

BACHELOR OF TECHNOLOGY (CBCS) (2020 COURSE)
B.Tech.Sem - VI COMPUTER SCIENCE & ENGINEERING : SUMMER : 2024
SUBJECT: QUANTITATIVE TECHNIQUES, COMMUNICATION & VALUES

Day : Thursday
Date : 30/05/2024

S-24331-2024

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

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicates full marks.
- 3) Calculator and Any Smart Gadgets are not **ALLOWED**.

Q.1 Solve the following questions: (10)

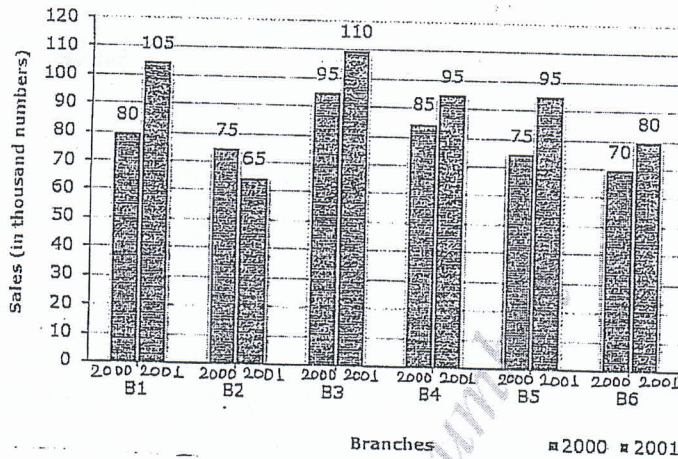
- 1) The simple interest on a certain sum of money at the rate of 5% p.a. for 8 years is Rs.840. At what rate of interest the same amount of interest can be received on same sum after 5 years?
a) 6% b) 8% c) 9% d) 10%
- 2) Manoj invested Rs.15000 at 10% per annum for 1 year. If the interest is compound half yearly, then the amount received by Manoj at the end of the year will be:
a) Rs.16500 b) Rs.16525.50 c) Rs.16537.50 d) Rs.18150
- 3) The sum of the ages of a father and his son is 45 years. Five years ago, the product of their ages was 34. The ages of the son and the father are respectively:
a) 9 & 36 b) 7 & 38 c) 6 & 39 d) 11 & 34
- 4) The average of first five multiples of 7 is :
a) 42 b) 35 c) 28 d) 21
- 5) The percentage profit earned by selling an article for Rs. 1920 is equal to the percentage loss incurred by selling the same article for Rs. 128. At what price should the article be sold to make 25% profit?
a) Rs.2000 b) Rs.2200 c) Rs.2400 d) Data inadequate
- 6) A and B are two stations 330 km apart. A train starts from A at 8 a.m. and travel towards B at 60 kmph. Another train starts from B at 9 a.m. and travel towards A at 75 kmph. At what time do they meet?
a) 10 A.M. b) 12 P.M. c) 11 A.M. d) 1 P.M.
- 7) The question given below consists of a question followed by two statements. You have to study the question and the statements and decide which of the statement (s) is/are necessary to answer the question.
What is the speed of the boat in still water?
i) The boat covers a distance of 48 kms in 6 hours while running upstream.
ii) The boat covers the same distance in 4 hours while running downstream.
a) I alone sufficient while II alone not sufficient to answer
b) II alone sufficient while I alone not sufficient to answer
c) Either I or II alone sufficient to answer
d) Both I and II are not sufficient to answer
e) Both I and II are necessary to answer
- 8) In what ratio must a grocer mix two varieties of tea worth Rs. 60 a kg and Rs.65 a kg so that by selling the mixture at Rs. 68.20 a kg he may gain 10%?
a) 3:2 b) 3:4 c) 3:5 d) 4:5
- 9) What is the probability of getting a sum 9 from two throws of a dice?
a) $\frac{1}{8}$ b) $\frac{1}{12}$ c) $\frac{1}{6}$ d) $\frac{1}{9}$
- 10) A can lay railway track between two given stations in 16 days and B can do the same job in 12 days. With the help of C, they did the job in 4 days only. Then, C alone can do the job in:
a) $9\frac{1}{5}$ Days b) $9\frac{2}{5}$ Days c) $9\frac{3}{5}$ Days d) 10 Days

P.T.O.

Q.2

The bar graph given below shows the sales of books (in thousand number) from six branches of a publishing company during two consecutive years 2000 and 2001 (10)

Sales of Books (in thousand numbers) from Six Branches - B1, B2, B3, B4, B5 and B6 of a publishing Company in 2000 and 2001.



- 1) What is the ratio of the total sales of branch B2 for both years to the total sales of branch B4 for both years?
 a) 2:3 b) 3:5 c) 4:5 d) 7:9
- 2) Total sales of branch B6 for both the years is what percent of the total sales of branches B3 for both the years?
 a) 68.54% b) 71.11% c) 73.17% d) 75.55%
- 3) What is the average sales of all the branches (in thousand numbers) for the year 2000?
 a) 73 b) 80 c) 83 d) 88
- 4) Pointing towards a girl, Abhisek says, "This girl is the daughter of only child of my father." What is the relation of Abhisek's wife to that girl?
 a) Daughter b) Mother c) Aunt d) Sister
- 5) If A+B means B is the brother of A; AxB means B is the husband of A; A-B means A is the mother of B and A% B means A is the father of B, which of the following relations shows that Q is the grandmother of T?
 a) Q-P+R%T b) PxQ%R-T c) PxQ%R+T d) P+Q%R-T
- 6) On what dates of April, 1997 did TUESDAY fall?
 a) 1st, 8th, 15th, 22nd, 29th c) 3rd, 10th, 17th, 24th
 b) 2nd, 9th, 16th, 23rd, 30th d) 4th, 11th, 18th, 25th
- 7) If TRANQUIL is coded as 20181141721912, then PERPLEX will be coded as:
 a) 7597356 c) 161514131211
 b) 165181612524 d) 161718191112
- 8) A man walks 5 km towards south and then turns to the right. After walking 3 km he turns to the left and walks 5 km. Now in which direction is he from the starting place?
 a) West b) South c) North-East d) South-West

- 9) In the following question two statements are given. Which are followed by four conclusions (1), (2), (3) and (4). Choose the conclusions which logically follow from the given statements.

Statements: Some questions are answers. Some answers are writers. All the writers are poets.

- 1) Some writers are answers.
 2) Some Poets are questions
 3) All the questions are poets
 4) Some poets are answers.
 a) Only (1) and (2) c) Only (1) and (3)
 b) Only (1) and (4) d) Only (2) and (4)

- 10) 8 11 21 15 18 21 22 ??

- a) 25 18 b) 25 21 c) 25 29 d) 24 21 e) 22 26

- Q.3 A) Each of the question given below consists of four sentences on a topic numbered a to d. There may be an error in any part of the sentence. Read the sentence and identify the part which has the error and write it as the correct answer. If there is no error, mark the answer as (e). (05)

- 1) a) He had taken b) the exam more seriously
 c) if he had known d) how important it is
- 2) a) After the accident b) they discovered that
 c) the house's compound wall d) had been knocked down
- 3) a) The teacher asked b) the student
 c) why he had not d) informed before hand
- 4) a) Unlike most animals b) the crocodile can live
 c) both on land d) and water
- 5) a) By January next year b) we will be living
 c) in Hyderabad d) for thirty years

- B) Do as directed (05)

- 1) Identify the meaning of the underlined words.
 The old couple was murdered in to wee hours
 i) difficult hours ii) peak hours iii) at dawn iv) Night time
- 2) Substitute the underlined word.
 Some writers depict mundane reality
 i) Dull and ordinary ii) exciting iii) Mental suffering iv) Facture
- 3) Identify the correctly spelt word
 i) Suspitions ii) Suspensions iii) Suspicious iv) Suspectous
- 4) Select the most appropriate synonym for the word 'elementary'
 i) Wide ii) Clear iii) Careful iv) Basic
- 5) Pick out the odd pair from the following:
 i) Permit-permission ii) Bless - blessing
 iii) Provide-Providation iv) Bold-boldness

- Q.4 a) Explain the term SWOT. Why SWOT analysis is important incorporate domain? (05)

- b) Distinguish between leadership and management with at least five distinguishing points (05)

OR

P.T.O.

- a) What are the team dynamics? Discuss the challenges of Team building? (05)
- b) How one should avoid stress? Justify your answer with pareto principle and discussing time management matrix. (05)
- Q.5 a) What do you understand by the term communication skills? What should one do to enhance his/her LSRW skills? (05)
- b) What does Group Discussion provide to recruiters? Discuss in detail the reasons of Failure in GD (05)

OR

- a) Presentation skills are the need of today's professional world. How one can make proper structure and flow of a presentation? (05)
- b) Discuss the principles of interviewing. What the general preparation is required to achieve success in the interview? (05)
- Q.6 a) What is meant by business ethics? How will they help to become a professional? (05)
- b) What role does diversity and inclusion play at workplace? (05)

OR

- a) Explain what is meant by Corporate Social Responsibility (CSR) and discuss its implication for management. (05)
- b) Why is the professional behaviour and grooming important at the workplace? Illustrate. (05)

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