

Pre Examination Training (PET)

Post: CRP POs/ MTs-XV

Day - 2

Module - 2

**Test of
Reasoning**

TEST OF REASONING

The type of questions provided in this module are only illustrative and not exhaustive. In actual test you may find questions on some or all these types and also questions on the type not mentioned here. This is a test to see how well you can think and analyse. This module contains 50 questions on reasoning ability. Verbal Reasoning depends upon the ability to understand words/directions given in the questions. You should also be able to analyse relationships among the various things expressed through words. Further, if you are able to discriminate the various aspects expressed through different words, you will be able to identify the correct answer easily. These questions are available in both Hindi and English versions.

Q.1 In a certain code language 'FAVOUR' is coded as ECURTV and CUSTOM is coded as BWRWNQ. How is 'FOSTER' be coded in the same code language?

- 1) QEWRVD
- 2) EPRVDU
- 3) GQTWfv
- 4) EQRWDV
- 5) None of those given as options

Solution:

F	A	V	O	U	R	C	U	S	T	O	M
-1	+2	-1	+3	-1	+4	-1	+2	+1	+3	+1	+4
E	C	U	R	T	V	B	W	R	W	N	Q

Hence,

F	A	V	O	U	R		C	U	S	T	O	M
-1	+2	-1	+3	-1	+4		-1	+2	-1	+3	-1	+4
E	C	U	R	T	V		B	W	R	W	N	Q

Hence,

F	O	S	T	E	R
-1	+2	-1	+3	-1	+4
E	Q	R	W	D	V

Q.2 In a certain code language '1, 2, 3' means 'bright little boy'; '1, 4, 5' means 'tall big boy' and '6, 3, 7' means 'beautiful little flower'. Which numeral in that language means 'bright'?

- 1) 1
- 2) 6
- 3) 3
- 4) 4
- 5) None of those given as options

Solution:

1	2	3	1	4	5	6	3	7
bright	little	boy	tall	big	boy	Beautiful	little	Flower

Q.3-7. Read the information given below and answer the questions.

Six plays A, B, C, D, E and F of a famous playwright were staged one on each day from Monday to Saturday. It is assumed that no other play was staged on the given day or any other day. The schedule of the plays was to be in accordance with the following:

Only three plays were staged between A and E. E was not staged on the last day of the schedule. C was staged immediately after A. B was staged on a day immediately after the day on which F is staged. D was not staged on any of the days after B.

Q.3 How many plays were staged before D?

- 1) None, as D was staged on Monday
- 2) One
- 3) Two
- 4) Three
- 5) Four

Q.4 On which of the following days was Play C staged?

- 1) Monday
- 2) Wednesday
- 3) Thursday
- 4) Friday
- 5) Saturday

Q.5 Play D was staged between which of the following pairs of plays?

- 1) C and E
- 2) E and F
- 3) A and E
- 4) B and E
- 5) C and F

Q.6 Which of the following plays was staged on Monday?

- 3) A and E
- 4) B and E
- 5) C and F

Q.6 Which of the following plays was staged on Monday?

- 1) E
- 2) A
- 3) F
- 4) B
- 5) C

Q.7 Which of the following plays was staged immediately after play B ?

- 1) None of those given as options
- 2) E
- 3) D
- 4) C
- 5) A

Solution:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
E	D	F	B	A	C

Q.8-12. In each question below are given two statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

Give answer (1) if only conclusion I follows; give answer (2) if only conclusion II follows; give answer (3) if either I or II follows; give answer (4) if neither I nor II follows, and give answer (5) if both I and II follow.

Q.8 Statements: All pencils are bricks. All bricks are stones. No stone is a diamond

Conclusion I: Some stones are pencils.

Conclusion II: Some diamonds are bricks.

4

Q.9 Statements: All pencils are bricks. All bricks are stones. No stone is a diamond

Conclusion I: All pencils are stones.

Conclusion II: No brick is a diamond

5

Q.10 Statements: Only a few trees are horses. No biscuit is a tree. All trees are desks

Conclusion I: No biscuit is a horse.

Conclusion II: At least some horses are desks.

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Q.11 Statements: All tigers are ships. Only a few ships are cupboards. No cupboard is a door.

Conclusion I: No door is a ship.

Conclusion II: All doors are tigers

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Q.12 Statements: All tigers are ships. Only a few ships are cupboards. No cupboard is a door.

Conclusion I: At least some ships are tigers

Conclusion II: All doors being ships is a possibility

5

Solution (8-12): Apply Venn Diagram

Conclusion I: At least some ships are tigers
Conclusion II: All doors being ships is a possibility

5

Solution (8-12): Apply Venn Diagram

Q.13 Study the following information and answer the question

P @ Q means P is the sister of Q

P # Q means P is the wife of Q,

P & Q means P is the father of Q

P \$ Q means P is the brother of Q.

In which of the following expressions, T is the daughter of A?

1) A # B & R @ S \$ T

2) A # B & R \$ T @ S

3) A # B & R @ T \$ S

4) A # B & R @ S @ T

5) None of those given as options

Explanation: first decode the symbol and then make the arrangement

Q.14 What will come in place of question mark (?) in the given series based on the English alphabetical order?

AZM BYN CXO DWP ?

- 1) EXQ
- 2) EVP
- 3) DVQ
- 4) EVQ
- 5) EUQ

Solution:

First Letter	A	+1	B	+1	C	+1	D	+1	E
Second Letter	Z	-1	Y	-1	X	-1	W	-1	V
Third Letter	M	+	N	+	O	+	P	+	Q

Q.15-18. Read each statement carefully and answer the following questions:

Q.15 Which of the following expressions will be true if the expression $S > V = B > N < W$ is definitely true?

- 1) $V > W$
- 2) $N < S$
- 3) $W > B$
- 4) $N = V$
- 5) $W < S$

Solution: $S > V = B > N < W$

$$N < S$$

Q.16 Which of the following symbols should replace the question mark (?) in the given expression in order to make expressions ' $Q > B$ ' as well as ' $R \leq M$ ' definitely true?

$$Q > M ? B \geq V = R$$

$$N < S$$

Q.16 Which of the following symbols should replace the question mark (?) in the given expression in order to make expressions ' $Q > B$ ' as well as ' $R \leq M$ ' definitely true?

$$Q > M ? B \geq V = R$$

- 1) \leq
- 2) $>$
- 3) $<$
- 4) \geq
- 5) Either \leq or $<$

Solution: $Q > M \geq B \geq V = R$

Q.17 Which of the following symbols should be placed in the blank spaces respectively (in the same order from left to right) in order to complete the given expression in such a manner that makes the expressions ' $C > P$ ' as well as ' $R \leq E$ ' definitely true?

$$C _ E _ J _ P _ R$$

- 1) $=, =, \geq, \geq$
- 2) $>, \geq, =, >$
- 3) $>, <, =, \leq$
- 4) $>, =, =, \geq$
- 5) $>, =, \geq, >$

Solution: $C > E = J = P \geq R$

$$C > P$$

$$R \leq E$$

Q.18 Which of the following symbols should be placed in the blank spaces respectively (in the same order from left to right) in order to complete the given expression in such a manner that makes the expression 'S > U' as well as 'R > A' definitely false?

$$S _ T _ R _ U _ A$$

- 1) <, <, >, =
- 2) <, =, =, >
- 3) <, =, =, <
- 4) >, =, =, >
- 5) >, >, =, <

Solution: $S < T = R = U < A$

Q.19-23. Study the following information and answer the following questions:

P, Q, R, S, T, U and V are seven friends who study in three different standards namely 10th, 11th and 12th such that not less than two friends study in the same standard. Each friend also has a different favourite subject namely Biology, Audit, Gujarati, Punjabi, Urdu, Law and Chemistry.

P likes Law and studies in the 10th standard with only one other friend who likes Punjabi. V studies with two other friends. Both the friends who study with V like Languages (Here languages include only Urdu, Punjabi and Gujarati). S studies in the 11th standard with only one person and does not like Audit. T studies with only one friend. The one who likes Biology does not study in 10th or 11th standard. T does not like Languages. R does not like Gujarati, Urdu or Audit. Q does not like Urdu.

Q.19 Which combination represents T's favourite subject and the standard in which he studies?

One friend. The one who likes biology does not study in 10th or 11th standard. T does not like Languages. R does not like Gujarati, Urdu or Audit. Q does not like Urdu.

Q.19 Which combination represents T's favourite subject and the standard in which he studies?

- 1) Audit and 12th
- 2) Chemistry and 10th
- 3) Audit and 11th
- 4) Biology and 12th
- 5) Chemistry and 12th

Q.20 Which of the following is V's favourite subject?

- 1) Biology
- 2) Audit
- 3) Punjabi
- 4) Gujarati
- 5) Urdu

Q.21 Who amongst the following studies in the 12th standard?

- 1) U
- 2) R
- 3) T
- 4) S
- 5) None of those given as options

Q.22 Which of the following combinations is definitely correct?

- 1) V and Urdu
- 2) U and Gujarati

- 3) R and Punjabi
- 4) Q and Audit
- 5) T and Chemistry

Q.23 Which of the following subjects does U like?

- 1) Punjabi
- 2) Urdu
- 3) Audit
- 4) Biology
- 5) Chemistry

Solution:

Friend	Class	Subject
P	10 th	Law
Q	12 th	Gujarati
R	10 th	Punjabi
S	11 th	Chemistry
T	11 th	Audit
U	12 th	Urdu
V	12 th	Biology

Q.24-28. Study the information and answer these questions.

In a certain code language-

'business is not commerce' is coded as 'ef uy ak dn'

'export and import business' is coded as, 'ak tk jl bt'

'commerce makes only part' is coded as, 'np vx uy gb'

'export makes import business' is coded as, 'bt tk ak gb'

(Note: all the given codes are two letter codes only)

Q.24 What is the code for 'import' in the above code language?

'commerce makes only part' is coded as, 'np vx uy gb'

'export makes import business' is coded as, 'bt tk ak gb'

(Note: all the given codes are two letter codes only)

Q.24 What is the code for 'commerce' in the given code language?

- 1) ef
- 2) gb
- 3) ak
- 4) np
- 5) uy

Q.25 What is the code for 'import' in the given code language?

- 1) jl
- 2) ak
- 3) either gb or ak
- 4) np
- 5) either tk or bt

Q.26 What may be the possible code for 'business only' in the given code language ?

- 1) np ak
- 2) ak uy
- 3) uy bt
- 4) np jl
- 5) None of those given as options

Q.27 What may be the possible code for 'makes possible' in the given code language?

- 1) gb vx
- 2) zq gb
- 3) uy zq
- 4) ak gb
- 5) np ak

Q.28 What is the code for 'and' in the given code language?

- 1) tk
- 2) bt
- 3) ak
- 4) jl
- 5) None of those given as options

Solution:

business is not commerce → ef uy ak dn(1)
export and import business → ak tk jl bt(2)
commerce makes only part → np vx uy gb(3)
export makes import business → bt tk ak gb(4)
from (1) and (2) business → ak
from (1) and (3) commerce → uy
from (3) and (4) makes → gb
from (2) and (4) and → jl
export/import → tk/bt

Q.29-33. Study the given information and answer the following questions:

When a word and number arrangement machine is given an input line of words and numbers, it arranges them following a particular rule. The following is an illustration of input and rearrangement:

(All the numbers are two digit numbers)

Q.29-33. Study the given information and answer the following questions:

When a word and number arrangement machine is given an input line of words and numbers, it arranges them following a particular rule. The following is an illustration of input and rearrangement:

(All the numbers are two digit numbers)

Input : 52 machine better 45 sale 60 82 fellow not 15

Step I : better 15 52 machine 45 sale 60 82 fellow not

Step II : fellow 45 better 15 52 machine sale 60 82 not

Step III : machine 52 fellow 45 better 15 sale 60 82 not

Step IV : not 60 machine 52 fellow 45 better 15 sale 82

Step V : sale 82 not 60 machine 52 fellow 45 better 15

As per the rules followed in the above steps, find out the appropriate steps for the given input.

Input : 65 price great 22 72 river family 10 91 land

Q.29 What is the position of '65' with respect to 'family' in step V of the given input?

- 1) Fifth to the right
- 2) Sixth to the left
- 3) Third to the left
- 4) Second to the right
- 5) None of those given as options

Q.30 Which of the following is the third element from the left end of step IV?

- 1) 65
- 2) great
- 3) 10
- 4) land
- 5) family

Q.31 Which of the following is step III of the given input?

- 1) river 91 price 72 land 65 great 22 family 10
- 2) family 10 65 price great 22 72 river 91 land
- 3) land 65 great 22 family 10 price 72 river 91
- 4) great 22 family 10 65 price 72 river 91 land
- 5) price 72 land 65 great 22 family 10 river 91

Q.32 What is the position of '65' from the right end in the II step?

- 1) Fifth
- 2) Sixth
- 3) Seventh
- 4) Eighth
- 5) Ninth

Q.33 Which element is third to the right of 'family' in Step III?

- 1) river
- 2) 72

Q.33 Which element is third to the right of 'family' in Step III?

- 1) river
- 2) 72
- 3) great
- 4) 65
- 5) 22

Solution:

Input : 65 price great 22 72 river family 10 91 land

Step I : family 10 65 price great 22 72 river 91 land

Step II : great 22 family 10 65 price 72 river 91 land

Step III : land 65 great 22 family 10 price 72 river 91

Step IV : price 72 land 65 great 22 family 10 river 91

Step V : river 91 price 72 land 65 great 22 family 10

Q.34-38. Study the following information and answer the questions given below:

Eight people-P, Q, R, S, U, V, W and X are sitting around a circular table facing the centre. Each of them is of a different profession- Accountant, Teacher, Doctor, Engineer, Banker, Lawyer, Professor and Architect. Q is sitting second to the left of V. The Architect is an immediate neighbour of V. There are only three people between the Architect and P. The engineer is sitting second to the left of P. The Teacher is to the immediate right of the Engineer. X is second to the right of V. S is the Architect. R and U are immediate neighbours of each other. Neither R nor U is an Engineer. The Banker is to the immediate left of Q. The Lawyer is second to the right of the Teacher. The Professor is an immediate neighbour of the Engineer. R is second to the right of the Accountant.

Q.34 Who is sitting second to the right of P?

- 1) The Lawyer
- 2) R
- 3) The Engineer
- 4) Q
- 5) V

Q.35 Who amongst the following is the Professor?

- 1) Q
- 2) W
- 3) X
- 4) V
- 5) U

Q.36 Four of the following five are alike in a certain way based on the given arrangement and hence form a group. Which of the following does not belong to that group?

- 1) Accountant – S
- 2) X – Doctor
- 3) U – Engineer
- 4) Banker – W

5) U

Q.36 Four of the following five are alike in a certain way based on the given arrangement and hence form a group. Which of the following does not belong to that group?

- 1) Accountant – S
- 2) X – Doctor
- 3) U – Engineer
- 4) Banker – W
- 5) Lawyer – V

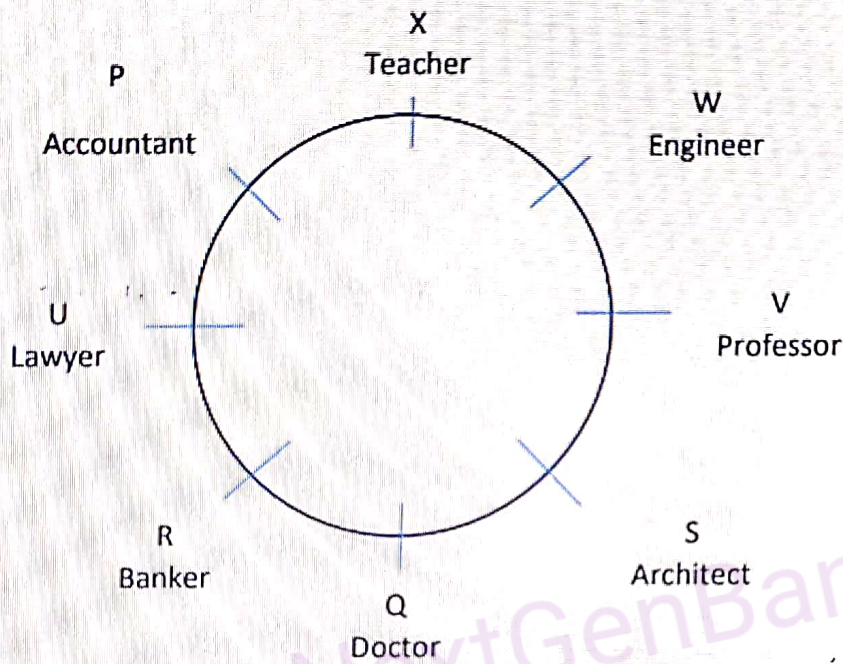
Q.37 What is the position of W with respect to the Architect?

- 1) Third to the left
- 2) Second to the right
- 3) Second to the left
- 4) Third to the right
- 5) Immediate right

Q.38 Which of the following statements is true according to the given arrangement?

- 1) The Lawyer is second to the left of the Doctor
- 2) P is an immediate neighbour of the Banker
- 3) S sits exactly between Q and the Banker
- 4) Only four people sit between the Teacher and Q. (either from left or right)
- 5) All of the given statements are true

Solution:



Q.39-43. Study the following information carefully and answer these questions.

A, B, C, D, E and F are six people each of them has a different height. E is taller than only A. B is taller than D and A. D is taller than F. B is not the tallest. As many people are taller than D as are shorter than F.

Q.39 How many of them are taller than D?

- 1) One
- 2) Two
- 3) Three
- 4) Four
- 5) None of those given as options

Q.39-43. Study the following information carefully and answer these questions.

A, B, C, D, E and F are six people each of them has a different height. E is taller than only A. B is taller than D and A. D is taller than F. B is not the tallest. As many people are taller than D as are shorter than F.

Q.39 How many of them are taller than D?

- 1) One
- 2) Two
- 3) Three
- 4) Four
- 5) None of those given as options

Q.40 How many of them are shorter than B?

- 1) One
- 2) Two
- 3) Three
- 4) Four
- 5) Five

Q.41 Who among them is tallest?

- 1) F
- 2) D
- 3) E
- 4) C
- 5) None of those given as options

Q.42 Who among them is third from top if arranged in descending order of height?

- 1) B
- 2) F
- 3) D
- 4) E

Q.42 Who among them is third from top if arranged in descending order of height?

- 1) B
- 2) F
- 3) D
- 4) E

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5) None of those given as options

Q.43 Who among them is smallest?

- 1) F
- 2) E
- 3) A
- 4) B
- 5) None of those given as options

Solution:

C	B	D	F	E	A
3	2	4	6	5	1

Q.44 Mohan cycles 3 km towards the east and takes the first right turn and cycles for another 5 km to point A. From point A he takes a left turn and cycles 7 km to point B, after covering another 4 km he rests for a while. How much distance has Mohan covered from point A till the time he stops?

Q.44 Mohan cycles 3 km towards the east and takes the first right turn and cycles for another 5 km to point A. From point A he takes a left turn and cycles 7 km to point B, after covering another 4 km he rests for a while. How much distance has Mohan covered from point A till the time he stops?

- 1) 16 km
- 2) 11 km
- 3) 19 km
- 4) 15 km
- 5) 8 km

Solution:



Hence, required distance = $7 + 4 = 11$ KM

Q.45 How many such pairs of letters are there in the word BRILLIANT each of which has as many letters between them in the word (in both forward and backward directions) as they have between them in the English alphabetical order?

- 1) None
- 2) One
- 3) Two
- 4) Three
- 5) More than three

Solution:

5) More than three

Solution:

B	R	I	L	L	I	A	N	T
		I	J	K	L	M	N	

Hence, I to N – 1 Pair

Q.46 If each of the vowels in the word FINANCIAL is changed to the next letter in the English alphabetical order and each consonant is changed to the previous letter in the English alphabetical order, and then delete the alphabets that appear more than once after performing the said operations. How many alphabets will be left after performing all the operations?

- 1) None
- 2) One
- 3) Two
- 4) Three
- 5) More than three

Solutions:

- 4) Three
- 5) More than three

Solutions:

F I N A N C I A L
E J M B M B J B K

Hence, alphabets E & K remains

Q.47 If it is possible to make only one meaningful four letter English word using the second, third, seventh and eighth letters (from left) of the word RECOGNIZE, which of the following would be the second letter of that word from the left end? If no such word can be made, give 'X' as your answer and if more than one such word can be formed, give your answer as 'Z'.

- 1) E
- 2) I
- 3) C
- 4) X
- 5) Z

Solution:

R E C O G N I Z E

Hence, No word can be formed from E,C,I & Z

Q.48-49. The following questions are based on the five three digit numbers given below:

956 597 712 639 164

Q.48 If all the numbers are arranged in ascending order from left to right, which of the following will be the second number from the right end?

- 1) 597
- 2) 712
- 3) 639
- 4) 956
- 5) 164

Q.48-49. The following questions are based on the five three digit numbers given below:

956 597 712 639 164

Q.48 If all the numbers are arranged in ascending order from left to right, which of the following will be the second number from the right end?

- 1) 597
- 2) 712
- 3) 639
- 4) 956
- 5) 164

Explanation: 164 597 639 712 956

Q.49 If all the digits in each of the numbers are arranged in descending order within the number, which of the following will form the third lowest number in the new arrangement of numbers?

- 1) 597
- 2) 712
- 3) 639
- 4) 956
- 5) 164

Explanation: 965 975 721 963 641

Q.50 For understanding the concept of the following types of questions

Assumptions:

An assumption is something "supposed". For example, "Unless you catch a bus, you will not be able to reach the railway station on time". In this statement it is assumed that (1) there is a bus service available to railway station, (2) the bus will be available to reach you to the railway station before your scheduled time (3) the bus will be a faster mode of travel than the one which you were intending to follow. All these three assumptions are implied in the above statement. There could be some more assumptions also. This explanation is given to clearly bring home the point "what assumption means". Read the following instructions and example of the type of questions which are included in the test.

Instructions: Given below is a statement followed by two assumptions numbered I & II. You have to consider the statement and the following assumptions and decide which of the assumptions is/are implicit in the statement.

Give answer (1) if only assumption I is implicit; give answer (2) if only assumption II is implicit; give answer (3) if either assumption I or II is implicit; give answer (4) if neither I nor II is implicit; give answer (5) if both the assumptions I and II are implicit.

Statement: Go by aeroplane to reach Bengaluru from Mumbai quickly.

Assumption I: Mumbai and Bengaluru are connected by aeroplane service.

Assumption II: There is no other means of going from Mumbai to Bengaluru.

It is clear that only assumption I is implicit in the statement and assumption II is NOT implicit in the statement. In fact the statement implies that there are other means to reach Bengaluru from Mumbai but they take longer than by aeroplane. The answer, therefore, is (1) i.e. only assumption I is implicit.