# VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD 

# B.E. (CBCS) VI-Semester Main Examinations, January-2021 <br> Critical Reasoning <br> (Open Elective-V) 

Max. Marks: 60
Time: 2 hours
Note: Answer any NINE questions from Part-A and any THREE from Part-B
Part-A $(9 \times 2=18$ Marks $)$

| Q. No. | Stem of the question | M | L | CO | PO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | i. Among a group of students, 50 played cricket, 50 played hockey and 40 played volley ball. 15 played both cricket and hockey, 20 played both hockey and volley ball, 15 played cricket and volley ball and 10 played all three. If every student played at least one game, find the number of students and how many played only cricket? <br> a. 15 <br> b. 25 <br> c. 30 <br> d. 35 | 1 | 2 | 1 | 12 |
| 2. | ii. Nurse Kemp has worked more night shifts in a row than Nurse Rogers, who has worked five. Nurse Miller has worked fifteen night shifts in a row, more than Nurses Kemp and Rogers combined. Nurse Calvin has worked eight night shifts in a row, less than Nurse Kemp. How many night shifts in a row has Nurse Kemp worked? <br> a. eight <br> b. nine <br> c. ten <br> d. eleven | 1 | 3 | 1 | 12 |
|  | i. Of 60 students in a class, anyone who has chosen to study maths elects to do physics as well. But no one does maths and chemistry, 16 do physics and chemistry. All the students do at least one of the three subjects and the number of people who do exactly one of the three is more than the number who do more than one of the three. What are the maximum and minimum number of people who could have done Chemistry only? <br> a. 40,0 <br> b. 28,0 <br> c. 38,2 <br> d.44, 0 | 1 | 2 | 1 | 12 |
|  | ii. Four friends in the sixth grade were sharing a pizza. They decided that the oldest friend would get the extra piece. Randy is two months older than Greg, who is three months younger than Ned. Kent is one month older than Greg. Who should get the extra piece of pizza? <br> a. Randy <br> b. Greg <br> c. Ned <br> d. Kent | 1 | 3 | 1 | 12 |
| 3. | i. In each of the following questions, arrange the given words in a meaningful sequence and thus find the correct answer from alternatives. <br> 1. Yarn 2.Plant 3.Saree 4.Cotton 5.Cloth <br> a. $5,4,1,2,3$ <br> b. $2,4,5,1,3$ <br> c. $2,4,1,5,3$ <br> d. $3,1,4,5,2$ | 1 | 1 | 2 | 12 |
|  | ii. In each of the following questions, arrange the given words in a meaningful sequence and thus find the correct answer from alternatives. <br> 1.Teapot 2.Kettle 3.Milk and water 4.Boil 5.Tea leaves <br> a. $2,4,1,5,3$ <br> b. $2,3,5,1,4$ <br> c. $2,4,1,5,3$ <br> d. $2,3,5,4,1$ | 1 | 1 | 2 | 12 |
| 4. | i. Fact 1: Islands are surrounded by water. <br> Fact 2: Maui is an island. <br> Fact 3: Maui was formed by a volcano. <br> If the first three statements are facts, which of the following statements must also be a fact? | 1 | 4 | 2 | 12 |

I. Maui is surrounded by water.
II. All islands are formed by volcanoes.
III. All volcanoes are on islands.
a. I only
b. III only
c. I and II only
d. None of the statements is a known fact.
ii. Fact 1: Mary said, "Ann and I both have cats."

Fact 2: Ann said, "I don't have a cat."
Fact 3: Mary always tells the truth, but Ann sometimes lies.
If the first three statements are facts, which of the following statements must also be a fact?

1. Ann has a cat.
II. Mary has a cat.
III. Ann is lying.
a. II only
b. I and II only
c. I, II, and III
d. None of the statements is a known fact.
i. While firing crackers, a child gets severe burns on the hand. What would you do?
a. Dip the child's hands in cold water till there is no more burning sensation.
b. Wash the hands with Dettol.
c. Send someone to call the doctor.
d. Apply some ointment on the affected area.
ii. If you find yourself in a situation where you are required to make a power - point presentation and you are already bogged down by too much work, as the manager what would you do?
a. Cancel the seminar and reschedule according to your convenience
b. Take an alternative mode of presentation
c. Prioritize your work and try to squeeze out time for it
d. Pass the buck to your subordinate, you are the boss, no one can question you
i. You are in a bus. The bus reaches your stop but still you have not purchased the ticket because of heavy rush. What will you do?
a. Jump out quickly to avoid embarrassment.
b. Call the conductor, give him the money and get the ticket.
c. Hand the money to someone sitting nearby to give it to the conductor
d. Give the money to the driver
ii. You find that the person whom you call your friend has been cheating you. What would you do?
a. Break relations with him.
b. Give him tit for tat
c. Make him realize his mistake
d. Tell other friends about him
2. $\quad$ i. Statement: In a T20 match played between India and Australia, the total runs made by the Indian team were 200. 160 runs out of 200 runs were made by spinners.
Conclusion I: $80 \%$ of the team consists of spinners
Conclusion II: The opening batsmen were spinners
a. Only Conclusion I is true
b. Only Conclusion II is true
c. Both Conclusion I and II are true
d. Neither Conclusion I nor II is true
e. Either Conclusion I or II is true
ii. Statement: Fortune favours the brave.

Conclusions I. Risks are necessary for success.
Conclusions II. Cowards die many times before their death.
a. Only Conclusion I is true
b. Only Conclusion II is true
c. Both Conclusion I and II are true
d. Neither Conclusion I nor II is true
e. Either Conclusion I or II is true
i. Statement: A metal producing Company in India has moved from a position where there was shortage of metal production to a position where there is self-sufficiency of metal.
Conclusion I: India was previously importing metal
Conclusion II: at this speed of self-sufficiency, India can soon become a foreign exchange earner
a. Only Conclusion I is true
b. Only Conclusion II is true
c. Both Conclusion I and II are true
d. Neither Conclusion I nor II is true
e. Either Conclusion I or II is true
ii. Statement: The Team Manager humiliated Varun in front of his colleagues on a Monday morning.
Conclusion I: The Team Manager did not like Varun
Conclusion II: Varun was not as popular as his other colleagues
a. Only Conclusion I is true
b. Only Conclusion II is true
c. Both Conclusion I and II are true
d. Neither Conclusion I nor II is true
e. Either Conclusion I or II is true
i. There has been a huge drop in the supply of cotton during the current year.
a. If the interference is definitely true.
b. If the interference is probably true.
c. If the interference is cannot be determined.
d. If the interference is probably false.
e. If the interference is definitely false.
ii. Non-smokers who are victims of passive smoking have one-third death rate as compared to smokers.
a. If the interference is definitely true.
b. If the interference is probably true.
c. If the interference is cannot be determined.
d. If the interference is probably false.
e. If the interference is definitely false.
10. A famous retail electronics showroom chain has six new mobile phone models $T, V, W, X, Y$, and $Z$ - each equipped with at least one of the following three

options: digital camera, music player, and office document viewer. No mobile has any other option. The following conditions apply:
V features both a digital camera and an office document viewer.
W has digital camera and music player
W and $Y$ have no options in common.
X has more options as compared to W
V and Z have exactly one option in common
$T$ has fewer options as compared to $Z$.
i. For exactly how many of the six mobile phones is it possible to determine exactly which option each one has?
a. Two b. Three
c. Four d. Five
e. Six
ii. Which one of the following must be false?
a. Exactly five mobile phones feature a music player.
b. Exactly five mobile phones feature a document viewer.
c. Exactly four mobile phones feature a music player.
d. Exactly four mobile phones feature a digital camera.
e. Exactly four mobile phones feature a document viewer.
11. i. In this question, five words have been given, out of which four are alike in some manner and the fifth one is different. Choose out the odd one?
a. Pellagra
b. Beriberi
c. Scurvy
d. Anaemia
e.

Goitre
ii. In this question, five words have been given, out of which four are alike in some manner and the fifth one is different. Choose out the odd one?
a. Collection
b. Compilation c. Cluster
d. Assemblage e.
Assortment
12. i. Assertion (A): In India, females have higher life expectancy than the males.
Reason ( $R$ ): Females receive a better diet.
a. Both $A$ and $R$ are true and $R$ is the correct explanation of $A$.
b. Both $A$ and $R$ are true but $R$ is not the correct explanation of $A$.
c. $A$ is true but $R$ is false.
d. $A$ is false but $R$ is true.
e. Both A and R are false.
ii. Assertion (A): On 26th January, 1950, the Indian Constitution came into force.
Reason (R): 26th January is celebrated as the Republic Day.
a. Both $A$ and $R$ are true and $R$ is the correct explanation of $A$.
b. Both $A$ and $R$ are true but $R$ is not the correct explanation of $A$.
c. A is true but $R$ is false.
d. $A$ is false but $R$ is true.
e. Both $A$ and $R$ are false.

## Part-B $(3 \times 14=42$ Marks $)$

13. a)
i. In a shop, 380 people buy socks, 150 people buy shoes and 200 people buy belt. If there are total 580 people who bought either socks or shoes or belt and only 30 people bought all the three things? So how many people bought exactly two things.
a. 90
b. 180
c. 270
d. 360
ii. Of the 200 candidates who were interviewed for a position at a call center, 100 had a two-wheeler, 70 had a credit card and 140 had a mobile phone. 40 of them had both, a two-wheeler and a credit card, 30 had both, a credit card and a mobile phone and 60 had both, a two wheeler and

mobile phone and 10 had all three. How many candidates had none of the three?
a. 0
b. 20
c. 10
d. 18
e. 25
iii. A, B , C, D, E and F are six cities which are collinear in the same order. The distance between any two adjacent cities is equal. A bus starts at A for city $F$. It takes 25 minutes for the bus to travel from one city to another and stops for 5 minutes at each place. If the bus reaches $E$ at 8:55, then at what time did it reach station B?
a. $7: 25$
b. 7:30
c. $7: 35$
d. 7:40
e. 7:50
iv. Five persons $-\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$ and E are being compared in weight and height. The second heaviest person. D is the shortest. A is the 2nd tallest and shorter than E, The heaviest person is the third tallest person. There is only one person shorter than $B$, who is lighter than $E$ and $A$ respectively. What is the position of $\mathbf{A}$ in height and weight respectively?
a. $2 \mathrm{nd}, 4^{\text {th }}$
b. $4 \mathrm{th}, 3^{\mathrm{rd}}$
c. $2 \mathrm{nd}, 1^{\text {st }}$
d. 5 th, $3^{\text {rd }}$
e.
$2 \mathrm{nd}, 5^{\text {th }}$
v. Cassock : Priest :: ?: Graduate
a. Сар
b. Tie
c. Coat
d. Gown
vi. Porcupine : Rodent $::$ Mildew : ?
a. Fungus
b. Germ
c. Insect
d. Pathogen
vii. In this question, five words have been given, out of which four are alike in some manner and the fifth one is different. Choose out the odd one?
a. Tortoise
b. Duck
c. Snake
d. Whale
e. e. Crow
b)
i. In a class of 40 students, 12 enrolled for both English and German. 22 enrolled for German. If the students of the class enrolled for at least one of the two subjects, then how many students enrolled for only English and not German?
a. 30
b. 10
c. 18
d. 28
e. 32
ii. In a class $40 \%$ of the students enrolled for Math and $70 \%$ enrolled for Economics. If $15 \%$ of the students enrolled for both Math and Economics, what \% of the students of the class did not enroll for either of the two subjects?
a. $5 \%$
b. $15 \%$
c. $0 \%$
d. $25 \%$
e. None of these
iii. Four Cars numbered as $(\mathrm{C} 1, \mathrm{C} 2, \mathrm{C} 3$ and C 4$)$ are participating in a car rally. They have to travel from $P$ to $Q$ then to $R$. After the race, the following is observed.
(i) The digit in the car number and the order in which they depart or arrive at any point is not the same.
(ii) The first car to leave P is the second car to reach R .
(iii) The first car to reach $R$ is the second car to leave $P$ and the last car to reach Q .

Which is the first car to leave P?
$\begin{array}{llll}1 & 3 & 3 & 12\end{array}$

| 1 | 4 | 1 |
| :--- | :--- | :--- | :--- |

$\begin{array}{llll}1 & 1 & 1 & 12\end{array}$
$\begin{array}{llll}1 & 1 & 1 & 12\end{array}$
$\begin{array}{llll}1 & 1 & 1\end{array}$
$1 \quad 2 \quad 1 \quad 12$
$1 \quad 2 \quad 1 \quad 12$
a. C4
b. C3
c. C 2
d. Cl
e. Cannot be determined.
iv. $U, V, W, X, Y$ and $Z$ are six police officers, who are parading in two rows, with three in the front row and three in the back row. Each officer in the back row has one officer exactly in the front of him. W and $X$ are at the extreme ends of two different rows. $Y$ is to the right of $U$ and exactly in front of V . If Z is exactly behind W , then which of the following statements is true?
a. $X$ is exactly between $V$ and $Z$.
b. Z and U are at extreme ends.
c. With the given information two seating arrangements are possible.
d. $Y$ and $X$ are at extreme ends of the front row.
e. $Z$ is between $X$ and $Y$.
v. Conscience : Wrong :: Police : ?
a. Thief
b. Law
c. Discipline
d. Crime
vi. In this question, five words have been given, out of which four are alike in some manner and the fifth one is different. Choose out the odd one?
a.Blaze
b. Glint
c. Simmer
d.Shimmer
e. Glimmer
vii. In this question, five words have been given, out of which four are alike in some manner and the fifth one is different. Choose out the odd one?
a. Courteous
b. Humble
c. Civil
d. Police
e. Honest
i. In each of the following questions, arrange the given words in a meaningful sequence and thus find the correct answer from alternatives.
1.Birth 2.Death 3.Funeral 4.Marriage 5.Education
a. $4,5,3,1,2$
b. $2,3,4,5,1$
c. $1,5,4,2,3$
d. $1,3,4,5,2$
ii. In each of the following questions, arrange the given words in a meaningful sequence and thus find the correct answer from alternatives.
1.Reading 2. Composing 3.Writing 4. Printing
a. $1,3,2,4$
b. $2,3,4,1$
c. $3,1,2,4$
d. $3,2,4,1$
iii. Fact 1: Pictures can tell a story.

Fact 2: All storybooks have pictures.
Fact 3: Some storybooks have words.
If the first three statements are facts, which of the following statements must also be a fact?
I. Pictures can tell a story better than words can.
II. The stories in storybooks are very simple.
III. Some storybooks have both words and pictures.
a. I only
b. II only
c. III only
d. None of the statements is a known fact.
iv. Fact 1: All hats have brims.

Fact 2: There are black hats and blue hats.
Fact 3: Baseball caps are hats.
If the first three statements are facts, which of the following statements must also be a fact?
I. All caps have brims.
II. Some baseball caps are blue.
III. Baseball caps have no brims.
a. I only
b. II only
c. I, II, and III
d. None of the statements is a known fact.
v. Assertion (A) : A little gap is left between iron rails.

Reason ( R ) : Iron expands in summer.
a. Both $A$ and $R$ are true and $R$ is the correct explanation of $A$.
b. Both $A$ and $R$ are true but $R$ is NOT the correct explanation of $A$.
c. $A$ is true but $R$ is false.
d. A is false but $R$ is true.
e. Both A and R are false.
vi. Assertion (A) : Increase in carbon dioxide would melt polarice.

Reason ( R ) : Global temperature would rise.
a. Both $A$ and $R$ are true and $R$ is the correct explanation of $A$.
b. Both $A$ and $R$ are true but $R$ is NOT the correct explanation of $A$.
c. A is true but $R$ is false.
d. A is false but R is true.
e. Both A and R are false.
vii. Assertion (A) : Tamil Nadu gets most of the rainfall in winter.

Reason ( R ) : Tamil Nadu gets rainfall from retreating monsoons.
a. Both $A$ and $R$ are true and $R$ is the correct explanation of $A$.
b. Both $A$ and $R$ are true but $R$ is NOT the correct explanation of $A$.
c. $A$ is true but $R$ is false.
d. A is false but $R$ is true.
e. Both A and R are false
b)
i. In each of the following questions, arrange the given words in a meaningful sequence and thus find the correct answer from alternatives.

1. Cutting 2. Dish 3. Vegetable 4. Market 5. Cooking
a. $1,2,4,5,3$
b. $3,2,5,1,4$
c. $4,3,1,5,2$
d. $5,3,2,1,4$
ii. In each of the following questions, arrange the given words in a meaningful sequence and thus find the correct answer from alternatives. 1. Sea 2. Rivulet 3. Ocean 4. River 5. Glacier
a. $5,4,3,2,1$
b. $5,4,2,3,1$
c. $5,2,4,1,3$
d. $5,2,1,3,4$
iii. Fact 1: Jessica has four children.

Fact 2: Two of the children have blue eyes and two of the children have brown eyes.
Fact 3: Half of the children are girls.
If the first three statements are facts, which of the following statements must also be a fact?

1. At least one girl has blue eyes.
II. Two of the children are boys.
III. The boys have brown eyes.
a. II only
b. I and III only
c. II and III only
d. None of the statements is a known fact.
iv. Fact 1: All chickens are birds.

Fact 2: Some chickens are hens.
Fact 3: Female birds lay eggs.
If the first three statements are facts, which of the following statements must also be a fact?
I. All birds lay eggs.
II. Hens are birds.
III. Some chickens are not hens.
a. II only
b. II and III only
c. I, II, and III
d. None of the statements is a known fact.
v. Assertion (A) : The Steam engine was invented by James Watt.

Reason (R) : There was a problem of taking out water from flooded mines.
a. Both A and R are true and R is the correct explanation of A .
b. Both $A$ and $R$ are true but $R$ is NOT the correct explanation of $A$.
c. A is true but $R$ is false.
d. A is false but $R$ is true.
e. Both $A$ and $R$ are false.
vi. Assertion (A) : Graphite is slippery and used as a lubricant.

Reason (R): Graphite has free electrons.
a. Both A and R are true and R is the correct explanation of A .
b. Both A and R are true but R is NOT the correct explanation of A .
c. A is true but R is false.
d. A is false but $R$ is true.
e. Both $A$ and $R$ are false
vii. Assertion (A): An iron ball floats on mercury but gets immersed in water. Reason ( R ): The specific gravity of iron is more than that of mercury.
a. Both $A$ and $R$ are true and $R$ is the correct explanation of $A$.
b. Both $A$ and $R$ are true but $R$ is NOT the correct explanation of $A$.
c. A is true but R is false.
d. $A$ is false but $R$ is true.
e. Both A and R are false.
i. Statements:
I. The government has recently fixed the fees for professional courses offered by the unaided institutions which are much lower than the fees charged last year.
II. The parents of the aspiring students launched a severe agitation last year protesting against the high fees charged by the unaided institutions.
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
e. Both the statements I and II are effects of some common cause
ii. Statements:
I. All the schools in the area had to be kept closed for most part of the week.
II. Many parents have withdrawn their children from the local schools.
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
e. Both the statements I and II are effects of some common cause
iii. Statements:
I. It is the aim of the city's civic authority to get the air pollution reduced by $20 \%$ in the next two months.
II. The number of asthma cases in the city is constantly increasing.
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
e. Both the statements I and II are effects of some common cause
iv. How is X related to Y ? Y
I. is son of U , who is wife of $\mathrm{V}, \mathrm{X}$ is son of W who is father in law of $V$
II. V is brother of X and son of W who is father in law of U , who is mother of Y .
a. If data in the statement I alone is sufficient to answer this question.
b. If data in the statement II alone is sufficient to answer this question.
c. If data either in the statement I alone or statement II alone are sufficient to answer this question.
d. If data given in both I \& II together are not sufficient to answer this question.
e. If data in both statements I \& II together are necessary to answer this question.
v. Among $\mathrm{U}, \mathrm{V}, \mathrm{W}, \mathrm{X}, \mathrm{Y}$ and Z who is the heaviest?
I. U is heavier than Y and Z and he is the second heaviest in the

| 1 | 4 | 3 | 12 |
| :--- | :--- | :--- | :--- |

group
II. X is heavier than V but not the heaviest.
a. If data in the statement I alone is sufficient to answer this question.
b. If data in the statement II alone is sufficient to answer this question.
c. If data either in the statement I alone or statement II alone are sufficient to answer this question.
d. If data given in both I \& II together are not sufficient to answer this question.
e. If data in both statements I \& II together are necessary to answer this question.
vi. What is the rate of interest on a certain sum?
I. The interest earned on the sum at the same rate of simple interest after 3 years is Rs. 4500 .
II. If the rate of interest is $2.5 \%$ more, the simple interest earned will be Rs. 900 more.
III. The amount received on the sum at the end of the 2 years at simple interest is Rs. 15,000 .
a. I and II only
b. II and III only
c. I and III only
d. Any two statements together
vii. What is the area of the rectangle?
I. The ratio of length to breadth of the rectangle is $35: 12$.
II. The perimeter of the rectangle is 188 cm .
III. The length of diagonal of the rectangle is 74 cm
a. I and II only
b. I and III only
c. (I and II) or (II and III)
d. Any two of the three
i. Find the Essential Part for the given word in following Words monopoly
a. corrupt
b. exclusive
c. rich
d. gigantic
ii. Find the Essential Part for the given word in following Words harvest
a. autumn
b. stockpile
c. tractor
d. crop
iii. Find the Essential Part for the given word in following Words cage
a. zoo
b. enclosure
c. prisoner
d. animal
iv. Find the Verification of Truth of the following Statements Atmosphere always has
a. Oxyen
b. Air c. Moisture
d. Dust
v. Find the Verification of Truth of the following Statements A child must have had
a. Toys
b. Friends
c. Parents d. Education

133
12
$\begin{array}{llll}1 & 3 & 3 & 12\end{array}$
112312
$\begin{array}{lll}1 & 1 & 3\end{array}$
12

113
12

113
12

13
12
vi. You are alone in the house and there is a quite danger of thieves around. Just then, you hear a knock at the door. You would:
a. open the door to see who is there.
b. first peep out from the window to confirm whether you know the person.
c. not open the door.
d. ask the servant to see who is there.
vii. You are living in a college hostel. The dal served to you in the mess has a lot of stones. What would you do?
a. Leave eating the dal altogether.
b. Bring the matter to the notice of mess incharge.
c. Speak to the cook about changing the dal.
d. Buy your own dal and cook it in your room.
16. a)
i. If * means $/$, - means ${ }^{*}$, / means + and + means - , then $(3-15 / 19) * 8+$ $6=$ ?
a. 8
b. 4
c. 2
d. -1
ii. If * means,-+ means $/,-$ means * and, means + , then $15-2 / 900+90 *$ $100=$ ?
a. 190
b. 180
c. 90
d. 0
e. None of these
iii. 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
e. If both I and II are strong
iv. Statement: "Quit drinking before it destroys you." - A notice issued in public interest by XYZ department.
Assumptions:
I. People fear being destroyed
II. Drinking breaks the drinker's family.
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 $I I$ is implicit
e. If both I and II are implicit
v. Statements: Although we have rating agencies like Crisil, ICRA, there is demand to have a separate rating agency for IT companies to protect investors.
Conclusions:
I. Assessment of financial worth of IT companies calls for separate set of skills, insight and competencies.
II. Now the investors investing in IT companies will get protection of their investment.
a. Only conclusion I follows
b. Only conclusion II follows
c. Either 1 or 11 follows
123
d. Neither I nor II follows
e. Both I and II follow
vi. Statements: The sealed tenders are invited from the capable, experienced contractors for the high level construction work.
Conclusions:
I. Tenders are invited from the capable, experienced contractors only.
II. It is difficult to know the capable people form the tenders regarding construction work.
a. Only conclusion I follows
b. Only conclusion II follows
c. Either I or II follows
d. Neither I nor II follows
e. Both I and II follow
vii. There are millions of schools in India. Most of these schools teach students in the regional languages rather than in Hindi or English. Teaching students in regional languages makes it easier for them to understand their lessons better and encourages them to attend schools. It is more effective for attracting local people's interest in educating their children.
Which of the following argument could be made from the above passage?
a. All the schools in India should teach students in the same language as that would establish uniformity among all the schools.
b. Students should be allowed to choose the language that they want to be taught in.
c. Regional languages are easier to understand for students and are more likely to develop their interest in education.
d. Regional languages are more effective for attracting local people's interest in business, culture and politics.
b)
i. Statement: "The potential of knowledge as a creator of wealth is gaining currency all around the world." -View of an economist Assumptions:
I. Only usable knowledge that is protectable may have the potential of wealth creation.
II. Only usable knowledge that is protected may have the potential of wealth creation.
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
e. If both I and II are implicit
ii. Statement: The State Government has decided to appoint four thousand primary school teachers during the next financial year.
Assumptions:
I. There are enough schools in the state to accommodate four thousand additional primary school teachers
II. The eligible candidates may not be interested to apply as the Government may not finally appoint such a large number of primary school teachers
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
e. If both I and II are implicit
iii. Statement: "The government's decision to supply ARV drugs in six selected states free of cost is commendable, but the patients should be adequately educated before the drugs are administrated." - View of Mr . "X"
Assumptions:
I. The patients can develop drug resistance if they are not regular in their medication
II. The patients if not counselled properly may spread the drug resistant disease.
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
e. If both I and II are implicit
iv. Statement: Should schooling be made free in our country?

Arguments:
I. No, it will add burden on the exchequer.
II. Yes, level of literacy will improve.
a. Only argument I is strong
b. Only argument II is strong
c. Either argument I or II is strong
d. Neither argument I nor II is strong
e. Both arguments I and II are strong
v. Statement: Since English is one of the official languages of India, should all schools be made English medium?
Arguments:
I. Yes. It would teach people the global language. It is important that people learn the language that has become a status symbol in this country.
II. No. More than half the population does not speak English and it would only make learning in schools more difficult for students.
a. Only Argument I is strong.
b. Only Argument II is strong.
c. Both the Arguments I and II are strong.
d. Neither Argument I nor II is strong.
e. Either argument I or II is strong
vi. Statements: Government has spoiled many top ranking financial institutions by appointing bureaucrats as Directors of these institutions. Conclusions:
I. Government should appoint Directors of the financial institutes taking into consideration the expertise of the person in the area of finance.
II. The Director of the financial institute should have expertise commensurate with the financial work carried out by the institute.
a. Only conclusion I follows
b. Only conclusion II follows
c. Either I or II follows
d. Neither I nor II follows
e. Both I and II follow
vii. Statement: Water supply in wards $A$ and $B$ of the city will be affected by about $50 \%$ on Friday because repairing work of the main lines is to be carried out.
Conclusions:
I. The residents in these wards should economize on water on Friday.
iI. The residents in these wards should store some water on the previous day.
a. Only conclusion I follows
b. Only conclusion II follows
c. Either I or II follows
d. Neither I nor II follows
e. Both I and II follow
17. a) Directions for Questions (i to iv): In each of the question below is given a statement followed by three courses of action numbered I, II and III. A course of action is a step or administrative decision to be taken for improvement, follow up or further action in regard to the problem, policy, etc. On the basis of information given in the statement, you have to assume everything in the statement to be true. Then decide which of the three given suggested course(s) of action logically follow(s) worth pursuing.
i. Statement: A blast was triggered off injuring many, when the night shift workers at an ordinance factory were handling 'for signaling explosive'. Courses of Action:
I. The factory management should train its staff as regards to the safety aspects of handling such explosive materials.
II. The service of the supervisor incharge of the night shift should be terminated immediately.
III. The factory should immediately stop carrying out such exercises at night.
a. None follows
b. All follow
c. Only I follows
d. Only I and II follow
e. None of these
ii. Statement: A large number of tribal inhabitants are found to have been suffering from various diseases due to exposure to radioactive waste near the uranium mine.
Courses of Action:
I. The Government should immediately close down the mine.
II. The Government should immediately take steps to save local people from exposure to radioactive waste.
III. The tribals should be rehabilitated at a safer place.
a. Only I follow
b. Only III follow
c. Only II follow
d. Only II and III follows e. None of these
iii. Statement : India's pre-eminent position in the world Black pepper production and trade is in danger as some of the countries, which recently started production of the 'king of the spices' crop from Indian root stocks, are farming better by adopting modern cultivation practices. Courses of Action:
I. India should immediately stop supplying root stocks of black pepper to other countries.
II. India should adopt modern technology for cultivating black pepper to compete in the international market.
III. India should reduce the price of its black pepper to remain competitive in the world market.
a. All follow b. Only II follows
c. Only I follows
d. Only III follows
e. None of these
iv. Statement: There have been many instances of dacoit and looting in many passenger trains this year
Courses of action :
I. The railway authority should immediately deploy one policeman in each compartment in all the passenger trains.
II. The passengers travelling by train should be given training on how to tackle with the dacoits and looters.
a. If only course of action I follows
b. If only course of action II follows
c. If either I or II follows
d. If neither I nor II follows
e. If both I and II follows
v. Mark is working with a realtor to find a location for the toy store he plans to open in his town. He is looking for a place that is either in, or not too far from, the center of town and one that would attract the right kind of foot traffic. Based on your judgement, which of the following locations should Mark's realtor call to his attention?
a. a storefront in a new high-rise building near the train station in the center of town whose occupants are mainly young, childless professionals who use the train to commute to their offices each day.
b. a little shop three blocks away from the town's main street, located across the street from an elementary school and next door to an ice cream store
c. a stand-alone storefront on a quiet residential street ten blocks away from the town's center
d. a storefront in a small strip mall located on the outskirts of town that is also occupied by a pharmacy and a dry cleaner
vi. Amit Khanna, born on 5th june, 1973 has done his post-graduation in Marketing Management with first class. He has secured $50 \%$ marks in the written Test. He has been working in an organization as a Marketing Officer for the last four years.
a. be a graduate with at least $50 \%$ marks.
b. have secured atleast $40 \%$ marks in the written test.
c. not be less than 24 years and more than 29 years as on 10 th October, 1997.
d. should have work experience of at least two years as an officer.
e. fulfils all other criteria except at (4) above but has a diploma in Marketing Management, his/her case is to be referred to General Manager, Marketing.
f. fulfils all other criteria except at (3) above but has worked as Maketting Officer at least for three years, his/her case is to be referred to Director, Marketing.
vii. All except one of the following are important strategies that a manager can use to create a more effective decision-making environment, which one is not?
a. Encourage others to make Decisions
b. Be ready to try new things
c. Relying solely upon himself/herself
d. Recognize the importance of quality information
b)
i. While addressing people in an open ground it begins to rain your address is important and you cannot afford to postpone it what will you do? You Would
a. Ask someone to arrange on umbrella
b. Stop your address for a while
c. Continue the address without bothering the rain
d. Postpone it for day
ii. A group effort of generating alternative ideas that can help a manager to solve a problem is called
a. The Delphi Technique
b. Out of the box thinking
c. The normal group technique
d. Brain Storming
iii. Errors in decision making occur because we use decision-making heuristics
a. In an Unplanned Manner
b. Haphazardly
c. Beyond the range for which they are intended
d. Without taking care of other aspects
iv. Suman Malhotra is a graduate with first class and has secured $60 \%$ marks in the written test. She has been working as an Officer for the last three years. She was born on 20th May, 1972.
a. be a graduate with at least $50 \%$ marks.
b. have secured atleast $40 \%$ marks in the written test.
c. not be less than 24 years and more than 29 years as on 10 th October, 1997.
d. should have work experience of at least two years as an officer.
e. fulfils all other criteria except at (4) above but has a diploma in Marketing Management, his/her case is to be referred to General Manager, Marketing.
f. fulfils all other criteria except at (3) above but has worked as Maketting Officer at least for three years, his/her case is to be referred to Director, Marketing.
v. Nitin Narang was born on 25th August, 1975. He has secured $60 \%$ and $50 \%$ marks in graduation and in the written test, respectively. He has been working in an organisation as Officer for the last four years.
a. be a graduate with at least $50 \%$ marks.
b. have secured atleast $40 \%$ marks in the written test.
c. not be less than 24 years and more than 29 years as on 10 th October, 1997.
d. should have work experience of at least two years as an officer.
e. fulfils all other criteria except at (4) above but has a diploma in Marketing Management, his/her case is to be referred to General Manager, Marketing.

| 1 | 2 | 5 | 12 |
| :--- | :--- | :--- | :--- |

$1 \quad 2 \quad 5 \quad 12$
12512
f. fulfils all other criteria except at (3) above but has worked as Maketting Officer at least for three years, his/her case is to be referred to Director, Marketing.
vi. You are a team manager, you find that your employee's performance is inappropriate that induces /creates a stress for you. You should:
a. Explore the reason of inappropriate performance and report to the higher authorities.
b. Start an incentive mechanism for better Performance.
c. Create an organizational culture in which the employees feel to be concerned
d. Implement special Human resource training for the employees
e. None of these
vii. You are competing with your batch mate for a prestigious award to be decided based on an oral presentation. Ten minutes are allowed for each presentation. You have been asked by the committee to finish on time. Your friend however is allowed more than the stipulated time period you would.
a. Lodge a complaint to the chairperson against the discrimination
b. Not listen to any justification from the committee
c. Ask for withdrawal of your name
d. Protest and leave the place
i. If there are 400 elements in consideration, set A has 100 elements, set B has 150 elments, and 75 are the common elements. Find how many elements is neither in A nor in B .
a. 175
b. 225
c. 275
d. 325
ii. A four-person crew from Classic Colors is painting Mr. Field's house. Michael is painting the front of the house. Ross is in the alley behind the house painting the back. Jed is painting the window frames on the north side, Shawn is on the south. If Michael switches places with Jed, and Jed then switches places with Shawn, where is Shawn?
a. in the alley behind the house
b. on the north side of the house
c. in front of the house
d. on the south side of the house
iii. Wax : Grease :: Milk : ?
a. Drink
b. Ghee
c. Curd
d. Protein
iv. In this question, five words have been given, out of which four are alike in some manner and the fifth one is different. Choose out the odd one?
a. Sleet
b. Fog
c. Hailstone
d. Vapour
e. Mist
v. In each of the following questions, arrange the given words in a meaningful sequence and thus find the correct answer from alternatives. 1. Frog 2. Eagle 3. Grasshopper 4. Snake 5. Grass
a. 5,3,4,2,1
b. $5,3,1,4,2$
c. $3,4,2,5,1$
d. $1,3,5,2,4$
vi. Fact 1: Most stuffed toys are stuffed with beans.

Fact 2: There are stuffed bears and stuffed tigers.
Fact 3: Some chairs are stuffed with beans.
If the first three statements are facts, which of the following statements must also be a fact?
I. Only children's chairs are stuffed with beans.
II. All stuffed tigers are stuffed with beans.
III. Stuffed monkeys are not stuffed with beans.
a. I only
b. II only
c. II and III only
d. None of the statements is a known fact.
vii. Assertion (A) : Most of the Himalayan rivers are perennial.

Reason ( R ) : They are fed by melting snow.
a. Both $A$ and $R$ are true and $R$ is the correct explanation of $A$.
b. Both $A$ and $R$ are true but $R$ is NOT the correct explanation of $A$.
c. A is true but $R$ is false.
d. A is false but $R$ is true.
e. Both $A$ and $R$ are false.
b)
i. In a class of 120 students numbered 1 to 120 , all even numbered students opt for Physics, those whose numbers are divisible by 5 opt for Chemistry and those whose numbers are divisible by 7 opt for Math. How many opt for none of the three subjects?
a. 19
b. 41
c. 21
d. 57 e. 26
ii. Answer the following questions based on the information given below: The proportion of male students and the proportion of vegetarian students in a school are given below. The school has a total of 800 students, $80 \%$ of whom are in the secondary section and rest equally divided between class 1 and 12 .

|  | Male(M) | Vegetarian (V) |
| :---: | :---: | :---: |
| Class12 | 0.60 | 0.54 |
| Class11 | 0.55 | 0.50 |
| Secondary section | $0.275(288)$ | $0.55(352)$ |
| Total | 0.475 | 0.53 |

In the secondary section, $50 \%$ of the students are vegetarian males. Which of the following statement is correct:
a. Except vegetarian males, all other groups have same number of students.
b. Except non vegetarian males, all other groups have same number of students.
c. Except vegetarian females, all other groups have same number of students.
d. Except non vegetarian females, all other groups have same number of students.
e. All of the above groups have the same number of students.
iii. Sword : Slaughter :: Scalpel : ?
a. Murder
b. Stab
c. Surgery
d. Chooping
iv. In this question, five words have been given, out of which four are alike in some manner and the fifth one is different. Choose out the odd one?
a. Odour
b. Smell
c. Foul
d. Fragrance
e. Incense
v. In each of the following questions, arrange the given words in a meaningful sequence and thus find the correct answer from alternatives.

1. Travel 2. Destination 3. Payment 4. Berth/Seat number 5. Reservation
2. Availability of berth/ Seat reservation
a. $6,2,5,4,3,1$
b. $5,3,4,1,6,2$
c. $2,6,3,5,4,1$
d. $1,2,5,4,3,6$
vi. Fact 1: Islands are surrounded by water.

Fact 2: Maui is an island.
Fact 3: Maui was formed by a volcano.
If the first three statements are facts, which of the following statements must also be a fact?
I. Maui is surrounded by water.
II. All islands are formed by volcanoes.
III. All volcanoes are on islands.
a. I only
b. III only
c. I and II only
d. None of the statements is a known fact.
vii. Assertion (A) : India is facing the problem of inflation.

Reason ( R ) : We have to failed to check the growth of black money.
a. Both $A$ and $R$ are true and $R$ is the correct explanation of $A$.
b. Both $A$ and $R$ are true but $R$ is NOT the correct explanation of $A$.
c. $A$ is true but $R$ is false.
d. $A$ is false but $R$ is true.
e. Both $A$ and $R$ are false.
19. Answer any two of the following:
i. Buses are always punctual in city X . How long, at the most, will Mr . Roy have to wait for the bus?
I. Mr. Roy has come to the bus stand at 9 A.M.
II. There is a bus at 10 A.M. and Possibly another bus even earlier.
a. If the data in statement I alone are sufficient to answer the question;
b. If the data in statement II alone are sufficient answer the question;
c. If the data either in I or II alone are sufficient to answer the question;
d. If the data even in both the statements together are not sufficient to answer the question;
e. If the data in both the statements together are needed.
ii. On which day the flat was purchased by Rohan in 1996 ?
I. Certainly before 18 th December, 1996 but definitely not before 15th December, 1996.
II. Certainly after 16 th December, 1996 but not later than 19 th December, 1996.
a. if the data in statement I alone are sufficient to answer the question;
b. if the data in statement II alone are sufficient answer the question;
c. if the data either in I or II alone are sufficient to answer the question;
d. if the data even in both the statements together are not sufficient to answer the question;
e. if the data in both the statements together are needed.
iii. On reaching the railway station, you find that the train you wanted to catch is just to start and there is hardly any time for purchasing the ticket. The best thing for you is to :
a. rush to the train rather than miss it and inform the T.T.I. at the next stoppage about your inability to purchase the ticket.
b. rush to the train and perform your journey quietly.
c. first purchase the ticket and then catch the train if it is there.
d. miss the train rather than take the risk of boarding the moving train.
iv. Find the Essential Part of the following Words

Respiration?

> a. mouth
> b.circulation
> c. oxygen
> d.carbon monoxide
v. Find the Verification of Truth of the following Statements

A Factory always has?
a. Electricity
b. Chimney
c. Workers
d.Files
e. Sellers
vi. Cause \& Effect:
A. If you are a habitual traffic rule breaker this won't come as good news to you.
B. The traffic department has enhanced the number of red lights manned by the police
a. If statement $(A)$ is the cause and statement $(B)$ is its effect.
b. If statement $(B)$ is the cause and statement $(A)$ is its effect.
c. If both the statements $(A)$ and $(B)$ are independent causes.
d. If both the statements (A) and (B) are effects of independent causes.
e. If both the statements (A) and (B) are effects of some common causes.
vii. Cause \& Effect:
I. The prices of food grains have increased by about $20 \%$ over the same period last year.
II. The prices of vegetables have substantially decreased during the past few weeks.
a. If Statement I is the cause and statement II is its effect.
b. If Statement II is the cause and statement I is its effect.
c. If both the statements I and II are independent causes.
d. If both the statements I and II are effects of independent causes.
e. If both the statements I and II are effects of some common causes.
b) i. Statement:

Should the practice of transfers of electrical cadre employees from one city to another government office be stopped?
Arguments:
I. No, transfer of employees is a routine administrative matter and we must continue it.
II. Yes, it involves lot of government expenditures and inconvenience to many compared to the benefits it yields.
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
e. If both I and II are strong
ii. Statement:

Should higher qualification be the only criteria for internal promotions in any organisation?
Arguments:
I. Yes, why not? In fact only higher qualification is more important than other factors.
II. No, quality of performance and other factors are more important than mere higher qualification in case of internal promotion.
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
e. If both I and II are strong

Directions:Answer these questions on the basis of the following information: Recently, the answer of a test held nationwide were leaked to a group of unscrupulous people. The investigation agency has arrested the mastermind and nine other people A, B, C, D, E, F, F, H and I in this matter. Interrogating them, the following facts have been obtained regarding their operation. Initially, the mastermind obtains the correct answer key from one or two people who already posses the same. These people are called his/her sources. If the person has two sources, then he/she compares the answer keys obtained from both sources. If the key to a question from both sources is identical, it is copied, otherwise it is left blank. If the person has only one source, he/she copies the sources answer into his/her copy. Finally, each person compulsorily replaces one of the answer(not a blank one) with a wrong answer in his/her answer key. The paper contained 200 questions; so the investigative agency out the possibility of two or more of than introducing wrong answers to the same question. The investigative agency has a copy of the correct answer key and has tabulated the following data. These data represent question numbers.

| Name | Wronac Answer (s) |  |
| :---: | :---: | :---: |
| $\square A$ | 46 | -*** |
| 8 | 96 | 46,90,25 |
| 6 | 2736 | 17.46 .91 |
| $\square$ | 17 | $\cdots$ |
| $E$ | 46.90 | +* |
| $\hat{F}$ | 14, 6 | 92.90 |
| Q | 25 | ars |
| H | 46.9 | **er |
| 1 | 27 | 17. 16.9 |

iii. Which one among the following must have two sources?
a. A
b. $B$
c. C
d. D
iv. How many people (excluding the mastermind) needed to make answer keysbefore C could make his answer key?
a. 2
b. 3
c. 4
d. 5
y. Which of the following two group of people has identical sources?
I. A, D and G II. E and H

| 1 | 4 | 4 | 12 |
| :---: | :---: | :---: | :---: |
| 1 | 4 | 4 | 12 |
| 1 | 4 | 4 | 12 |

a. Only I b. Only II c. Neither I and II d. Both I and II Directions:Answer the questions on the basis of the information given below:
Some children were taking free throws at the basketball court in school during lunch break. Below are some facts about how many baskets these children shot.
I. Ganesh shot 8 baskets less than Ashish.
II. Dhanraj and Ramesh together shot 37 baskets.
III. Jagrai shot 8 baskets more than Dhanraj.
IV. Ashish shot 5 baskets morethanDhanraj.
V. Ashish and Ganesh together shot 40 baskets.
vi. Which of the following statement is true?
a. Ramesh shot 18 baskets and Dhanraj shot 19 baskets
b. Ganesh shot 24 baskets and Ashish shot 16 baskets
c. Jugraj shot 19 baskets and Dhanraj shot 27 baskets
d. Dhanraj shot 11 baskets and Ashish shot 16 baskets
vii. Which of the following statement is true?
a. Dhanraj and Jugraj together shot 46 baskets
b. Ganesh shot 18 baskets and Ramesh shot 21 baskets
c. Dhanraj shot 3 more baskets than Ramesh
d. Ramesh and Jugraj together shot 29 baskets
i. You are a Deputy secretary in a ministry of the government of India where you are dealing with the appointment of 'Technical Assistants' on the basis of a written examination. 10 candidates have been shortlisted for the two posts. Based on their educational and previous work experience you have to make your recommendation in order to preference. A senior official in the ministry. Who is known to you asks you to recommend the name of a candidate amongst the first two choices. What will you do?
a. Bring the matter to the knowledge of your immediate superior officer and do as be verbally directs.
b. Company to the request of the senior officer. Who approached you and recommend the name of his candidate in the top two despite knowing that he is not among the best two.
c. Examine the profile of all ten candidates and take decision on merits even. If it means that the candidate $Y$ is eventually selected.
d. See to it that the candidates Y is not selected at all by placing him down in the preference
e. For selecting Best alternative in these type of circumstances you are required to adopt virtue approach as in these circumstances you must be loyal to take ethical and moral decision
ii. STATEMENT: Lack of coordination between the university, its colleges and various authorities has resulted in students ousted from one college seeking migration to another.
Courses of Action:
I. If a student is ousted from my college, the information should be sent to all other colleges of University.
II. The admissions to all colleges of the universities should be handled by the University directly.
a. If only Course of Action 1 follows.
b. If only Course of Action 2 follows.
c. If either Course of Action 1 or 2 follows.
d. If neither Course of Action 1 nor 2 follows.
e. If both Course of Action $1 \& 2$ follows.

## iii. STATEMENT:

Ministry of Tourism in its one of the reports revealed that due to recent

