

Time: $\mathbf{1}^{1 / 2}$ Hours

SNS College of Technology, Coimbatore-35.
(Autonomous)
B.E/B.Tech Internal Assessment -II Academic Year 2023-2024 (Even)

Fourth Semester 19GET276 - VQAR II (Common to all branches)

Maximum Marks: 50

Answer All Questions PART - A (20x 1 = 20Marks)

| 1. | What is the probability of getting a sum 9 from two throws of a dice? |  |
| :---: | :---: | :---: |
|  | a) $1 / 6$ | b) $1 / 8$ |
|  | c) $1 / 9$ | d) $1 / 12$ |
| 2. | One card is drawn at random from a pack of 52 cards. What is the probability that the card drawn is a face card (Jack, Queen and King only)? |  |
|  | a)1/13 | b) $3 / 13$ |
|  | c) $1 / 4$ | d) $9 / 52$ |
| 3. | Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5 ? |  |
|  | a) $1 / 2$ | b) $2 / 5$ |
|  | c) $8 / 15$ | d) $9 / 20$ |
| 4. | A card is drawn from a pack of 52 cards. The probability of getting a queen of club or a king of heart is: |  |
|  | a) $1 / 13$ | b) $2 / 13$ |
|  | c) $1 / 26$ | d) $1 / 52$ |
| 5. | Two dice are tossed. The probability that the total score is a prime number is: |  |
|  | a) $1 / 6$ | b) $5 / 12$ |
|  | c) $1 / 2$ | d) $7 / 9$ |
| 6. | A bag contains 4 white, 5 red and 6 blue balls. Three balls are drawn at random from the bag. The probability that all of them are red, is: |  |
|  | a) $1 / 22$ | b) $3 / 22$ |
|  | c) $2 / 91$ | d) $2 / 77$ |
| 7. | Input: 56 apple 85 zigbee 12 ball What is the output? |  |
|  | a) 85 apple 56 ball 12 zigbee | b) 85 apple 56 ball 12 zigbee |
|  | c) 855612 apple ball zigbee | d) 855612 apple ball zigbee |
| 8. | In which year was Rahul born? <br> Statements: <br> I. Rahul at present is 25 years younger to his mother. <br> II.Rahul's brother, who was born in 1964, is 35 years younger to his mother. |  |


|  | a) I alone is sufficient while II alone is not sufficient | b) II alone is sufficient while I alone is not sufficient |
| :---: | :---: | :---: |
|  | c) Either I or II is sufficient | d) Both I and II are sufficient |
| 9. | Statements: Some actors are singers. All the singers are dancers. Conclusions: <br> 1. Some actors are dancers. <br> 2. No singer is actor. |  |
|  | a) Only (1) conclusion follows | b) Only (2) conclusion follows |
|  | c) Either (1) or (2) follows | d) Neither (1) nor (2) follows |
| 10. | Statements: <br> I Standard of living among the middle class society is constantly going up since part of few years. <br> II Indian Economy is observing remarkable growth. |  |
|  | a) Statement I is the cause and statement II is its effect. | b) Statement II is the cause and statement I is its effect. |
|  | c) Both the statements I and II are independen causes. | d) Both the statements I and II are effects of independent causes. |
| 11. | Statements: All the harmoniums are instruments. All the instruments are flutes. Conclusions: <br> 1. All the flutes are instruments. <br> 2. All the harmoniums are flutes. |  |
|  | a) Only (1) conclusion follows | b) Only (2) conclusion follows |
|  | c) Either (1) or (2) follows | d) Neither (1) nor (2) follows |
| 12. | $\begin{aligned} & \text { Statements: I. Importance of Yoga and exercise is being realized by all sections of the society. } \\ & \text { II. There is an increasing awareness about health in the society particularly among } \\ & \text { middle ages group of people. } \end{aligned}$ |  |
|  | a) Statement I is the cause and statement II is its effect. | b) Statement II is the cause and statement I is its effect. |
|  | c) Both the statements I and II are independent causes. | d) Both the statements I and II are effects of independent causes. |
| 13. | Statement: Anger is energy, in a more proactive way and how to channelize it is in itself a skill. Assumptions: <br> I. Anger needs to be channelized. <br> II. Only skillful people can channelize anger to energy. |  |
|  | a) If only assumption I is implicit. | b) If only assumption II is implicit. |
|  | c) If either I or II is implicit | d) If neither I nor II is implicit |
| 14. | The cause of corruption in medical education is shortage of seats, and fewer doctors than required for the population and even fewer specialists. <br> Which of the following can be inferred from the above? |  |
|  | a) Students pay bribes to the management of institutions to avail seats. | b) The criteria to select students to fill medical seats are flexible |
|  | c) There is a set standard regarding the doctors to population ratio | d) Most of the doctors are general physicians |


| 15. | Statement: "Enjoy your challenges" - an advertisement of a car brand. Assumptions: <br> I. People wish to enjoy challenges. <br> II. There are people who are willing to buy a car. |  |
| :---: | :---: | :---: |
|  | a) If only assumption I is implicit. | b) If only assumption II is implicit. |
|  | c) If either I or II is implicit. | d) If neither I nor II is implicit. |
| 16. | 1. Milky way 2. Sun 3. Moon 4. Earth 5. Stars |  |
|  | a) $4,3,2,5,1$ | b) $3,4,2,5,1$ |
|  | c) $2,3,4,5,1$ | d) $1,4,3,2,5$ |
| 17. | If the dice (I), (II) and (III) have even number of dots on their bottom faces, then what would be the total number of dots on their top faces? |  |
|  | a) 7 | b) 11 |
|  | c) 12 | d) 14 |
| 18. | Two positions of dice are shown below. How many points will appear on the opposite to the face containing 5 points? |  |
|  | a) 3 | b) 1 |
|  | c) 2 | d) 4 |
| 19. | 1.Site 2. Plan 3. Rent 4. Money 5. Building |  |
|  | a) $4,1,2,5,3$ | b) $3,4,2,5,1$ |
|  | c) $2,3,5,1,4$ | d) $1,2,3,5,4$ |
| 20. | If the odd numbered dice have even number of dots on their top faces, then what would be the total number of dots on the top faces of their dice? |  |
|  | a) 8 | b) 10 |
|  | c) 12 | d) 14 |

## PART - B ( $15 \times 2=30$ Marks)

| 21. | Input: Tank 1535 Sweet 3926 Ignite Brush Assumption Kite 8060 What is the output? |  |
| :---: | :---: | :---: |
|  | a) 80 Assumption 60 Brush 49 Ignite 39 Kite 35 Sweet 26 Tank 15 | b) 80 Assumption 60 Brush 49 Ignite 39 Kite 35 Sweet 26 Tank 15 |
|  | c) 35 Sweet 26 Tank 1580 <br> Assumption 60 Brush | d) 35 Sweet 26 Tank 1580 Assumption 60 Brush |
| 22. | Question: What will be the total weight of 10 poles, each of the same weight? <br> Statements: <br> I. One-fourth of the weight of each pole is 5 kg . <br> II. The total weight of three poles is 20 kilograms more than the total weight of two poles. |  |
|  | a) I alone is sufficient while II alone is not sufficient | b) II alone is sufficient while I alone is not sufficient |
|  | c) Either I or II is sufficient | d) Neither I nor II is sufficient |


| 23. | Statement: All green are blue \& All blue are white. Conclusions: <br> 1. Some blue are green. <br> 2. Some white are green. <br> 3. Some green are not white. <br> 4. All white are blue. |  |
| :---: | :---: | :---: |
|  | a) Only (1) and (2) | b) Only (1) and (3) |
|  | c) Only (1) and (4) | d) Only (2) and (4) |
| 24. | Statement: No door is dog \& All the dogs are cats. Conclusions: <br> 1. No door is cat. <br> 2. No cat is door. <br> 3. Some cats are dogs. <br> 4. All the cats are dogs. |  |
|  | a) Only (2) and (4) | b) Only (1) and (3) |
|  | c) Only (3) and (4) | d) Only (3) |
| 25. | Statement: Should Indian scientists working abroad be called back to India? <br> Arguments: <br> I. Yes, they must serve the motherland first and forget about discoveries, honors, facilities and all. <br> II. No, we have enough talent, let them stay where they want. |  |
|  | a) If only argument I is strong | b) If only argument II is strong |
|  | c) If either I or II is strong | d) If neither I nor II is strong |
| 26. | In a lottery, there are 10 prizes and 25 blanks. A lottery is drawn at random. What is the probability of getting a prize? |  |
|  | a) $1 / 10$ | b) $2 / 5$ |
|  | c) $2 / 7$ | d) $5 / 7$ |
| 27. | From a pack of 52 cards, two cards are drawn together at random. What is the probability of both the cards being kings? |  |
|  | a) $1 / 15$ | b) $25 / 57$ |
|  | c) $35 / 256$ | d) $8 / 221$ |
| 28. | Question: Among T, V, B, E and C, who is the third from the top when arranged in the descending order of their weights? <br> Statements: <br> I. B is heavier than T and C and is less heavier than V who is not the heaviest. <br> II. C is heavier than only T. |  |
|  | a) I alone is sufficient while II alone is not sufficient | b) II alone is sufficient while I alone is not sufficient |
|  | c) Either I or II is sufficient | d) Neither I nor II is sufficient 4 hours |
| 29. | Statement: Population increase coupled with depleting resources is going to be the scenario of many developing countries in days to come. <br> Conclusions: <br> I. The population of developing countries will not continue to increase in future. <br> II. It will be very difficult for the governments of developing countries to provide decent quality of life. |  |
|  | a) If only conclusion I follows | b) If only conclusion II follows |
|  | c) If either I or II follows | d) If neither I nor II follows |


| 30. | Question: How many students in a class play football? <br> Statements: <br> Only boys play football. <br> There are forty boys and thirty girls in the class. |  |
| :--- | :--- | :--- |
|  | a) I alone is sufficient while II <br> alone is not sufficient | b) II alone is sufficient while I alone is not sufficient |
| c) Either I or II is sufficient | d) Neither I nor II is sufficient |  |
| 31. | Statement: <br> The 'M' state government has decided hence forth to award the road construction contracts through <br> open tenders only. <br> Courses of action: <br> I. The 'M' state will not be able to get the work done swiftly as it will have to go through tender and <br> other procedures. <br> II. Hence forth the quality of roads constructed may be far better. |  |
| a) If only I follows | b) If only II follows |  |
| c) If either I or II follows | d) If neither I nor II follows |  |
| 32. | Statement: Should vacations of court judges be reduced? <br> Arguments: <br> I. Yes, it will speed up judicial process and many people are likely to get justice in reasonable time. <br> II. Yes, it is a sign of British legacy, why should we carry it further? |  |
| a) If only argument I is strong | b) If only argument II is strong |  |
|  | c) If either I or II is strong | d) If neither I nor II is strong |
| 33. | Statement: Should Indian scientists working abroad be called back to India? <br> Arguments: <br> I. Yes, they must serve the motherland first and forget about discoveries, honors, facilities and all. <br> II. No, we have enough talent, let them stay where they want. |  |
| a) If only argument I is strong | b) If only argument II is strong |  |
| c) If either I or II is strong | d) If neither I nor II is strong |  |
| 34. | Two dice are thrown simultaneously. What is the probability of getting two numbers whose product is <br> even? |  |
| a) $1 / 2$ | b) $3 / 4$ |  |
| c) 3/8 | d) 5/16 |  |
| 35. | In a class, there are 15 boys and 10 girls. Three students are selected at random. The probability that 1 <br> girl and 2 boys are selected, is: |  |
| a) $21 / 46$ | b) $25 / 117$ |  |
| c) 1/50 | d) $3 / 25$ |  |

