



|              | <b>QUESTION BANK</b>   |  |
|--------------|--|--|
|              | <b>Program: B.TECH</b><br><b>Course Name: Q AND R</b><br><b>Academic year: 2023-27</b>   | <b>Course Code: QR</b><br><b>Semester/ Year: 3<sup>rd</sup> /2nd</b> |
|              |  |  |
| <b>S.No.</b> | <b>Questions</b>   | <b>CO*</b>   |
| Q1.          | A shopkeeper sold an article at a discount of 20% and makes a profit of ₹40. Cost price of article is ₹600<br>Quantity I. Marked price of article.<br>Quantity II. An article sold at ₹1800 and cost price of article is ₹1000.<br>Find profit on article.<br>(A) Quantity I > Quantity II<br>(B) Quantity I < Quantity II<br>(C) Quantity I ≥ Quantity II<br>(D) Quantity I ≤ Quantity II<br><b>(E) Quantity I = Quantity II or no relation</b> |  |
| Q2.          | When a person sold an article, his profit percent is 60% of the selling price. If the cost price is increased by 75% and the selling price remains the same, then find decrement in the profit is what percent of the selling price of the article?<br>(A) 25%<br><b>(B) 30%</b><br>(C) 40%<br>(D) 27.5%<br><b>(E) None of these</b>   |  |
| Q3.          | A sold an article for ₹8000 and incurred a loss. Had he sold the article for ₹9800, his gain would have been twice the amount of loss. At what price should the article be sold to earn 20% profit?<br>(A) ₹10840<br>(B) ₹9820<br><b>(C) ₹10320</b><br>(D) ₹9840<br><b>(E) ₹10480</b>  |  |
| Q4.          | Shyamji sold a commodity at a loss of 2%. If he has been able to sell it at a profit of 10% he would have fetched ₹12000 more than what he did. What was the cost price of the commodity?<br>(A) ₹2.5 lakh<br><b>(B) ₹1 lakh</b><br>(C) ₹0.5 lakh<br>(D) ₹1.5 lakh<br>(E) ₹3 lakh  |  |



|      |  |  |
|------|--|--|
| Q5.  | <p>A seller sells his goods at 20% profit. Had he bought it at 10% more and sold it for ₹140 more, he would have earned a profit of 25%. Find the cost price of the goods.</p> <p>(A) ₹600<br/>(B) ₹1000<br/>(C) ₹900<br/>(D) ₹800<br/>(E) ₹750</p>  |  |
| Q6.  | <p>A shopkeeper buys a dozen of bananas for ₹15 out of which 4 Bananas were found to be rotten and could not be sold. He sold the remaining bananas and earned an overall profit of 20%. For how much did the shopkeeper sell 4 bananas which were not rotten?</p> <p>(A) ₹9<br/>(B) ₹5.5<br/>(C) ₹2.25<br/>(D) ₹7<br/>(E) ₹10</p> |  |
| Q7.  | <p>The profit earned when a book is sold for ₹600 is thrice the profit earned when the same book is sold for ₹400. What should be the selling price if seller wants to earn 60% profit?</p> <p>(A) ₹420<br/>(B) ₹440<br/>(C) ₹460<br/>(D) ₹480<br/>(E) ₹500</p>  |  |
| Q8.  | <p>Arun bought an old computer and spent ₹110 on its repairs. He then sold it to Bhola at a profit of 20%. Bhola sold it to Chandan at a loss of 10%. Chandan finally sold it for ₹1188 at a profit of 10%. How much did Arun pay for the article? (A) ₹1050<br/>(B) ₹890<br/>(C) ₹750<br/>(D) ₹640<br/>(E) ₹1290</p>              |  |
| Q9.  | <p>Sumit bought a book from flipkart at ₹500 but flipkart also charged an additional, ₹25 for packaging and ₹50 for delivering the book. For what amount Sumit should sell his book to get a profit of 16%?</p> <p>(A) ₹667<br/>(B) ₹783<br/>(C) ₹612<br/>(D) ₹458<br/>(E) ₹532</p>  |  |
| Q10. | <p>A and B sold two articles at 25% profit and 40% profit respectively. If total profit is ₹178 and the cost price of A is ₹120 less than B. find the CP of B.<br/>(A) ₹310</p>  |  |



|      |  |  |
|------|--|--|
|      | (B) ₹370<br>(C) ₹320<br>(D) ₹430<br>(E) None of these  |  |
|      | <p><b>Direction (11-15):</b> Study the following information carefully and answer the questions given below:</p> <p>Nine persons i.e. P, Q, R, S, T, U, V, W, X were born on different months i.e. January, March, April, May, July, August, September, October, November but not necessarily in same order. Four persons were born between P and T. P was born before T. Q was born in the month of 30 days after July. T was born after Q and before R. There were as many persons born before X as after R. one person was born between U and V. S was born before U and after W.</p> |  |
| Q11. | <p>How many persons were born between X and V?</p> <p>(A) Two<br/>(B) Three<br/>(C) One<br/>(D) Four<br/>(E) More than four</p>  |  |
| Q12. | <p>Who among the following was born on August?</p> <p>(A) R<br/>(B) S<br/>(C) T<br/>(D) P<br/>(E) None of these</p>  |  |
| Q13. | <p>In which of the following month S was born?</p> <p>(A) March<br/>(B) April<br/>(C) June<br/>(D) October<br/>(E) None of these</p>   |  |
| Q14. | <p>If W is related to April, V is related to July then, P is related to which of the following?</p> <p>(A) March<br/>(B) May<br/>(C) June<br/>(D) August<br/>(E) October</p>   |  |
| Q15. | <p>Four of the following five are alike in certain way based from a group, find the one which does not belong to that group?</p> <p>(A) R<br/>(B) S</p>  |  |

|      |  |  |
|------|--|--|
|      | <p>(C) T<br/>(D) U<br/>(E) V</p>   |  |
| Q16. | <p><b>Direction (6-10):</b> Read the following information carefully and answer the following questions.</p> <p>Seven persons A, B, C, D, E, F and G were born in different months viz. January, February, March, April, June, August and December of the same year, but not necessarily in the same order. Not more than three persons were born before B. A was born immediately before the month in which C was born. A was not born in the month having 30 days nor in the month having least number of days. C was not born in the month immediately before D. Only three persons were born between A and E, who is born in one of the months after F. B was not born in the month having 31 days. Only two persons were born between B and D.</p> <p>How many persons were born after G?</p> <p>(A) One<br/>(B) Three<br/>(C) Two<br/>(D) More than Three<br/>(E) No</p> |  |
| Q17. | <p>Who among the following was born immediately before the month in which A was born?</p> <p>(A) G<br/>(B) B<br/>(C) C<br/>(D) No One<br/>(E) None of these</p>  |  |
| Q18. | <p>Who among the following was born in the month having least number of day?</p> <p>(A) F<br/>(B) C<br/>(C) G<br/>(D) D<br/>(E) None of these</p>  |  |
| Q19. | <p>G was born in which of the following month?</p> <p>(A) January<br/>(B) March<br/>(C) August<br/>(D) December<br/>(E) None of these</p>  |  |
| Q20. | <p>B was born in which of the following month?</p> <p>(A) February<br/>(BS) December</p>   |  |



|      |  |  |
|------|--|--|
|      | (C) January<br>(D) March<br><b>(E) None of these</b>   |  |
|      | <p><b>Direction (21-23):</b> Study the following information carefully and answer the questions given below.</p> <p>In a family, there are ten members P, Q, R, S, T, U, V, W and X. P and Q are married couple. S is the only son of R, who is the brother of P. T and W are siblings of S. Q is daughter-in-law of U. X is mother of V, who is sister of P. L is sister-in-law of V, who is unmarried.</p> |  |
| Q21. | <p>How is U related to S?</p> <p>(A) Father<br/>(B) Brother in-law<br/>(C) Grand-son<br/><b>(D) Grand-father</b><br/>(E) None of these</p>   |  |
| Q22. | <p>How is Q related to V?</p> <p><b>(A) Sister in-law</b><br/>(B) Daughter<br/>(C) Cousin<br/>(D) Sister<br/>(E) Mother</p>  |  |
| Q23. | <p>How is L related to W?</p> <p>(A) Sister in-law<br/><b>(B) Mother</b><br/>(C) Daughter<br/>(D) Wife<br/>(E) None of these</p>   |  |
| Q24. | <p>Binni points towards a person and says, "That person is the wife of only son-in-law of my father's only son's wife."<br/>How is Binni related to that person?</p> <p><b>(A) Aunt</b><br/>(B) Mother<br/>(C) Grandmother<br/>(D) Wife<br/>(E) None of the above</p>  |  |
| Q25. | <p>Saurav said pointing towards a lady in a picture, "That person is daughter of my mother's father's only son".<br/>How is the lady in the picture related to Saurav?</p> <p>(A) Father's sister<br/>(B) Mother's sister<br/>(C) Cousin (maternal brother)<br/><b>(D) Cousin (maternal sister)</b></p>  |  |



|      |   |  |
|------|---|--|
|      | (E) None of the above   |  |
|      | <p><b>Direction (26-28):</b> Study the information carefully and answer the questions given below. Five members in a family viz. A, B, C, D and E sitting in row facing north. B is sitting third to the left of his daughter. A is sitting immediate right of D's father in law. C is sitting between A and A's sister who is sitting to the right of his only brother. D who is daughter in law of C is sitting at one of the extreme end of the row. A's wife is not neighbour of A's sister. There is two married couple in the family.</p> |  |
| Q26. | <p>If all the persons are sitting in an alphabetical order from left to right than how many persons position will remain unchanged?</p> <p>(A) One<br/>(B) Two<br/>(C) Three<br/>(D) More than Three<br/>(E) None of these</p>  |  |
| Q27. | <p>What is the position of Daughter in law of C with respect to C's husband?</p> <p>(A) Second to the left<br/>(B) Second to the right<br/>(C) Immediate right<br/>(D) Immediate left<br/>(E) Third to the left</p>   |  |
| Q28. | <p>Which of the following person is sitting exactly middle of the row?</p> <p>(A) Daughter of C<br/>(B) Father of A<br/>(C) Mother-in-law of D<br/>(D) Can't be determined<br/>(E) None of these</p>  |  |
|      | <p><b>Direction (29-30):</b> Read the following information carefully and answer the questions given below it.</p> <p>In a family, there are nine members A, B, C, D, E, F, G, H and I. A and B are a married couple, A being the male member. D is the only son of C, who is the brother of A. E is the sister of D. B is the daughter-in-law of F. H is sister of D. I is the mother of G, who is sister of A?</p>  |  |
| Q29. | <p>How is F related to A?</p> <p>(A) Father<br/>(B) Sister-in-law<br/>(C) Sister<br/>(D) Mother-in-law<br/>(E) None of these</p>  |  |
| Q30. | <p>How is B related to G?</p> <p>(A) Sister-in-law</p>  |  |



|      |  |  |
|------|--|--|
|      | (B) Daughter<br>(C) Cousin<br>(D) Sister<br>(E) Mother   |  |
| Q31. | Direction (31 – 35): Find the wrong number in the following number series ?<br>1, 3, 7, 15, 31, 64, 127<br>(A) 1<br>(B) 3<br>(C) 15<br>(D) 64<br>(E) 127   |  |
| Q32. | 1, 15, 119, 475, 949, 947, 473<br>(A) 947<br>(B) 475<br>(C) 15<br>(D) 473<br>(E) 1   |  |
| Q33. | 250, 260, 291, 314, 340, 370, 405<br>(A) 370<br>(B) 314<br>(C) 260<br>(D) 405<br>(E) 250   |  |
| Q34. | 750, 535, 411, 348, 322, 314, 315<br>(A) 315<br>(B) 750<br>(C) 411<br>(D) 348<br>(E) 314   |  |
| Q35. | 2, 7, 27, 107, 427, 1708, 6827<br>(A) 107<br>(B) 1708<br>(C) 2<br>(D) 6827<br>(E) 7  |  |
| Q36. | Direction (36 – 40): In the following series one number is wrong which does not follow the pattern. Find the wrong number.<br>900, 896, 912, 848, 1105, 80<br>(A) 900<br>(B) 912<br>(C) 896<br>(D) 1105<br>(E) 848 |  |



|      |  |  |
|------|--|--|
| Q37. | 7, 11, 20, 35, 61, 96<br>(A) 7<br>(B) 35<br>(C) 61<br>(D) 11<br>(E) 97   |  |
| Q38. | 2, 3, 7, 22, 89, 459<br>(A) 3<br>(B) 22<br>(C) 459<br>(D) 7<br>(E) 89  |  |
| Q39. | 2, 4, 12, 48, 240, 1448<br>(A) 4<br>(B) 12<br>(C) 240<br>(D) 1448<br>(E) 2   |  |
| Q40. | 2, 3.4, 6.2, 11.8, 25, 45.4, 90.2<br>(A) 25<br>(B) 11.8<br>(C) 45.4<br>(D) 3.4<br>(E) 90.2   |  |
| Q41. | In a certain code language "FRIED" is written as "QEJCD", "PLANT" is written as "KOBMS" how is "SHOWN" written in that code language?<br>(A) RGPVM<br>(B) VMPRG<br>(C) GRPMV<br>(D) TIPXO<br>(E) GRNMV                       |  |
| Q42. | In a certain code language MOBILE is written as OQDKNG and TABLET is written as VCDNGV then how can we write COMPUTER in that code language?<br>(A) EQOSWVGT<br>(B) EQORWVGT<br>(C) EQORWVGU<br>(D) FQORWVGT<br>(E) GQORWVGT |  |
| Q43. | If in a certain code language, IMPETUS is written as JLQDUTT and PENSIVE is written as QDORJUF, then how will CHANGED be written in that language?<br>(A) DGBMHDP<br>(B) DGBMHDN   |  |





|      |  |  |
|------|--|--|
|      | (C) DGBMHED<br>(D) DGBMHDE<br>(E) DEVGHRN  |  |
| Q45. | In a certain code language, 'HOCKEY' is written as 'IPDJDX' and 'SKETCH' is written as 'TLFSBG'. What will be the code for 'ENDING' in that code language?<br>(A) GOEHNH<br>(B) FOEHMH<br>(C) GMEHOH<br>(D) FMEHMH<br>(E) FOEHMF |  |
| Q46. | If —3265ll is the input, output will be —6532ll. Similarly, for input —7489ll, output will be —9874ll. So, what will be the output of input —8154ll?<br>(A) 8451<br>(B) 5481<br>(C) 8541<br>(D) 4581<br>(E) None of these        |  |
| Q47. | Four of the following given five follows a certain pattern find the one that does not belong to that group?<br>(A) ECA<br>(B) QOM<br>(C) GEC<br>(D) FBD<br>(E) MKI   |  |
| Q48. | Find the odd one out?<br>(A) JQK<br>(B) BYC<br>(C) LRM<br>(D) CXD<br>(E) OPX   |  |
| Q49. | Select the one which is different from other four alternatives.<br>(A) MN<br>(B) AZ<br>(C) BY<br>(D) JP<br>(E) EV  |  |
| Q50. | Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?<br>(A) DGIK<br>(B) ZWUS<br>(C) KNPR<br>(D) QTVX<br>(E) HKM                                       |  |

|      |   |  |
|------|---|--|
| Q51. | <p><b>Direction (01-02):</b> Study the following information carefully and answer the questions given below:</p> <p>Eight boxes are placed one above another. Box G is placed above box H. Three boxes are placed between box M and box N which is placed just above box P. Box Q is placed just above box G. Only one box is placed below box M. Box J is placed above box K and below box H.</p> <p>Which of the following boxes placed at the topmost position?</p> <p>(A) J<br/>(B) K<br/><b>(C) Q</b><br/>(D) P<br/>(E) None of these</p>  |  |
| Q52. | <p>How many boxes are placed below box H?</p> <p>(A) Two<br/><b>(B) Three</b><br/>(C) One<br/>(D) None<br/>(E) More than three</p>  |  |
| Q53. | <p><b>Direction (53-54):</b> Study the following information carefully and answer the questions given below:</p> <p>On five different days of the week starting from Tuesday to Saturday, five persons P, Q, R, S, and T are going to watch movies but not necessarily in the same order. The person belonging to China goes to watch the movie after Q. Two persons are going to watch the movie between P and T. T goes immediately before R. The one who belongs to Nepal goes immediately before the one who belongs to Bhutan. Q belongs to England and goes to watch the movie on Thursday. The one who belongs to China does not go to watch the movie on Friday. P does not belong to India and China.</p> <p>Who among the following belongs to Bhutan?</p> <p>(A) P<br/>(B) T<br/><b>(C) S</b><br/>(D) R<br/>(E) The one who goes to watch movie on Tuesday</p> |  |
| Q54. | <p>Which of the following statement is not true?</p> <p>(A) P goes to watch movie on Tuesday<br/>(B) All are true<br/>(C) Q goes after P<br/>(D) R belongs to China<br/><b>(E) T goes on Thursday</b></p>   |  |
|      | <p><b>Directions (55 – 56) :</b> Answer the questions based on the information given below:</p>   |  |



|      |   |  |
|------|---|--|
| Q55. | <p>Certain number of persons sits in a straight row facing north direction. Only one person sit to the left of T and no one sit to the right of U. Six persons sit between T and R. Two persons sit between R and Q. S sits 2nd to the left of Q. P sits 3rd to the right of R. Number of persons between T and S is equal to the number of persons between P and U.</p> <p>How many persons sit in the row?</p> <p>(A) 12<br/>(B) 14<br/>(C) 13<br/>(D) 15<br/>(E) None of these</p>   |  |
| Q56. | <p>How many persons sit to the right of Q?</p> <p>(A) Six<br/>(B) Five<br/>(C) Seven<br/>(D) Eight<br/>(E) None of these</p>  |  |
| Q57. | <p>Directions (57– 58) : Answer the questions based on the information given below.</p> <p>Fourteen persons are sitting in a parallel row such that seven persons sit in each row. M, N, O, P, Q, R and S sit in row 1 and A, B, C, D, E, F and G sit in row 2. Persons in row 1 face south while persons in row 2 face north. Persons in row 1 and row 2 are facing towards each other. M sits in the middle of the row. Three persons sit between O and P, who sits opposite to F. One person sits between F and A. C sits to the immediate left of D. M sits opposite to A. C does not sit opposite to O. G sits opposite to N, who is not adjacent to P. B sits to the right of G. P is not adjacent to S.</p> <p>Who among the following sits opposite to Q?</p> <p>(A) E<br/>(B) B<br/>(C) D<br/>(D) G<br/>(E) Cannot be determined</p> |  |
| Q58. | <p>How many persons sit to the right of P in same row?</p> <p>(A) Three<br/>(B) Four<br/>(C) Six<br/>(D) Five<br/>(D) None of these</p>   |  |
|      | <p>Directions (59 – 60): Answer the questions based on the information given below:</p> <p>Seven persons sit around a circular table. Some of them face towards the centre while others face outside. C sits 2nd to the right of E and both face</p>  |  |



**DEV BHOOMI**  
—UTTARAKHAND—  
**UNIVERSITY**

(Notified by Govt. of India u/s 2(f) of the U.G.C. Act, 1956)

|      |  |  |
|------|--|--|
| Q59. | <p>same direction. G sits beside C and faces outside. B sits 3rd to the left of G. F is the neighbor of A but neither of them sits beside C. D faces outside. Neither D nor A sits 2nd to the left of G. F and A face same direction as E.</p> <p>Who sits 2nd to the right of B?</p> <p>(A) A<br/>(B) D<br/>(C) E<br/>(D) Can't be determined<br/>(E) None of these</p> |  |
| Q60. | <p>Who sits 4th to the right of A?</p> <p>(A) D<br/>(B) E<br/>(C) B<br/>(D) None of these<br/>(E) G</p>  |  |