

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - VI Computer Science & Engineering : SUMMER : 2025
SUBJECT: QUANTITATIVE TECHNIQUES, COMMUNICATION & VALUES

Day : Friday
Date : 30/05/2025

S-25598-2025

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.
- 4) Calculator and any smart gadgets are not allowed.

Q.1 Solve the following questions :

(10)

- 1) The average age of 6 boys is increased by 2 years when three of them, whose ages are 14, 12 and 10 years, are replaced by 3 girls. What is the average age of a girl?
 - i) 18
 - ii) 16
 - iii) 14
 - iv) 12
- 2) The average age of 20 boys is 13 years. The average age of first 11 boys is 12 years; average age of next 8 boys is 14 years. Find the age of 20th boy?
 - i) 12 years
 - ii) 13 years
 - iii) 14 years
 - iv) 16 years
- 3) In a mixture of 45 liters the ratio of milk and water is 3:2. If we want to convert the ratio 2:3 how much water should be added?
 - i) 13.5 liters
 - ii) 14 liters
 - iii) 22.5 liters
 - iv) 15.5 liters
- 4) Find which of the following ratio is the greatest?
 - i) 5:9
 - ii) 13:17
 - iii) 21:25
 - iv) 3:7
- 5) If 8 men working 9 hours per day can complete a work in 32 days. Then 12 men working 8 hours per day require how many days to complete the work?
 - i) 18
 - ii) 22
 - iii) 36
 - iv) 24
- 6) In an examination a student who got 32% of the total marks failed by 8 marks and another student who got 35% of total marks got 16 marks more than the pass mark then total marks are?
 - i) 900
 - ii) 800
 - iii) 1000
 - iv) 600
- 7) 30% of the people read newspaper X, 50% read newspaper Y and 20% read both the papers. What percentage of the people read neither of the newspaper?
 - i) 5%
 - ii) 15%
 - iii) 20%
 - iv) 40%
- 8) A mixture of a certain quantity of milk with 10 liters of water is worth Rs. 5.5 a liter. If pure milk be worth Rs. 10.5 a liter, how much milk is there in the mixture?
 - i) 10 lit.
 - ii) 11 lit.
 - iii) 12 lit.
 - iv) 13 lit.
- 9) A, B and C can do a work in 36, 54 and 72 days respectively. They started working together but A left 8 days before the completion of the work while B left 12 days before the completion. Then the number of days for which C worked is ?
 - i) 21
 - ii) 26
 - iii) 28
 - iv) 24

..PTO

- Q.3 A) Read the sentence and identify the part which has error and write correct answer of it. If there is no error, mark the answer as (E) (05)
- 1) If he worked hard he would have
A got through the exam B which he wrote recently
C D
 - 2) She told me that she will meet me
A the next day B if she had time
C D
 - 3) He usually goes to college
A by walk B because he stays close by
C D
 - 4) After he returned back from U.S.
A he has started B his own factory
C D
 - 5) The students work
A meticulously throughout the year B doesn't they
C D

- Q.3 B) In each of the sentences, one word is given in bold and four options are given (05) select the word or phrase nearest in meaning to the word given in bold.
- 1) The soldier received the Bravery Award for his **exemplary** display of courage during the war.
i) New ii) Strange
iii) Abnormal iv) Praiseworthy
 - 2) Mr. Kumar **was fired** for continually coming late to the office
i) Beaten ii) Scolded
iii) Abused iv) Dismissed
 - 3) A **conscientious** worker is always admired by his colleagues.
i) Obedient ii) Sincere
iii) Skillful iv) Careful
 - 4) My students in the laboratory are rather **inquisitive** about the language learning softwares.
i) Sensitive ii) Careful
iii) Curious iv) Anxious
 - 5) The automobile industry depends on **indigenous** technology
i) Sophisticated ii) Ancient
iii) Alien iv) Native

- Q.4 a) Differentiate between Soft Skills and Hard Skills. How do these two skills sets complement each other in personal and professional development? (05)
- b) Discuss the attributes of a good leader. What qualities and behaviors are commonly associate with effective leadership? (05)

OR

- Q.4 a) Define emotional intelligence (EI) and explain its importance in personal and professional lives. (05)
- b) Discuss the importance of conducting a SWOT analysis for an individual's career development. (05)

- Q.5 a) Explain the importance of LSRW skills in effective communication. How do these skills complement each other in the communication process? (05)
- b) Discuss the dos and don'ts of email writing etiquettes in a professional context. (05)

OR

- Q.5 a) What preparation a candidate has to do before the interview so that he can perform well during the interview? (05)
- b) Mention the tips and guidelines for building an effective resume or CV. (05)

- Q.6 a) Differentiate between social and office etiquette. How does professional behaviour in social setting, reflect an individual's character and values. (05)
- b) How can CSR initiatives benefit both companies and society? Give an example. (05)

OR

- Q.6 a) How do the values contribute to effective leadership and team management in the firm? (05)
- b) Explain the terms diversity and inclusion. How can diversity enhance creativity and innovation within a company? (05)

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