CHAPTER 2

Odd Man Out, Coding and Decoding

Finding the odd man out from the given alternatives is a very common type of questions that one comes across in different competitive examinations. In the questions on odd man out, all the items-except one-follow a certain pattern (in their formation) or belong to a group. The item that does not follow the pattern or does not belong to the group has to be marked as the answer choice.

The problems of this variety often fall under the category of CLASSIFICATION. When a given set of elements is classified under a single head, one of the items will not fall into that group to which the rest belong, i.e., it will not have the common property, which the others will have. Hence it becomes the odd man out.

Questions on classification can be asked in any form. Some of the commonly asked ones are given below.

(1) ALPHABET CLASSIFICATION

In this type, a group of jumbled letters typically consisting of three letters, (but can be four or two or just a single letter) are put together. The pattern or order in which they are grouped is to be studied and we need to find out which groups have the same pattern or relationship between the letters. There will be one choice, which will have a pattern different from the rest and that is our answer.

Solved Examples

1. Find the odd one among the following.

(1) ZW
(2) TQ
(3) SP
(4) NL

Solution: $Z^{-3}W$, $T^{-3}Q$, $S^{-3}P$, $N^{-2}L$, $P^{-3}M$

Hence, NL is the odd one.

Choice (4)

2. Find the odd one among the following.

(1) CFD
(2) GJH
(3) KNM
(4) JMK

Solution: $C^{+3}F^{-2}D$, $G^{+3}J^{-2}H$, $K^{+3}N^{-1}M$, $J^{+3}M^{-2}K$, $V^{+3}Y^{-2}W$

Hence, KNM is the odd one.

Choice (3)

(2) WORD CLASSIFICATION

Here, different items are classified based on common properties like names, places, professions, parts of speech, etc. A few examples are illustrated below.

Solved Examples

3. Find the odd one among the following.

(1) Mercury
(2) Moon
(3) Jupiter
(4) Saturn

☝ ***Solution:*** All others except Moon are planets where as Moon is a satellite.

Choice (2)

4. Find the odd one among the following.

(1) SORE (2) SOTLU
(3) NORGAE (4) MEJNIAS

☝ ***Solution:*** The words are jumbled. The actual words are ROSE, LOTUS, ORANGE, JASMINE and LILLY. All, except ORANGE, are flowers whereas ORANGE is a fruit.

Choice (3)

(3) NUMBER CLASSIFICATION

In this case, we need to choose the odd number from the given alternatives. The numbers may belong to a particular set, i.e., they may be odd, even, prime, rational, squares, cubes, and they may also be coded into binary digits (involving 0's and 1's) etc. and only one of the choices will not follow the rule which others do and that is our answer. A few illustrations are given below.

Solved Examples

5. Find the odd one among the following.

(a) (1) 17 (2) 27
(3) 37 (4) 47

(b) (1) 441 (2) 289
(3) 361 (4) 343

(c) (1) 1011 (2) 1101
(3) 1111 (4) 10001

☝ ***Solution:***

(a) All the given numbers except 27 are prime numbers whereas 27 is a composite number.

Choice (2)

(b) The given numbers can be written as $(21)^2$, $(17)^2$, $(19)^2$, $(7)^3$, $(25)^2$All except 343 are the squares whereas 343 is a cube.

Choice (4)

(c) The given numbers are in binary system, converting these into the decimal system we get, 1011

$\Rightarrow 1 \times 2^3 + 0 \times 2^2 + 1 \times 2^1 + 1 \times 2^0$

$= 8 + 2 + 1 = 11$

$1101 \Rightarrow 1 \times 2^3 + 1 \times 2^2 + 0 \times 2^1 + 1 \times 2^0$

$= 8 + 4 + 1 = 13$

$1111 \Rightarrow 1 \times 2^3 + 1 \times 2^2 + 1 \times 2^1 + 1 \times 2^0$

$= 8 + 4 + 2 + 1 = 15$

$0001 \Rightarrow 1 \times 2^4 + 0 \times 2^3 + 0 \times 2^2 + 0 \times 2^1 + 1 \times 2^0$

$= 16 + 1 = 17$

$111 = 1 \times 2^2 + 1 \times 2^1 + 1 \times 2^6$

$= 4 + 2 + 1 = 7$

All the given numbers except 15 are prime numbers.

Choice (3)

Before looking at the different types of questions and some of the codes that can be used with the help of examples, let us first understand what we mean by *coding* and *decoding*. When we say *coding*, a particular code or pattern is used to express a word in English language as a different word or in a different form. The coded word itself does not make any sense unless we know the pattern or code that has been followed. *Decoding* refers to the process of arriving at the equivalent English word from the code word given.

In the questions, a particular code is given and on the basis of this given code, we have to find out how another word (in English language) can be coded. The correct code for the given word has to be selected from the answer choices on the basis of the code given in the question.

Solved Examples

1. In a certain code language, if the word 'PARTNER' is coded as OZQSMDQ, then what is the code for the word 'SEGMENT' in that language?

(1) TFHNFOU
(2) RDFLDMS
(3) RDELDMS
(4) RDFEDNS

Solution:

Word : P A R T N E R
Logic : −1 −1 −1 −1 −1 −1 −1
Code : O Z Q S M D Q

Similarly the code for SEGMENT is

Word : S E G M E N T
Logic : −1 −1 −1 −1 −1 −1 −1
Code : R D F L D M S

Choice (2)

2. In a certain code language, if the word RECTANGLE' is coded as TGEVCPING, then how is the word 'RHOMBUS' coded in that language?

(1) TJOQDWV
(2) TJQNDWU
(3) TJQODWU
(4) TJQOEWU

Solution:

Word : R E C T A N G L E
Logic : +2 +2 +2 +2 +2 +2 +2 +2 +2
Code : T G E V C P I N G

Similarly, the code for RHOMBUS is

Word : R H O M B U S
Logic : +2 +2 +2 +2 +2 +2 +2
Code: T J Q O D W U

Choice (3)

Directions for questions 3 to 6: In a certain code language, the codes for some words are as follows.

NATION	-	agvnab
REMOTE	-	rzgrbe
STAIR	-	efgnv
FORMAL	-	bensyz
COMMON	-	zabzpb
FOR	-	ebs

Based on the above coding pattern answer the following questions.

3. What is the code for 'SCREEN'?

(1) fepcra (2) fpersa
(3) fpreba (4) fperra

4. What is the code for 'RATION'?

(1) ensvba (2) engvba
(3) engrba (4) engvca

5. What is the code for 'CREATOR'?

(1) prengbc
(2) persbgc
(3) perngbe
(4) pebryc

6. What is the code for 'AMERICAN'?

(1) nzrevpna
(2) nzrespna
(3) nzlespna
(4) nzreqpna

Solutions for questions 3 to 6:

The given words and their codes are as follows:

(1) NATION - agvnab
(2) REMOTE - rzgrbi

(3) STAIR - efgnv
(4) FORMAL - bensyz
(5) COMMON - zabzpb
(6) FOR - ebs

In the first word, the letter N is repeated and so is the code a. Hence, for N, the code is a. Similarly, from the second word, the code for E is 'r'. In first and sixth words the letter o is common and so is the code b. Hence, the code for o is b. In the fifth word, the letter m is repeated and so is the code z. Hence, the code for m is z. Similarly, the codes for the remaining letters can be determined.

The letters and their respective codes are as follows:

Letter	A	C	E	F	I	L	M	N	O	R	S	T
Code letter	n	p	R	s	v	y	z	a	b	e	f	G

3. The code for 'SCREEN' is fperra.

Choice (4)

4. The code for 'RATION' is engvba.

Choice (2)

5. The code for 'CREATOR' is perngbe.

Choice (3)

6. The code for 'AMERICAN' is nzrevpna.

Choice (1)

PRACTICE EXERCISE 2 (A)

Directions for questions 1 to 24: In each of the following questions, three out of the following four are alike and hence form a group. Find the one which does not belong to that group.

1. (1) 27 (2) 37
(3) 47 (4) 67

2. (1) 36 (2) 49
(3) 64 (4) 81

3. (1) 343 (2) 121
(3) 1331 (4) 2197

4. (1) $\frac{2}{22}$ (2) $\frac{5}{55}$
(3) $\frac{1}{1}$ (4) $\frac{3}{333}$

5. (1) 508 (2) 328
(3) 608 (4) 148

6. (1) PMS (2) ROU
(3) GDJ (4) KIM

7. (1) GFI (2) QOR
(3) LKN (4) YXA

8. (1) KMNL (2) PRSQ
(3) VWYZ (4) JLMK

9. (1) OQMS (2) UAWY
(3) NPLR (4) BDZF

10. (1) B4 (2) E25
(3) D16 (4) I91

11. (1) Chameleon (2) Crocodile
(3) Turtle (4) Allegator

12. (1) Part (2) Trap
(3) Cart (4) Dart

13. (1) Skin (2) Eye
(3) Leg (4) Nose

14. (1) Baseball (2) Boxing
(3) Chess (4) Wrestling

15. (1) HEWAT (2) CERI
(3) ROWAJ (4) EECRALS

16. (1) 8 (2) 27
(3) 64 (4) 125

17. (1) Trapezium (2) Square
(3) Triangle (4) Cube

18. (1) Lungs (2) Eyes
(3) Fingers (4) Ears

19. (1) Oasis (2) Fountain
(3) Mirage (4) Pond

20. (1) India : Rupee (2) America : Dollar
(3) Quwait : Dinar (4) Australia : Pound

21. In a certain code language, if the word CUSTOMER is coded as RCEUMSOT, then how is the word IMMACULATE coded in that language?
(1) EITMMALAUC (2) EITMAMLAUC
(3) ETEMAMALUC (4) EITMMALUAC

22. In a certain code language, if the word SEARCH is coded as IDSBFT, then how is the word FURNISH coded in that language?
(1) ITKNSVG (2) ITJORWG
(3) ITJOSVG (4) ITHNRVG

23. In a certain code language, if the word BARRICADE is coded as AABCDEIRR, then how is the word INDIVIDUAL coded in that language?
(1) ADDIIILNUV (2) ADDIIINLUV
(3) AIIIUDDLNV (4) ADDINIILUV

24. In a certain code language, if INFER = 25 and JERSEY = 28, then CHOICE =?
(1) 34 (2) 39
(3) 41 (4) 47

Directions for questions 25 and 26: These questions are based on the following data.

In a certain code language, if the word ROUTINE is coded as JMPRRLJ and the word FIDELITY is coded as LGHCXGNW, then how will you code the following words in that language?

25. TOBACCO
(1) NMDXEAF (2) NMDYEBF
(3) NMCYFBD (4) NMDYFAD

26. In a certain code language, the word INDUSTRY is coded as $C_3\ G_2\ B_2\ C_7\ S_1\ D_5\ F_3\ E_5$ and the word CREDIT is coded as $C_1\ F_3\ E_1\ B_2\ C_3\ D_5$, then find the code for MOTIVE.

(1) $M_1C_5D_4C_3K_2E_1$ (2) $M_1E_3J_2C_3K_2E_1$
(3) $M_1E_4D_5C_3T_2E_1$ (4) $M_1E_4J_2C_4K_2E_2$

Directions for question 27: For the following groups of letters given in Column I, the codes are given in Column II. Answer the following questions by finding the codes for the groups from the given columns.

Column I	**Column II**
(1) lit kit bit dit	b r p d
(2) fit git mit kit	t d s v
(3) rit bit git tit	x p v w
(4) nit dit fit rit	r s x j

27. What is the code for nit?

(1) x (2) s
(3) j (4) r

Directions for question 28: For the words given in column I, the codes are given in Column II. Answer the following questions by finding the codes for the letters from the words and their codes given in the columns.

Column I	**Column II**
(1) PRETEND	4396408
(2) COMMON	615715
(3) HOUSE	4*2&1
(4) SUPPORT	3*21839
(5) DRUM	5*08

28. What is the code for the word HORMONE?

(1) &385364 (2) &176561
(3) &175184 (4) &185164

Directions for questions 29 and 30: For the following sentences given in column I, the codes are given in Column II. Answer the following questions by finding the codes for the words form the given columns.

Column I	**Column II**
All people are not poet	kak cac hah faf zaz
Great people are happy	tat dad faf zaz
Krishna is a god	nan gag rar mam
Tagore is a great poet	mam kak dad nan lal
God make people happy	tat gag faf sas
No person is happy	xax pap faf mam

29. What is the code for the word 'Tagore' in that language?

(1) kak (2) dad
(3) lal (4) nan

30. Which of the following can be the code for "Tagore make great paintings" in that language?

(1) dad sas lal cac (2) lal kak zaz waw
(3) qaq lal gag sas (4) lal dad sas vav

Directions for questions 31 and 32: For the following sentences given in column I, the codes are given in column II. Answer the following questions by finding the codes for the words form the given columns.

Column I	**Column II**
I do not cheat.	1 # 2 7
I win the gold medal	9 @ 7 6 Ψ
I am not the last	3 7 6 π #
Manav do not loose	1 8 # %
Last person win the silver medal	4 π 6 θ @ Ψ
Manav is a person	4 5 8 *

31. What is the code for 'cheat'?

(1) 7 (2) 1
(3) # (4) 2

32. What is the code for "Manav is a cheat"?

(1) * 8 # 5 (2) 4 8 5 2
(3) 5 * 8 2 (4) 5 9 4 2

Directions for questions 33 and 34: Given below are the codes for the digits/symbols. Study the conditions given below and answer the questions that follow.

Digit/ symbol:	6	2	@	*	3	$	1	#	7	8	4	%	5	£	9
Letter codes:	G	J	B	P	O	A	K	N	F	Q	L	S	D	M	H

Conditions:

(1) If the 1st element in the group is a symbol and the last one is an odd digit, the code for both will be X.
(2) If the 1st element is an even digit and the last element is a symbol, then codes for each of them gets interchanged.
(3) If the 1st element is an odd digit and the last element is an even digit then the code for both will be Y.
(4) If both the 1st and the last elements are symbols, then the code for both will be Z.

What will be the code for the following groups of numbers and symbols?

33. 7 4 5 9 8 3 6

(1) FLDHQOG (2) GLDHQOF
(3) FLDQHOG (4) YLDHQOY

34. # 6 3 4 1 8 5

(1) NGLOKQD
(2) DGOLKQN
(3) XGOLKQX
(4) ZGOLKQZ

Directions for questions 35 and 36: Given below are the codes for the digits/symbols. Answer the questions based on the codes and the conditions given below the code.

Digit/ symbol:	3	8	£	4	$	@	1	#	7	%	9	©	*	2	5	S	6
Letter code:	D	A	M	H	Q	C	R	G	B	J	F	K	N	L	T	P	E

Conditions:

(1) If both the left most and the right most elements are symbols, then the codes for the first two elements get interchanged between them and the codes for the last two elements get interchanged between them.
(2) If the left most element is a symbol and the right most is an even digit then the code for both will be y.
(3) If the left most element is an odd digit and the right most element is a symbol, then the codes of these two get interchanged.
(4) If the left most element is an odd digit and the right most element is an even digit then the code for both will be w.
(5) If the left most element in the group is an even digit and the right most element is an odd digit then, reverse the order of the code for the group.

35. 8 3 6 @ 4 9 7

(1) PDECHFA (2) BFHCEDA
(3) ADECHFB (4) XDECHFX

36. $ 4 7 8 3 © 6

(1) EKDABHQ (2) ZHBADKZ
(3) EHBADKQ (4) YHBADKY

Directions for questions 37 to 40: Select the correct alternative from the given choices.

37. In a certain code language, if Violet is called as Green, Green is called as Red, Red is called as Brown, Brown is called as Orange, Orange is called as Yellow, Yellow is called as Blue and Blue is called as Indigo, then what is the colour of human blood in that language?

(1) Red (2) Blue
(3) Green (4) Brown

38. In a certain code, language Bread is called Butter, Butter is called Milk, Milk is called Shirt, Shirt is called Shoe, Shoe is called Bicycle, Bicycle is called Watch, Watch is called Aeroplane and Aeroplane is called Ship, then which of the following indicates time in that language?

(1) Watch (2) Bicycle
(3) Milk (4) Aeroplane

39. In a certain code language, if each letter in the English alphabet, with an odd numbered value is given a code of 2 and each of the remaining letters is coded as 1, then what is the code for the word SALVATION?

(1) 211221121 (2) 211121212
(3) 221112122 (4) 221121221

40. In a certain code language, if the word MANAGEMENT is coded as DAEAGEDEEB, then how is the word TREASURE coded in that language?

(1) BIFAIDHE (2) BIEAJCIE
(3) BJEAIDCE (4) BJFAIJCE

PRACTICE EXERCISE 2 (B)

Directions for questions 1 to 20: In each of the following questions, three out of the following five are alike and hence form a group. Find the one which does not belong to that group.

1. (1) 16 (2) 28
(3) 36 (4) 64

2. (1) 41 (2) 43
(3) 53 (4) 57

3. (1) 42624 (2) 37573
(3) 84284 (4) 93339

4. (1) 4422 (2) 2442
(3) 4242 (4) 2244

5. (1) 358 (2) 246
(3) 134 (4) 862

6. (1) 123 (2) 132
(3) 231 (4) 321

7. (1) ABB (2) BCC
(3) CCCDDDD (4) DDDDEEEEE

8. (1) BDFL (2) PRUZ
(3) JLOT (4) CEHM

9. (1) YCAEC (2) KOMQO
(3) PTRUT (4) GKIMK

10. (1) 1P6 (2) 2Y4
(3) 2T0 (4) 1R8

11. (1) Cat (2) Dog
(3) Tiger (4) Elephant

12. (1) Tiruvanantapuram (2) Hyderabad
(3) Calicut (4) Bangalore

13. (1) Asteroid (2) Star
(3) Planet (4) Rocket

14. (1) Walk (2) Talk
(3) Drink (4) Plank

15. (1) Ganga (2) Hirakud
(3) Yamuna (4) Sutlez

16. (1) 30 (2) 27
(3) 36 (4) 45

17. (1) Sculpture (2) Blacksmith
(3) Carpenter (4) Architect

18. (1) Daughter-in-law (2) Mother
(3) Sister (4) Daughter

19. (1) Museum (2) Auction
(3) Exhibition (4) Botanical park

20. (1) Deal (2) Seal
(3) Zeal (4) Real

Directions for questions 21 to 24: Select the correct alternative from the given choices.

21. In a certain code language, if the word LIBERAL is coded as MJCFSBM, then how is the word REDUCTION coded in that language?
(1) EDCTBSHNM (2) SFEVDUJPO
(3) SFEVCTJPO (4) SFDUCTJPO

22. In a certain code language, if the word CERTIFY is coded as BURGIVX, then how is the word ADJACENT coded in that language?
(1) ZWQZXVMG (2) GMVXZQWZ
(3) RMVWYJWH (4) GMXVWRVZ

23. In a certain code language, if the word ADVANTAGE is coded as EFWEPVEHI, then how is the word DUPLICATE coded in that language?
(1) EAQMODEUF (2) FAQMODEUI
(3) FAQMODEVI (4) FAQMJDEVI

24. In a certain code language, if FRAME = 48 and HURDLE = 74, then FIGMENT =?
(1) 74 (2) 89
(3) 91 (4) 81

Directions for questions 25 and 26: These questions are based on the following data.

In a certain code language, if the word ROUTINE is coded as JMPRRLJ and the word FIDELITY is coded as LGHCXGNW, then how will you code the following words in that language?

25. BRANCH
(1) DTBPFJ (2) DPBPFJ
(3) DPBLFF (4) DPBLHJ

26. MINUTE
(1) $M_1H_1N_1S_2J_2E_1$ (2) $M_1C_3G_2G_3E_4E_1$
(3) $M_1C_3G_2K_2D_5E_1$ (4) $M_1H_1G_2S_2D_5E_2$

Directions for question 27: For the following groups of letters given in Column I, the codes are given in Column II. Answer the following questions by finding the codes for the groups from the given columns.

Column I	Column II
(1) lit kit bit dit	b r p d
(2) fit git mit kit	t d s v
(3) rit bit git tit	x p v w
(4) nit dit fit rit	r s x j

27. What is the code for kit?
(1) r (2) p
(3) x (4) d

Directions for question 28: For the words given in column I, the codes are given in Column II. Answer the following questions by finding the codes for the letters from the words and their codes given in the columns.

Column I	Column II
(1) PRETEND	4396408
(2) COMMON	615715
(3) HOUSE	4*2&1
(4) SUPPORT	3*21839
(5) DRUM	5*08

28. What is the code for the word EMPEROR?

(1) 5495717 (2) 4534818
(3) 3453919 (4) 4537178

Directions for questions 29 and 30: For the following sentences given in column I, the codes are given in column II. Answer the following questions by finding the codes for the words form the given columns.

Column I	**Column II**
All people are not poet	kak cac hah faf zaz
Great people are happy	tat dad faf zaz
Krishna is a god	nan gag rar mam
Tagore is a great poet	mam kak dad nan lal
God make people happy	tat gag faf sas
No person is happy	xax pap faf mam

29. What is the code for the word 'not' in that language?

(1) cac
(2) hah
(3) tat
(4) Cannot be determined

30. If the code for "Mahima is not a person" is "nan xax mam yay cac", then what is the code for "Mahima make all people happy"?

(1) xax yah cac tat sas
(2) faf yay sas cac tat
(3) hah yay faf tat sas
(4) tat xax yay tat sas

Directions for questions 31 and 32: For the following sentences given in column I, the codes are given in column II. Answer the following questions by finding the codes for the words form the given columns.

Column I	**Column II**
I do not cheat.	1 # 2 7
I win the gold medal	9 @ 7 6 Ψ
I am not the last	3 7 6 π #
Manav do not loose	1 8 # %
Last person win the silver medal	4 π 6 θ @ Ψ
Manav is a person	4 5 8 *

31. What is the code for 'gold'?

(1) 9 (2) @
(3) 7 (4) Ψ

32. What can be the code for "I loose the gold medal"?

(1) 7 9 @ % 6 (2) 6 8 9 ψ %
(3) 7 9 5 % 6 (4) ψ 6 9 7 @

***Directions for questions 33 and 34*:** Given below are the codes for the digits/symbols. Study the conditions given below and answer the questions that follow.

Digit/ symbol:	6	2	@	*	3	$	1	#	7	8	4	%	5	£	9
Letter codes:	G	J	B	P	O	A	K	N	F	Q	L	S	D	M	H

Conditions:

(1) If the 1st element in the group is a symbol and the last one is an odd digit, the code for both will be X.
(2) If the 1st element is an even digit and the last element is a symbol, then codes for each of them gets interchanged.
(3) If the 1st element is an odd digit and the last element is an even digit then the code for both will be Y.
(4) If both the 1st and the last elements are symbols, then the code for both will be Z.

What will be the code for the following groups of numbers and symbols?

33. 8 4 6 9 7 3 %

(1) QLGHFOS (2) QLGHFOS
(3) XLGHFOX (4) QOFHGLS

34. 4 3 2 9 6 1 @

(1) LOJHGKB (2) XOJHGKX
(3) YOJHGKY (4) BOJHGKL

Directions for questions 35 and 36: Given below are the codes for the digits/symbols. Answer the questions based on the codes and the conditions given below the code.

Digit/ symbol:	3	8	£	4	$	@	1	#	7	%	9	©	*	2	5	S	6
Letter codes:	D	A	M	H	Q	C	R	G	B	J	F	K	N	L	T	P	E

Conditions:

(1) If both the left most and the right most elements are symbols, then the codes for the first two elements get interchanged between them and the codes for the last two elements get interchanged between them.
(2) If the left most element is a symbol and the right most is an even digit then the code for both will be y.
(3) If the left most element is an odd digit and the right most element is a symbol, then the codes of these two get interchanged.
(4) If the left most element is an odd digit and the right most element is an even digit then the code for both will be w.

(5) If the left most element in the group is an even digit and the right most element is an odd digit then, reverse the order of the code for the group.

35. 3 # % 7 9 6 4

(1) HEFBJGD (2) WGJBFEW
(3) XGJBFEX (4) HGJBFED

36. 5 1 © 2 6 9 @

(1) YRKLEFY (2) ZRKLEFZ
(3) XRKLEFX (4) CRKLEFT

Directions for questions 37 to 40: Select the correct alternative from the given choices.

37. In a certain code language, if Pen means Eraser, Eraser means Book, Book means Scale, Scale means Sharpener, Sharpener means Duster and Duster means Table, then what is the name of the object that is used to clean the black board in that language?

(1) Duster (2) Sharpener
(3) Scale (4) Table

38. In a certain code language, the letters in the English alphabet are coded as follows, based on their place values. Each letter with a multiple of 2 as place value are given 1 as code, and the ones with a multiple of 3 as place value are given 2 as code, in case of a clash, 1 prevails and the rest of the letters are given 3 as code. Then what is the code for the word ALPHABET?

(1) 31313113 (2) 31113131
(3) 13331313 (4) 31131131

39. In a certain code language, if each letter in the English alphabet, which has prime number place value is coded as 1 and each of the remaining letters are coded as 2, then what is the code for the word LANGUAGE?

(1) 12211221 (2) 11212121
(3) 22212211 (4) 22212121

40. In a certain code language if RAIN is coded as abcd, GAIN is coded as bcde and PAIN is coded as bcdf, then what is the code for the word GRAIN?

(1) abcde (2) bcdef
(3) acdfe (4) abcfe

ANSWER KEYS

PRACTICE EXERCISE 2 (A)

1. 1	**2.** 2	**3.** 2	**4.** 2	**5.** 3	**6.** 4	**7.** 2	**8.** 3	**9.** 2	**10.** 4
11. 1	**12.** 2	**13.** 3	**14.** 1	**15.** 4	**16.** 3	**17.** 4	**18.** 3	**19.** 3	**20.** 4
21. 2	**22.** 3	**23.** 1	**24.** 1	**25.** 4	**26.** 2	**27.** 3	**28.** 4	**29.** 3	**30.** 4
31. 4	**32.** 3	**33.** 4	**34.** 3	**35.** 2	**36.** 4	**37.** 4	**38.** 4	**39.** 4	**40.** 2

PRACTICE EXERCISE 2 (B)

1. 2	**2.** 4	**3.** 3	**4.** 3	**5.** 4	**6.** 2	**7.** 2	**8.** 1	**9.** 3	**10.** 2
11. 4	**12.** 3	**13.** 4	**14.** 4	**15.** 2	**16.** 1	**17.** 4	**18.** 1	**19.** 2	**20.** 4
21. 2	**22.** 2	**23.** 3	**24.** 4	**25.** 3	**26.** 2	**27.** 4	**28.** 2	**29.** 4	**30.** 3
31. 1	**32.** 1	**33.** 1	**34.** 4	**35.** 2	**36.** 4	**37.** 2	**38.** 2	**39.** 3	**40.** 1