## IAE2 QUESTION BANK

| 1. | The complement of $\mathrm{P}(\mathrm{A})$ is |  |
| :---: | :---: | :---: |
|  | a) $\mathbf{1 - P}(\mathrm{A})$ | b) $1+\mathrm{P}(\mathrm{A})$ |
|  | c) $1 / \mathrm{P}(\mathrm{A})$ | d) None of these |
| 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. | Input: 56 apple 85 zigbee 12 ball, What is the output? |  |
|  | a) 85 apple 56 ball 12 zigbee | a) 85 apple 56 ball 12 zigbee |
|  | c) 855612 apple ball zigbee | c) 855612 apple ball zigbee |
| 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. | Statements : <br> No dancers are actors. Some actors are artists. No artist is artisan. <br> Conclusions: <br> I. Some artists are not dancers. <br> II. Some artisans are not actors |  |
|  | a)If only conclusion I follow | b)If only conclusion II follow |
|  | c) If neither conclusion I nor conclusion II follows | d) If both the conclusions follow |
| 8. | How much was the total sale of the company? <br> Statements: <br> I. The company sold 8000 units of product A each costing Rs. 25. <br> II. This company has no other product line. |  |
|  | 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: <br> All rivers are seas. <br> All lakes are seas. <br> Some seas are not oceans. <br> Conclusions: <br> I. Some rivers are not lakes. <br> II. Some oceans may not be seas. |  |
| :---: | :---: | :---: |
|  | a) If only conclusion I follow | b) If only conclusion II follow |
|  | c) If neither conclusion I nor conclusion II follows | d) If both the conclusions follow |
| 10. | 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 |
| 11. | Statements: Some actors are singers. All the singers are dancers. Conclusions: <br> Some actors are dancers. 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 |
| 12. | 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) $1 / 52$ |
| 13. | Statements: Some mangoes are yellow. Some tixo are mangoes. Conclusion: <br> Some mangoes are yellow. Some tixo are mangoes |  |
|  | a) Only (1) conclusion follows | b) Only (2) conclusion follows |
|  | c) Either (1) or (2) follows | d) Neither (1) nor (2) follows |
| 14. | 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 independent causes. | d) Both the statements I and II are effects of independent causes. |
| 15. | Statements: Some ants are parrots. All the parrots are apples. <br> Conclusions: <br> All the apples are parrots. <br> Some ants are apples. |  |
|  | a) Only (1) conclusion follows | b) Only (2) conclusion follows |
|  | c) Either (1) or (2) follows | d) Neither (1) nor (2) follows |
| 16. | 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 follo | b) Only (2) conclusion follows |
|  | c) E | d) Neither (1) nor (2) |
| 17. | Statements: I. Importance of Yoga and exercise is being realized by all sections of the society. <br> II. There is an increasing awareness about health in the society particularly among middle ages group of people. |  |
|  | 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. |
| 18. | Statements: <br> Standard of living among the middle class society is constantly going up since part of few years. 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 independent causes | d) Both the statements I and II are effects of independent causes. |
| 19. | Statements: <br> The staff of Airport Authorities called off the strike they were observing in protest against privatization. <br> The staff of Airport Authorities went on strike anticipating a threat to their jobs. |  |
|  | 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. |
| 20. | Statement: An increasing number of graduates produced by Indian universities are unemployable. Courses of Action: <br> (I). Colleges and institutes of higher learning should be given greater autonomy to decide the course content. <br> (II). World class foreign universities should be encouraged to set up campuses in India. |  |
|  | a) If only (I) follows. | b) If only (II) follows. |
|  | c) If either (I) or (II) follows. | d) If neither (I) nor (II) follows. |
| 21. | Statement: The dolphin population in India has been decreasing sharply over the past few years. Courses of Action: <br> (I). Dolphins should be declared an endangered species and bred in aquariums or protected areas. <br> (II). Locals should be enlisted to protect dolphins. |  |
|  | a) If only (I) follows. | b) If both (I) and (II) follow. |
|  | c) If either (I) or (II) follows. | d) If neither (I) nor (II) follows. |
| 22. | Statement: <br> Anger is energy, in a more proactive way and how to channelize it is in itself a skill. <br> 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 |

23. The cause of corruption in medical education is shortage of seats, and fewer doctors than required for the population and even fewer specialists.
Which of the following can be inferred from the above?
a) Students pay bribes to the management of
b) The criteria to select students to fill medical institutions to avail seats.
c) There is a set standard regarding the doctors to population ratio seats are flexible
d) Most of the doctors are general physicians
24. Statement: "Enjoy your challenges" - an advertisement of a car brand.

Assumptions:
I. People wish to enjoy challenges.
II. There are people who are willing to buy a car.
a) If only assumption I is implicit.
c) If either I or II is implicit.
b) If only assumption II is implicit.
d) If neither I nor II is implicit.
25. The total surface area of a solid hemisphere is $942 \mathrm{~cm}^{2}$. Its Volume (in $\mathrm{cm}^{3}$ ) is closest to: (Take $\pi=3.14$ )
a) 2089
b)2093
c) 2037
d)2097
26. Find the radius of semi-circle whose perimeter is 72 cm . (Take $\pi=22 / 7$ )

| a) 14 cm | b) 11 cm |
| :--- | :--- |
| c) 56 cm | d) 24 cm |

27. 28. Milky way 2. Sun 3. Moon 4. Earth 5. Stars
a) $4,3,2,5,1$
b) $\mathbf{3 , 4 , 2 , 5 , 1}$
c) $2,3,4,5,1$
d) $1,4,3,2,5$
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. 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
3. 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
4. 5. Site 2. Plan 3. Rent 4. Money 5. Building
a) $\mathbf{4 , 1 , 2 , 5 , 3}$
b) $3,4,2,5,1$
c) $2,3,5,1,4$
d) $1,2,3,5,4$
1. 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
2. The probability of all the events in a sample space adds up to

| a) 0 | b) 1 |
| :--- | :--- |
| c) 2 | d) 3 |

34. Choose the box that is similar to the box formed from the given sheet of paper (X).


(1)

(2)

(3)

(4)
a) 1 and 2 only
b) 2 and 4 only
c) 2 and 3 only
d) 1 and 4 only
35. Choose the box that is similar to the box formed from the given sheet of paper (X).

(X)

(1)

(2)

(3)

(4)
a) 1 and 3 only
b) 2,3 and 4 only
c) 2 only
d) 3 and 4 only
36. Which of the following will be step III for the input below?

Input $\begin{array}{lllllllll}04 & 22 & 18 & 29 & 31 & 16 & 11 & 03\end{array}$
a) $22 \quad 29 \quad 04 \quad 18 \quad 16 \quad 11 \quad 03$
b) $\begin{array}{lllllll}31 \quad 04 \quad 22 \quad 18 \quad 29 \quad 16 \quad 11 \quad 03\end{array}$
c) $31 \quad 29 \quad 04 \quad 22 \quad 18 \quad 16 \quad 11 \quad 03$
d) 3129220418161103
37. At which step does we get the final output of the given input?

Input: $\begin{array}{llllll}11 & 06 & 24 & 47 & 05 & 03\end{array}$
a) Step II
b) Step III
c) Step IV
d) Step V
38. Which of the following is third to the right of fifth element from left end in step IV?

Input: around 35 world 57 meet 91 several 39 problematic 43 instances 19
a) Problematic
b) 35
c) Meet
d) 57
39. Which of the following comes exactly between 'around' and 'world' in the final output?

Input: around 35 world 57 meet 91 several 39 problematic 43 instances 19
a) 39
b) Several
c) 35
d) 19
40. Question: Among T, V, B, E and C, who is the third from the top when arranged in the descending order of their weights?
Statements:
I. B is heavier than T and C and is less heavier than V who is not the heaviest.
II. C is heavier than only T.

| a) I alone is sufficient while II alone is not <br> sufficient | b) II alone is sufficient while I alone is not <br> sufficient |
| :--- | :--- |
| c) Either I or II is sufficient | d) Neither I nor II is sufficient 4 hours |
| Input: Tank 15 35 Sweet 39 26 Ignite Brush Assumption Kite 80 60 <br> What is the output? | a) 80 Assumption 60 Brush 49 Ignite 39 Kite 35 <br> Sweet 26 Tank 15 |
| b) 80 Assumption 60 Brush 49 Ignite 39 Kite 35 Sweet <br> 26 Tank 15 |  |


|  | c) 35 Sweet 26 Tank 1580 Assumption 60 Brush | d) 35 Sweet 26 Tank 1580 Assumption 60 Brush |
| :---: | :---: | :---: |
| 42. | Statements: All the windows are doors. No door is a wall. Conclusions: <br> Some windows are walls. <br> No wall is a door. |  |
|  | a) Only (1) conclusion follows | b) Only (2) conclusion follows |
|  | c) Either (1) or (2) follows | d) Neither (1) nor (2) follows |
| 43. | 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 |
| 44. | Statements: All cups are books. All books are shirts. <br> Conclusions: <br> Some cups are not shirts. <br> Some shirts are cups |  |
|  | a) Only (1) conclusion follows | b) Either (1) or (2) follows |
|  | c) Only (2) conclusion follows | d) Neither (1) nor (2) follows |
| 45. | The ratio between the perimeter and the breadth of a rectangle is $5: 1$. If the area of the rectangle is $216 \mathrm{sq} . \mathrm{cm}$ What is the length of the rectangle? |  |
|  | a) 36 cm | b) 18 cm |
|  | c) 20 cm | d) None of these |
| 46. | Statements: 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) |
| 47. | Statements: 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) |
| 48. | Statement: <br> 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, honours, 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 |
| 49. | 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) $5 / 7$ |
| 50. | 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) $8 / 221$ |
| 51. | The area of a triangle is $\qquad$ of the area of the parallelogram on the same base and between the same parallels. |  |
|  | a) Same as | b) triple |
|  | c) half | d) double |
| 52. | 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 |
| 53. | 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 |
| 54. | 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 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 |
| 55. | Choose the box that is similar to the box formed from the given sheet of paper ( X ). <br> (X) <br> (1) <br> (3) <br> (4) |  |
|  | a) 1 only | b) $\mathbf{2} \mathbf{~ o n l y}$ |
|  | c) 1 and 3 only | d) 1,2,3 and 4 only |


| 56. | Choose the box that is similar to the box formed from the given sheet of paper (X) <br> (1) <br> (2) <br> (3) <br> (4) |  |
| :---: | :---: | :---: |
|  | a) 2 and 3 only | b) 1,3 and 4 only |
|  | c) 2 and 4 only | d) 1 and 4 only |
| 57. | Statement: <br> The ' M ' state government has decided hence forth to award the road construction contracts through 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 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 |
| 58. | Statement: Cases of road accidents are increasing constantly, particularly in the urban areas. Courses of Action: <br> (I). Transport authorities in the urban areas should impose stringent norms for maintenance of vehicles. <br> (II). Traffic police should severely punish those found to be violating traffic rules. |  |
|  | a) If only (I) follows. | b) If only (II) follows. |
|  | c) If either (I) or (II) follows. | d) If neither (I) nor (II) follows. |
| 59. | 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 |
| 60. | Statements: <br> The Government has decided to hold a single entrance test for admission to all the medical colleges in India. <br> The State Government has debarred students from other States to apply for the seats in the medical colleges in the State. |  |
|  | a) Both the statements I and II are effects of some common cause. | 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. |
| 61. | How many steps will be required to complete the given input? <br> Input: never 42 leaved 39 important object 5346 anyplace 74 |  |
|  | a) Three | b) Seven |
|  | c) $\operatorname{Six}$ | d) Five |

62. Which of the following steps will be last but one of the given input?

Input: never 42 leaved 39 important object 5346 anyplace 74
a) 39744653 important 42 never leaved object anyplace
b) 3974465342 important never leaved object anyplace
c) 3974464253 never leaved object anyplace important
d) 3974465342 important never object leaved anyplace
63. Input: 555 cat 651 dog 481 gold 231 modi 631 ruchi In which step we will get the following output?

6511555231481 modi ruchi cat dog gold.

| a) Step 5 | b) Step 4 |
| :--- | :--- |
| c) Step 3 | d) There is no such step |

64. Statement: Should Indian scientists working abroad be called back to India?

Arguments:
I. Yes, they must serve the motherland first and forget about discoveries, honours, facilities and all. 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
65. Two dice are thrown simultaneously. What is the probability of getting two numbers whose product is even?
a) $1 / 2$
b) $3 / 4$
c) $3 / 8$
d) $5 / 16$
66. In a class, there are 15 boys and 10 girls. Three students are selected at random. The probability that 1 girl and 2 boys are selected, is:
a) $21 / 46$
b) $25 / 117$
c) $1 / 50$
d) $3 / 25$
67. If the events have the same theoretical probability of happening, then they are called
a) Mutually exclusive events
b) Mutually exhaustive events
c) Equally likely events
d) Impossible events
68. Input : host $15 \quad 32$ page 43 over mother 92 Which of the following step will be the last but one?
a) IV
b) V
c) VI
d) VII
69. $\quad$ Step II of an input is : 67 cat $12 \quad 25$ dog fight man 42 Which of the following will be step V?

| a) 67 | cat | 42 | $\operatorname{dog}$ | 25 | fight | 12 | man | b) $\mathbf{6 7}$ | cat | $\mathbf{4 2}$ | $\mathbf{d o g}$ | $\mathbf{2 5}$ | $\mathbf{1 2}$ | fight man |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c) 67 | cat | 42 | $\operatorname{dog}$ | 12 | 25 | fight | man | d) 67 | cat | 42 | 12 | 25 | dog | fight man |

70. Find the area of a rhombus whose diagonals are given to be of lengths 6 cm and 7 cm .

| a) $30 \mathrm{~cm}^{2}$ | b) $28 \mathrm{~cm}^{2}$ |
| :--- | :--- |
| c) $42 \mathrm{~cm}^{2}$ | d) $21 \mathrm{~cm}^{2}$ |

