question carries **eight** marks. **(4×8=32)**

- 13) a) If $8^x \cdot 2^y = 512$ and $3^{3x+2y} = 9^6$ then what is the value of x and y. **4**
 - b) Find the square root of 1471369. **4**
- 14) How many ways the word "ANIMATION" can be arranged such that :
 - i) Repeated letters.
 - ii) Vowels comes together
 - iii) Consonants comes together
 - iv) Vowels never comes together ? **8**
- 15) a) A person travels from a place P to Q at the speed of 40 km/h and return at a speed of 10 km/h. What is the average speed of the person for the whole journey ? **4**
 - b) Draw a pie chart for the following data : **4**

Item of Expenditure	Amount Spent (in rupees)
Stationery	3,750
Mobile recharge	1,875
Travel	1,875
Snacks	1,200



- 16) a) The angle of elevation of the top of tower at a point on the ground is 30° , on working 24 meter towards the tower, the angle of elevation becomes 60° . Find the height of the tower. **4**



- b) A square park is surrounded by a path of uniform width 2 meters all around it. The area of the path is 288 Sq.meters. Find the perimeter of the park. **4**
- 17) a) Darshan deposit an amount Rs. 65,000 to obtain simple interest at 14% per annum for 4 years. What is the total amount will Darshan get at the end of 4 years ? **4**
- b) Two pipes A and B can fill the tank in 4 and 5 hours respectively. If they open an alternate hours and if pipe B is opened first. How many hours it will take to fill the tank ? **4**
- 18) a) Explain the types of teaching aid. How it plays a major role in effective teaching ? **4**
- b) Explain the types of communication. **4**
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