Reasoning

Coding Decoding

Level-3

Q1 Directions: In each of the following questions two rows of numbers are given, the resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operation of numbers progresses from left to right.

Rules:

- (i) If an even number is followed by a perfect cube, then the first number is subtracted from the second number.
- (ii) If an even number is followed by an odd number, then both the numbers are multiplied.
- (iii) If an odd number is followed by an even number which is not a perfect cube, then the numbers are divided.
- (iv) If an odd number is followed by an odd number which is not a perfect cube, then both the numbers are added.
- (v) If an even number is followed by an odd number which is not a multiple of 5, then the larger number is divided by 25.
- (vi) If an even number is followed by an even number, then the larger number is the resultant.

200 47 W

13 17 15

If 'W' is the resultant of the second row, then what is the resultant of the first row?

- (A) 540
- (B) 54
- (C) 450

Q2

- (D) 45
- (E) None of these

Directions: In each of the following questions two rows of numbers are given, the resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operation of numbers progresses from left to right.

Rules:

- (i) If an even number is followed by a perfect cube, then the first number is subtracted from the second number.
- (ii) If an even number is followed by an odd number, then both the numbers are multiplied.
- (iii) If an odd number is followed by an even number which is not a perfect cube, then the numbers are divided.
- (iv) If an odd number is followed by an odd number which is not a perfect cube, then both the numbers are added.
- (v) If an even number is followed by an odd number which is not a multiple of 5, then the larger number is divided by 25.
- (vi) If an even number is followed by an even number, then the larger number is the resultant.

26 343 10

67 71 136

What is the sum of the resultant of first row and second row?

- (A) 196.7
- (B) 179.7
- (C) 199.7
- (D) 169.7
- (E) None of these

Directions: In each of the following questions two rows of numbers are given, the resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operation of numbers progresses from left to right.

Rules:

- (i) If an even number is followed by a perfect cube, then the first number is subtracted from the second number.
- (ii) If an even number is followed by an odd number, then both the numbers are multiplied.
- (iii) If an odd number is followed by an even number which is not a perfect cube, then the numbers are divided.
- (iv) If an odd number is followed by an odd number which is not a perfect cube, then both the numbers are added.
- (v) If an even number is followed by an odd number which is not a multiple of 5, then the larger number is divided by 25.
- (vi) If an even number is followed by an even number, then the larger number is the resultant.

56 125 29

10 75 43

If 'L' is the resultant of first row and 'M' is the resultant of second row, then find 'L + M'?

(A) 86

(B) 128

(C) 182

(D) 68

- (E) None of these
- **Directions:** In each of the following questions two rows of numbers are given, the resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operation of numbers progresses from left to right.

Rules:

- (i) If an even number is followed by a perfect cube, then the first number is subtracted from the second number.
- (ii) If an even number is followed by an odd number, then both the numbers are multiplied.
- (iii) If an odd number is followed by an even number which is not a perfect cube, then the numbers are divided.
- (iv) If an odd number is followed by an odd number which is not a perfect cube, then both the numbers are added.
- (v) If an even number is followed by an odd number which is not a multiple of five, then the larger number is divided by 25.
- (vi) If an even number is followed by an even number, then the larger number is the resultant.

150 87 16

P 15 729

If 'P' is the resultant of first row, then find the resultant of the second row?

(A) 489

(B) 498

(C)984

(D) 894

- (E) None of these
- **Directions:** In each of the following questions two rows of numbers are given, the resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operation of numbers progresses from left to right.

Rules:

- (i) If an even number is followed by an odd number, then the resultant will be the addition of both the numbers.
- (ii) If an odd number is followed by a perfect square, then the resultant will be the difference of that perfect square and the odd number.

- (iii) If an odd number is followed by an another odd number (but not perfect square), then the resultant will be the addition of both the numbers.
- (iv)) If an odd number is followed by an even number (but not perfect square), then the resultant will be the multiplication of both the numbers.
- (v) If an even number is followed by an another even number, then the resultant will be the division of the first number by the second number.

17 24 55

36 43 12

Find the sum of the resultant of the first row and the second row.

(A) 1141

(B) 4111

(C) 1411

(D) 1114

- (E) None of theseD
- **Q6 Directions:** In each of the following questions two rows of numbers are given, the resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operation of numbers progresses from left to right.

Rules:

- (i) If an even number is followed by an odd number, then the resultant will be the addition of both the numbers.
- (ii) If an odd number is followed by a perfect square, then the resultant will be the difference of that perfect square and the odd number.
- (iii) If an odd number is followed by an another odd number (but not perfect square), then the resultant will be the addition of both the numbers.

- (iv)) If an odd number is followed by an even number (but not perfect square), then the resultant will be the multiplication of both the numbers.
- (v) If an even number is followed by an another even number, then the resultant will be the division of the first number by the second number.

25 41 37

48 16 X

If 'X' is the resultant of the first row, then what is the resultant of the second row?

(A) 100

(B) 106

(C)99

(D) 110

- (E) None of these
- Q7 Directions: In each of the following questions two rows of numbers are given, the resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operation of numbers progresses from left to right.

Rules:

- (i) If an even number is followed by an odd number, then the resultant will be the addition of both the numbers.
- (ii) If an odd number is followed by a perfect square, then the resultant will be the difference of that perfect square and the odd number.
- (iii) If an odd number is followed by an another odd number (but not perfect square), then the resultant will be the addition of both the numbers.
- (iv)) If an odd number is followed by an even number (but not perfect square), then the resultant will be the multiplication of both the numbers.

(v) If an even number is followed by an another even number, then the resultant will be the division of the first number by the second number.

762

5 15 2

What is the multiplication of the resultant of the first row and the second row?

(A) 120

(B) 150

(C) 180

(D) 210

(E) None of these

Q8 Directions: In each of the following questions two rows of numbers are given, the resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operation of numbers progresses from left to right.

Rules:

- (i) If an even number is followed by an odd number, then the smaller number is to be subtracted from the larger number.
- (ii) If an even number is followed by an even number, then the smaller number must be added to the double of the larger number.
- (iii) If an odd number is followed by an odd number, then both the numbers are to be added.
- (iv) If an odd number is followed by an even number, then the smaller number of the two is to be halfed.
- (v) If a number which has decimal is followed by an even number, then the decimal gets removed and the number is divided by 5.

43 23 24

26 19 6

What will be the difference between the resultants of the two rows?

(A) 159

(B) 213

(C) 216

- (D) 153
- (E) None of these
- **Q9 Directions:** In each of the following questions two rows of numbers are given, the resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operation of numbers progresses from left to right.

Rules:

- (i) If an even number is followed by an odd number, then the smaller number is to be subtracted from the larger number.
- (ii) If an even number is followed by an even number, then the smaller number must be added to the double of the larger number.
- (iii) If an odd number is followed by an odd number, then both the numbers are to be added.
- (iv) If an odd number is followed by an even number, then the smaller number of the two is to be halfed.
- (v) If a number which has decimal is followed by an even number, then the decimal gets removed and the number is divided by 5.

46 85 79

67 Y 58

If 'Y' is resultant of first row, then what is the sum of the resultant of first row and second row?

(A) 165

(B) 275

- (C) 185
- (D) 245
- (E) None of these
- Q10 Directions: In each of the following questions two rows of numbers are given, the resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be

answered. The operation of numbers progresses from left to right.

Rules:

- (i) If an even number is followed by an odd number, then the smaller number is to be subtracted from the larger number.
- (ii) If an even number is followed by an even number, then the smaller number must be added to the double of the larger number.
- (iii) If an odd number is followed by an odd number, then both the numbers are to be added.
- (iv) If an odd number is followed by an even number, then the smaller number of the two is to be halfed.
- (v) If a number which has decimal is followed by an even number, then the decimal gets removed and the number is divided by 5.

57 20 83

X 44 32

If 'X' is the resultant of the first row, what will be the resultant of the second row?

(A) 38

(B) 86

(C) 96

(D) 48

(E) None of these

Q11 Directions: In each of the following questions two rows of numbers are given, the resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operation of numbers progresses from left to right.

Rules:

- (i) If an even number is followed by an odd number, then the smaller number is to be subtracted from the larger number.
- (ii) If an even number is followed by an even number, then the smaller number must be added to the double of the larger number.

- (iii) If an odd number is followed by an odd number, then both the numbers are to be added.
- (iv) If an odd number is followed by an even number, then the smaller number of the two is to be halfed.
- (v) If a number which has decimal is followed by an even number, then the decimal gets removed and the number is divided by 5.

83 98 12

12 36 33

What is the product of the resultant of the first and second row?

(A) 4233

(B) 3342

(C) 2433

(D) 2342

(E) None of these

Q12 Directions: In each question below is a given letter followed by four combinations of symbols and numbers. You have to find out which of the combination correctly represents the code based on the given coding system.

Letters	G	С	T	D	F	S	R	I	Н	0	E	U	Q	N	P	K	A
Numbers/	#	!	5	۸	8	&	7	*	1	\$	3	@	4	+	6	%	>
Symbols																	

Conditions:

- i) If the first and the last letters are vowels, then both are to be coded as the code of the first letter.
- ii) If the first letter is consonant and the last letter is a vowel, then the codes of both are to be interchanged.
- iii) If both first and the last letters are consonants then both are to be coded as "?"
- iv) If the first letter is a vowel and the last letter is consonant, then both are to be coded as the code of the last letter.

What is the code of FUTURE OUTPUT?

- (A) 3@5@78 5@56@5 (B) 8@5@73 \$@56@5
- (C) 3@5@78 \$@56@5 (D) 8@5@78 \$@56@\$
- (E) 3@5@73 ?@56@?
- Q13 Directions: In each question below is a given letter followed by four combinations of symbols and numbers. You have to find out which of the combination correctly represents the code based on the given coding system.

Letters	G	С	T	D	F	S	R	I	Н	0	E	U	Q	N	p	K	A
Numbers/	#	!	5	۸	8	&	7	*	1	\$	3	@	4	+	6	%	>
Symbols																	

Conditions:

- i) If the first and the last letters are vowels, then both are to be coded as the code of the first letter.
- ii) If the first letter is consonant and the last letter is a vowel, then the codes of both are to be interchanged.
- iii) If both first and the last letters are consonants then both are to be coded as "?"
- iv) If the first letter is a vowel and the last letter is consonant, then both are to be coded as the code of the last letter.

What is the code of FRENCH?

- (A) 873+!1
- (B) ?73+!?
- (C) 173+!1
- (D) 873+!8
- (E) 173+!8
- Q14 Directions: In each question below is a given letter followed by four combinations of symbols and numbers. You have to find out which of the combination correctly represents the code based on the given coding system.

Letters	G	С	T	D	F	S	R	I	Н	0	E	U	Q	N	P	K	A
Numbers/	#	!	5	۸	8	&	7	*	1	\$	3	@	4	+	6	%	>
Symbols																	

Conditions:

- i) If the first and the last letters are vowels, then both are to be coded as the code of the first letter.
- ii) If the first letter is consonant and the last letter is a vowel, then the codes of both are to be interchanged.
- iii) If both first and the last letters are consonants then both are to be coded as "?"
- iv) If the first letter is a vowel and the last letter is consonant, then both are to be coded as the code of the last letter.

What is the code of UNIQUE TICKET?

- (A) @+*4@3 5*!%35
- (B) @+*4@@ ?*!%3?
- (C) 5+*4@@ 5*!%35
- (D) @+*4@@ 5*!%35
- (E) ?+*4@? 5*!%35
- Q15 Directions: In each question below is a given letter followed by four combinations of symbols and numbers. You have to find out which of the combination correctly represents the code based on the given coding system.

L	etters	G	С	T	D	F	S	R	I	Н	0	E	U	Q	N	P	K	A
N	lumbers/	#	!	5	۸	8	&	7	*	1	\$	3	@	4	+	6	%	>
S	Symbols																	

Conditions:

- i) If the first and the last letters are vowels, then both are to be coded as the code of the first letter.
- ii) If the first letter is consonant and the last letter is a vowel, then the codes of both are to be

interchanged.

- iii) If both first and the last letters are consonants then both are to be coded as "?"
- iv) If the first letter is a vowel and the last letter is consonant, then both are to be coded as the code of the last letter.

What is the code of INSIDE HEIGHT?

- (A) 3+&*^3 13*#15
- (B) *+&*^3 13*#15
- (C) $*+8*^*?3*#1?$
- (D) *+&*^3 53*#15
- (E) 3+&*^* 13*#11
- Q16 Directions: In each question below is a given letter followed by four combinations of symbols and numbers. You have to find out which of the combination correctly represents the code based on the given coding system.

Letters	G	С	T	D	F	S	R	Ι	Н	0	E	U	Q	N	P	K	A
Numbers/	#	!	5	۸	8	&	7	*	1	\$	3	@	4	+	6	%	>
Symbols																	

Conditions:

- i) If the first and the last letters are vowels, then both are to be coded as the code of the first letter.
- ii) If the first letter is consonant and the last letter is a vowel, then the codes of both are to be interchanged.
- iii) If both first and the last letters are consonants then both are to be coded as "?"
- iv) If the first letter is a vowel and the last letter is consonant, then both are to be coded as the code of the last letter.

What is the code of REPAIR?

- (A) 76>3*7
- (B) ?36>*?
- (C) 736 > *7
- (D) 763 > *7
- (E) 763>7*

Q17 Directions: Study the following data carefully and answer the questions accordingly.

means either minutes or seconds are 0

> means either minutes or seconds are 4

@ means either minutes or seconds are 5

^ means either minutes or seconds are 6

& means either minutes or seconds are 7

\$ means either minutes or seconds are 30

% means either minutes or seconds are 60

Note: if two symbols are given than by default first symbol is considered as minute and the other is considered as second For example, @ > means 5 minutes and 4 seconds

A tank is equipped with three pumps: A, B and C. Pump A alone could fill the tank in > % . Pump B alone could fill the tank in @ % while pump C alone could fill the tank in & \$.

For a minute pump A is used, for next one minute Pump B and Pump A together are used to fill, after that pump A is replaced with pump B and pump B and pump C are used to fill water for a minute. And then Pump C alone is used for a minute. For how much more time should all three pumps be used to fill the remaining tank.

- $(A) \wedge >$
- (B) ##
- (C) > #

- (D) ^ #
- (E) None of these

Q18 Directions: Study the following data carefully and answer the questions accordingly.

means either minutes or seconds are 0

> means either minutes or seconds are 4

@ means either minutes or seconds are 5

[^] means either minutes or seconds are 6

& means either minutes or seconds are 7

\$ means either minutes or seconds are 30

% means either minutes or seconds are 60

Note: if two symbols are given than by default first symbol is considered as minute and the other is considered as second For example, @ > means 5 minutes and 4 seconds

A train usually takes \$ ^ to reach a destination but it got delayed by > %. Then, how much time did it took to reach the destination that day?

- (A) @ \$ + # ^
- (B) $$ @ + # ^$
- (C) \$ # + @ ^
- (D) # \$ + @ ^
- (E) None of these

Q19 Directions: Study the following data carefully and answer the questions accordingly.

- + means either hour hand or minute hand is at 3
- ? means either hour hand or minute hand is at 5
- < means either hour hand or minute hand is at 6
- > means either hour hand or minute hand is at 9
- ~ means either hour hand or minute hand is at 10 ! means either hour hand or minute hand is at 11
- @ means either hour hand or minute hand is at 12

Note: If two symbols are given then by default first symbol is consider as an hour hand and second one is considered minute hand. And all time are consider at PM. e.g. >@ = 9:00 PM., !? =11:25

A train Z which travels at the uniform speed of 60km/hr leaves Kolkata for Lucknow at +@ and train A which travels from Lucknow to Kolkata started its journey at ?@ . Train A travels faster than train Z and meets train Z at ~@. What is the speed of train A if the distance between Lucknow and Kolkata is 820km?

- (A) 110 km/hr
- (B) 90 km/hr
- (C) 16.67 m/s
- (D) 22.22 m/s
- (E) None of these

Q20 Directions: Study the following data carefully and answer the questions accordingly.

- + means either hour hand or minute hand is at 3
- ? means either hour hand or minute hand is at 5
- < means either hour hand or minute hand is at 6

> means either hour hand or minute hand is at 9 ~ means either hour hand or minute hand is at 10 ! means either hour hand or minute hand is at 11 @ means either hour hand or minute hand is at 12

Note: If two symbols are given in then by default first symbol is consider as an hour hand and second one is considered minute hand. And all time are consider at PM. e.g. >@ = 9:00 PM., !? =11:25

A work is divided among three people equally. Person A starts to work at <@ and completes it at >>, while person B starts at ++ and completes it at ?>. Person C quit the job so both A and B have to do his work. At what time they will be able to finish the work if they start at ~@ working together?

(A) > !

(B) < ?

(C)! <

- (D)?!
- (E) None of these

Directions: Study the following data carefully and answer the questions accordingly.

- + means either hour hand or minute hand is at 3
- ? means either hour hand or minute hand is at 5
- < means either hour hand or minute hand is at 6
- > means either hour hand or minute hand is at 9
- ~ means either hour hand or minute hand is at 10 ! means either hour hand or minute hand is at 11
- @ means either hour hand or minute hand is at 12

Note: If two symbols are given in then by default first symbol is consider as an hour hand and second one is considered minute hand. And all time are consider at PM. e.g. >@ = 9:00 PM., !? =11:25

For a specific work, if 18 men together start the job at +< they complete it at ><. 12 women if start at << they are able to complete it at !@. At what time will 8 men and 8 women can complete the same work if they start at ?@

- (A) @ <
- (B) < ?

(C) > ?

- (D) > <
- (E) None of these

Q22 Study the following information carefully and answer the questions accordingly.

@ means either minutes or seconds are 7

^ means either minutes or seconds are 10

& means either minutes or seconds are 12

\$ means either minutes or seconds are 23

> means either minutes or seconds are 32

means either minutes or seconds are 35

% means either minutes or seconds are 50

Note: if two symbols are given than by default first symbol is considered as minute and the other is considered as second For example, @ > means 7 minutes and 32 seconds

Person A started the exam @ # late but finished it ^ \$ before Person B. How much time does Person B take to complete the exam if he does not delay to start and Person A completes it in >&.

(A) % ^

(B) % #

- (C) ^ #
- (D) \$ &
- (E) None of these

Q23 Study the following information carefully and answer the questions accordingly.

@ means either minutes or seconds are 7

^ means either minutes or seconds are 10

& means either minutes or seconds are 12

\$ means either minutes or seconds are 23

> means either minutes or seconds are 32

means either minutes or seconds are 35

% means either minutes or seconds are 50

Note: if two symbols are given than by default first symbol is considered as minute and the other is considered as second For example, @> means 7 minutes and 32 seconds

A person usually takes #& to reach his office, one day he got late by ^\$. Person 2 takes ^& and 13 seconds more to reach the office. How much more time than person 2 does person 1 take that day to reach the office ?

(A) >^

(B) ^>

(C) ^#

- (D) #^
- (E) None of these

Q24 Answer the questions based on the information given below:

In a certain coded language,

means either the hour or the minute hand of the clock is at 2

\$ means either the hour or the minute hand of the clock is at 6

% means either the hour or the minute hand of the clock is at 9

@ means either the hour or the minute hand of the clock is at 1

& means either the hour or the minute hand of the clock is at 10

* means either the hour or the minute hand of the clock is at 8

For example,

#@ PM means 2:05 PM

%& PM means 9:50 PM

Note: The first symbol represents the hour hand and the second symbol represents the minute hand. Assume all time in PM, unless else mentioned.

A person boarded a train at &\$ AM. He reached station A after 14 hours 45 minutes. If it took him 25 minutes to reach his home, then at what time did he reach his home?

(A) &@ AM

(B) @\$ AM

(C) @* AM

(D) *\$ AM

(E) None of these

Q25 Directions: Study the following information carefully and answer the below questions In a certain code language,

"Study important questions earlier" means "€J63? \$Z44! &K92@ €M32#" "Bring admit card tomorrow" means "&H34? \$M70# *H12# \$N90!" "Syllabus are really difficult" means "*G83@ &A42@ *F34! *J60%" "Eagerly waiting for results" means "&B03! \$M42© *N73? &N03!" What is the code for the word "Vegetables?"

(A) &B14@

(B) *E14!

(C) €G14@

(D) €B14@

(E) None of these

Q26 Answer the questions based on the information given below:

In a certain coded language,

means either the hour or the minute hand of the clock is at 2

\$ means either the hour or the minute hand of the clock is at 6

% means either the hour or the minute hand of the clock is at 9

@ means either the hour or the minute hand of the clock is at 1

& means either the hour or the minute hand of the clock is at 10

* means either the hour or the minute hand of the clock is at 8

For example,

#@ PM means 2:05 PM

%& PM means 9:50 PM

Note: The first symbol represents the hour hand and the second symbol represents the minute hand. Assume all time in PM, unless else mentioned.

A person had breakfast at *% AM, had lunch 5 hours 30 minutes after taking his breakfast. If he takes dinner 7 hours 35 minutes after taking his lunch, then at what time did he take his dinner?

(A) %# PM

(B) %& PM

(C) %@ PM

(D) %% PM

(E) %*

Q27 Study the following information carefully and answer the questions accordingly.

In a certain code language,

'research overcook conflict bottom' is written as 'O6% T5# U4© F4\$'

classroom without photograph account' is written as 'U4% B6© P7# D4%'

'stadium network disclaim polish' is written as 'M4# T5© U5\$ B4©'

Which of the following can be the code for 'guess' in the given code language?

(A) F3%

(B) F3#

(C) F3*

(D) F3\$

(E) F3©

Q28 Study the following information carefully and answer the questions accordingly.

In a certain code language,

'research overcook conflict bottom' is written as $^{\circ}$ O6% T5# U4© F4\$ '

classroom without photograph account' is written as 'U4% B6© P7# D4%'

'stadium network disclaim polish' is written as 'M4# T5© U5\$ B4©'

Which of the following is the code for 'impact' in the given code language?

(A) Q5%

(B) Q4#

(C) P4%

(D) Q4\$

(E) Q4%

Q29 Study the following information carefully and answer the questions accordingly.

In a certain code language,

'research overcook conflict bottom' is written as 'O6% T5# U4© F4\$'

classroom without photograph account' is written as 'U4% B6© P7# D4%'

'stadium network disclaim polish' is written as 'M4# T5© U5\$ B4©'

Which of the following is the code for 'paperwork' in the given code language?

(A) Q6%

(B) Q6#

(C) Q4%

(D) Q6©

(E) Q6\$

Q30 Study the following information carefully and answer the questions accordingly.

In a certain code language,

'research overcook conflict bottom' is written as 'O6% T5# U4© F4\$'

classroom without photograph account' is written as 'U4% B6© P7# D4%'

'stadium network disclaim polish' is written as 'M4# T5© U5\$ B4©'

Which of the following is the code for 'stylish' in the given code language?

(A) Z6\$

(B) Z4#

(C) Z6%

(D) Z6#

(E) Z6©

Q31 Study the following information carefully and answer the questions accordingly.

In a certain code language,

'research overcook conflict bottom' is written as 'O6% T5# U4© F4\$'

classroom without photograph account' is written as 'U4% B6© P7# D4%'

'stadium network disclaim polish' is written as 'M4# T5© U5\$ B4©'

Which of the following is the code for 'transform' in the given code language?

(A) B7©

(B) B7#

(C) B6%

(D) B6©

(E) B6\$

Answer Key

- Q1 (C)
- Q2 (D)
- (B) Q3
- (A) Q4
- (C) Q5
- (B) Q6
- (D) Q7
- (D) Q8
- (C) Q9
- Q10 (B)
- (A) Q11
- Q12 (A)
- (B) Q13
- (B) Q14
- (C) Q15
- (B) Q16

- (B) Q17
- Q18 (C)
- Q19 (D)
- Q20 (C)
- Q21 (D)
- Q22 (A)
- Q23 (D)
- Q24 (C)
- Q25 (D)
- Q26 (B)
- Q27 (C)
- Q28 (E)
- Q29 (E)
- Q30 (D)
- Q31 (A)

Hints & Solutions

Q1 Text Solution: Row 1: Row 2: 56 125 – The pair follows rule (i), hence resultant 13 17 – The pair follows rule (iv), hence resultant = = 125 - 56= 69 13 + 17= 30 69 29 – The pair follows rule (iv), hence resultant 30 15 – The pair follows rule (ii), hence resultant = = 69 + 2930 X 15 = 98 =450So, L = 98 Row 2: So, W = 450 Row 1: 10 75 – The pair follows rule (ii), hence resultant = 200 47 - The pair follows rule (v), hence 10 X 75 = 750resultant = 200 / 25 = 8 750 43 – The pair follows rule (v), hence resultant 8 450 – The pair follows rule (vi), hence resultant = 750 / 25= 30 So, the answer is 450. So, M = 30Now, Q2 Text Solution: L + MRow 1: = 98 + 3026 343 – The pair follows rule (i), hence resultant = 128 = 343 - 26So, the answer is 128. = 317 317 10 – The pair follows rule (iii), hence resultant Q4 Text Solution: = 317 / 10Row 1: = 31.7150 87 – The pair follows rule (v), hence resultant Row 2: = 150 / 2567 71 – The pair follows rule (iv), hence resultant = 6 = 67 + 716 16 – The pair follows rule (vi), hence resultant = = 13816 138 136 - The pair follows rule (vi), hence So, **P = 16** resultant = 138 Row 2: So, the sum of the resultant of first row and 16 15 – The pair follows rule (ii), hence resultant = second row; 16 X 15 = 31.7 + 138= 240 = 169.7 240 729 - The pair follows rule (i), hence So, the answer is 169.7 resultant = 729 - 240 = 489 Q3 Text Solution:

So, the resultant of the second row is 489.

Q5 Text Solution:

Row 1:

17 24 - The pair follows rule (iv), hence resultant

 $= 17 \times 24$

= 408

408 55 – The pair follows rule (i), hence resultant

=408 + 55

= 463

Row 2:

36 43 – The pair follows rule (i), hence resultant =

36 + 43

= 79

79 12 - The pair follows rule (iv), hence resultant

= 79 X 12

= 948

So, the sum of the resultant of the first row and the second row;

= 463 + 948

= 1411

So, the answer is 1411.

Q6 Text Solution:

Row 1:

25 41 - The pair follows rule (iii), hence resultant

= 25 + 41

= 66

66 37 – The pair follows rule (i), hence resultant =

66 + 37

= 103

So, X = 103

Row 2:

48 16 – The pair follows rule (v), hence resultant =

48 / 16

= 3

3 103 – The pair follows rule (iii), hence resultant

= 3 + 103

= 106

So, the answer is 106.

Q7 Text Solution:

Row 1:

7 6 – The pair follows rule (iv), hence resultant = 7

X 6

= 42

42 2 – The pair follows rule (v), hence resultant =

= 21

Row 2:

5 15 - The pair follows rule (iii), hence resultant =

5 + 15

= 20

20 2 – The pair follows rule (v), hence resultant =

20/2

= 10

So, the multiplication the resultant of the first row and the second row;

 $= 21 \times 10$

= 210

So, the answer is 210.

Q8 Text Solution:

Row 1:

43 23 - The pair follows rule (iii), hence resultant

= 43 + 23 = 66

66 24 - The pair follows rule (ii), hence resultant

 $= 24 + (2 \times 66)$

= 24 + 132

= 156

Row 2:

26 19 – The pair follows rule (i), hence resultant =

26 - 19 = 7

7 6 – The pair follows rule (iv), hence resultant = 6

/2 = 3

So, Row 1 - Row 2

= 156 - 3

= 153

So, the answer is 153.

Q9 Text Solution:

Row 1:

46 85 – The pair follows rule (i), hence resultant =

85 - 46 = 39

39 79 - The pair follows rule (iii), hence resultant

= 39 + 79 = 118

Y = 118

Row 2:

67 118 – The pair follows rule (iv), hence resultant

= 67 / 2 = **33.5**

33.5 58 - The pair follows rule (v), hence

resultant = 335 / 5 = 67

So, row 1 + row 2

= 118 + 67

= 185

So, the answer is 185.

Q10 Text Solution:

Row 1:

57 20 - The pair follows rule (iv), hence resultant

= 20 / 2 = 10

10 83 – The pair follows rule (i), hence resultant =

83 - 10 = 73

X = 73

Row 2:

73 44 - The pair follows rule (iv), hence resultant

= 44 / 2 = **22**

22 32 - The pair follows rule (ii), hence resultant

 $= 22 + (32 \times 2) = 86$

So, the resultant of Row 2 is 86.

Q11 Text Solution:

Row 1:

83 98 - The pair follows rule (iv), hence resultant

= 83 / 2 = **41.5**

41.5 12 – The pair follows rule (v), hence resultant

=415/5=83

Row 2:

12 36 – The pair follows rule (ii), hence resultant =

12 + (2 X 36)

= 12 + 72

84 33 – The pair follows rule (i), hence resultant =

84 - 33 = 51

So, the product of the resultant of the first and

second row;

= 83 X 51 = 4233

So, the answer is 4233.

Q12 Text Solution:

FUTURE-3@5@78

Condition 2 follows: If the first letter is consonant and the last letter is a vowel, then the codes of both are to be interchanged.

OUTPUT-5@56@5

Condition 4 follows: If the first letter is a vowel and the last letter is consonant, then both are to be coded as the code of the last letter.

Q13 Text Solution:

FRENCH- ?73+!?

Condition 3 follows: If both first and the last letters are consonants then both are to be coded as "?"

Q14 Text Solution:

UNIQUE- @+*4@@

Condition1 follows: If the first and the last letters are vowels, then both are to be coded as the code of the first letter.

TICKET- ?*!%3?

Condition 3 follows: If both first and the last letters are consonants then both are to be coded as "?"

Q15 Text Solution:

INSIDE- *+&*^*

Condition 1 follows: If the first and the last letters are vowels, then both are to be coded as the code of the first letter.

HEIGHT- ?3*#1?



Condition 3 follows: If both first and the last letters are consonants then both are to be coded as "?"

Q16 Text Solution:

REPAIR- ?36>*?

Condition 3 follows: If both first and the last letters are consonants then both are to be coded as "?"

Q17 Text Solution:

Zero minutes.

means either minutes or seconds are 0
> means either minutes or seconds are 4
@ means either minutes or seconds are 5
^ means either minutes or seconds are 6
& means either minutes or seconds are 7
\$ means either minutes or seconds are 30
% means either minutes or seconds are 60
Pump A alone could fill the tank in 4 min 60 sec
.Pump B alone could fill the tank in 5 min 60 sec
while pump C alone could fill the tank in 7 min 30
sec.

A = 5 min

B = 6 min

C = 7.5 min

Let tank be of 30 units so A fills 6 unit per min, B fills 5 unit per min and C fill 4 unit per min

For a minute pump A is used, for next one minute

Pump B and Pump A together are used to fill, after that pump A is replaced with pump B and pump B and pump C are used to fill water for a minute. And then Pump C alone is used for a minute. So, 6 + (6 + 5) + (5 + 4) + 4 = 30 units.

Tank is already full.

So for zero more minutes all three pumps should

be used.

Q18 Text Solution:

\$ ^ 30 mins and 6 sec

> % 4 mins and 60 sec = 5mins

Total time = 35 mins and 6 sec $\# + @^ = 30 \text{ mins} + 5 \text{ mins} 6 \text{ sec} = 35 \text{ min} 6 \text{ sec}$

Q19 Text Solution:

+ means either hour hand or minute hand is at 3
? means either hour hand or minute hand is at 5
< means either hour hand or minute hand is at 6
> means either hour hand or minute hand is at 9
~ means either hour hand or minute hand is at 10
! means either hour hand or minute hand is at 11
@ means either hour hand or minute hand is at 11

A train Z which travels at the uniform speed of 60km/hr leaves Kolkata for Lucknow at 3:00 PM and train A which travels from Lucknow to Kolkata started its journey at 5:00 PM . Train A travels faster than train Z and meets train Z at 10:00PM. What is the speed of train A if the distance between Lucknow and Kolkata is 820km Time for train Z = 7 hr and time for train A is 5 hrs. Train Z travelled 60*7 = 420 km and Train A travelled 820-420 = 400 km in 5 hrs Speed of Train A is 80 km/hr = 22.22 m/s

Q20 Text Solution:

+ means either hour hand or minute hand is at 3
? means either hour hand or minute hand is at 5
< means either hour hand or minute hand is at 6
> means either hour hand or minute hand is at 9
~ means either hour hand or minute hand is at 10
! means either hour hand or minute hand is at 11
@ means either hour hand or minute hand is at 11

A work is divided among three people equally. . Person A starts to work at 6:00 PM and completes it at 9:45, while person B starts at 3:15 PM and completes it at 5:45 PM. Person C quit the job so both A and B have to do his work. At what time they will be able to finish the work if they start at 10:00 PM working together?

A = 3hr 45 min = 3.75 hr

B = 2 hr 30 min = 2.5 hr

Let the work be of total 15 units, then A does 4 units of work in an hour and B does 6 units of work in an hour, together they do 10 units of work in an hour can could complete in 15/10 = 1.5 hrs

if they start at 10:00 PM then work will finish by 11:30 PM = ! <

Q21 Text Solution:

12

+ means either hour hand or minute hand is at 3

? means either hour hand or minute hand is at 5

< means either hour hand or minute hand is at 6

> means either hour hand or minute hand is at 9

 \sim means either hour hand or minute hand is at 10 $\,$

! means either hour hand or minute hand is at 11 @ means either hour hand or minute hand is at

For a specific work, if 18 men together start the job at 3:30 PM they complete it at 9:30 PM. 12 women if start at 6:30 PM they are able to complete it at 11:00 PM. At what time will 8 men and 8 women can complete the same work if they start at 5:00 PM

18 men in 6 hrs

12 women in 4 hrs 30 mins =4.5 hr

18 * 6 * M = 12 *4.5 * W

 $M/W = \frac{1}{2} => W = 2M$

8M and 8W = 24M

24 men can complete in

18 * 6 /24 = 4.5 hrs

If they start at 5:00 PM, the can complete by 9:30PM => <

Q22 Text Solution:

@ means either minutes or seconds are 7

^ means either minutes or seconds are 10

& means either minutes or seconds are 12

\$ means either minutes or seconds are 23

> means either minutes or seconds are 32

means either minutes or seconds are 35

% means either minutes or seconds are 50

Converting the statement:

Person A started the exam 7 min 35 sec late but finished it 10 min 23 sec before Person B. How much time does Person B take to complete the exam if he does not delay to start and Person A completes it in 32 min 12 sec.

Time taken by B is 7 min 35 sec + 10 min 23 sec + 32 min 12 sec

= 50 min 10 sec = % ^

Q23 Text Solution:

Time taken by the person 1 to reach the office #& i.e. 35 minutes 12 seconds

But he took ^\$ 10 minutes 23 seconds more on that day.

Therefore, the total time taken by the person to reach on that particular day is 45 minutes and 35 seconds.

Time take by the person 2 to reach the office ^& i.e 10 minutes and 12 second and 13 seconds more, therefore total time taken is 10 minutes and 25 seconds.

Therefore Person 1 took 35 minutes and 10 seconds more i.e #^

Q24 Text Solution:

A person boarded the train at 10:30 AM and he reached station A at 1:15 AM, it took him 25 minutes to reach home, hence he was home at 1:40 AM or at @* AM.

Q25 Text Solution:

I) For symbols ->First symbol represents the vowel count and the last symbol represents the consonant count. Vowels -> 1-\$, 2- * , 3-\$, 4-\$

Consonants -> 1-%, 2-©, 3-#, 4-!, 5-?, 6-@

II) For letter ->Consider the third letter of every word. If the third letter is a vowel then the fifth

succeeding letter of that vowel as per the English alphabetical series is taken. If the third letter is a consonant, then the fifth preceding letter of that consonant as per the alphabetical series is taken. III) For numbers -> The place value(as per the alphabetical series) of the first and last letter of the word is added and written in reverse order.

Q26 Text Solution:

He had his breakfast at 8:45AM, lunch at 2:15PM and dinner at 9:50PM or %& PM.

Q27 Text Solution:

Solution:-

Letter :- Third letter from the left end in the word + 1

Example :- In the word "EVERY" 3rd letter from the left is E' + 1 = F'.

Number:-

Number of consonants in the word.

Example :- In the word "EVERY" the number of consonants is 3.

Symbol:-

Last letter of the word is 'H' use '#'

Last letter of the word is 'K' use '\$'

Last letter of the word is 'T' use '%'

Last letter of the word is 'M' use '©'

Q28 Text Solution:

Solution:-

Letter :- Third letter from the left end in the word + 1

Example :- In the word "EVERY" 3rd letter from the left is E' + 1 = F'.

Number:-

Number of consonants in the word.

Example: In the word "EVERY" the number of consonants is 3.

Symbol:-

Last letter of the word is 'H' use '#'
Last letter of the word is 'K' use '\$'

Last letter of the word is 'T' use '%' Last letter of the word is 'M' use '©'

Q29 Text Solution:

Solution:-

Letter :- Third letter from the left end in the word +1

Example :- In the word "EVERY" 3rd letter from the left is E' + 1 = F'.

Number:-

Number of consonants in the word.

Example :- In the word "EVERY" the number of consonants is 3.

Symbol:-

Last letter of the word is 'H' use '#'

Last letter of the word is 'K' use '\$'

Last letter of the word is 'T' use '%'

Last letter of the word is 'M' use '©'

Q30 Text Solution:

Solution:-

Letter :- Third letter from the left end in the word

Example :- In the word "EVERY" 3rd letter from the left is E' + 1 = F'.

Number:-

Number of consonants in the word.

Example :- In the word "EVERY" the number of consonants is 3.

Symbol:-

Last letter of the word is 'H' use '#'

Last letter of the word is 'K' use '\$'

Last letter of the word is 'T' use '%'

Last letter of the word is 'M' use '©'

Q31 Text Solution:

Solution:-

Letter :- Third letter from the left end in the word + 1

Example :- In the word "EVERY" 3rd letter from the left is E' + 1 = F'.

Number:-

Number of consonants in the word.

Example :- In the word "EVERY" the number of consonants is 3.

Symbol:-

Last letter of the word is 'H' use '#' Last letter of the word is 'K' use '\$' Last letter of the word is 'T' use '%' Last letter of the word is 'M' use '©'



