4. CODING-DECODING

v

A CODE is a 'system of signals'. Therefore, Coding is a method of transmitting a message between the sender and the receiver without a third person knowing it.

The Coding arid Decoding Test is set up to judge the candidate's ability to decipher the rule that codes a particular word/message and break the code to decipher the message.

TYPE 1 : LETTER CODING

In these questions, the real alphabets in a word are replaced by certain other alphabets according to a specific rule to form its code. The candidate is required to detect the common rule and answer the questions accordingly.

Case I. ***To form the code for another word (CODING)***

Ex. 1. If in a certain language MYSTIFY is coded as NZTUJGZ, how is NEMESIS coded in that language ?

(a) MDLHRDR (6) OFNFTJT (c) ODNHTDR (d) PGOKUGU

Sol. Clearly, each letter in the word MYSTIFY is moved one step forward to obtain the corresponding letter of the code.

M Y S T I F Y

N Z T U J G Z

So, in NEMESIS, N will be coded as O, E as F, M as N and so on. Thus, the code becomes OFNFTJT.

Hence, the answer is (6).

Ex. 2. If TAP is coded as SZO. then how is FREEZE coded ? (M.BjL 1998)

(a) EQDFYG (6) ESDFYF (c) GQFDYF (dVJEQDDYD

Sol. Clearly, each letter in the word TAP is moved one step backward to obtain the corresponding letter of the code.

S Z O

- I t

T A P

Thus, in FREEZE, F will be coded as E, R as Q, E as D and Z as Y.

So, the code becomes EQDDYD.

Hence, the answer is (d).

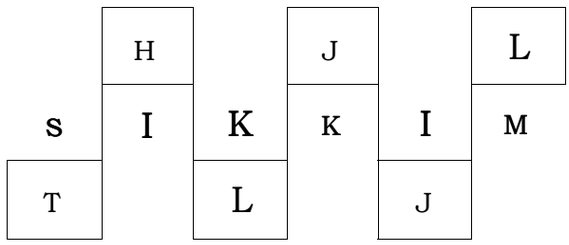
Ex. 3. In a certain code, SIKKIM is written as THLJJL. How is TRAINING written in that code ? (B.S.R.B. 1997)

(a) SQBHOHOH (6) UQBHOHOF (c) UQBJOHHO

(d) UQBJOHOH (e) None of these

Sol. Clearly, the letters in the word SIKKIM are moved alternately one step forward and one step backward to obtain the letters of the code.

I



So, in TRAINING, T will be coded as, U, R as Q, A as B, I as H, N as O and so on. Thus, the code becomes UQBHOHOF.
Hence, the answer is (6).

Ex. 4. In a certain code, MENTION is written as LNEITNO. How is PATTERN written in that code ? **(B.S.R.B.** 1998)
(a) APTTREM (6) PTAETNR (c) OTAETNR
(d) OTAETRN (e) None of these

SoL Clearly, to obtain the code, the first letter of the word MENTION is moved one step backward and the remaining letters are reversed in order, taking two at a time.

M E N T I O N

L

So, in PATTERN, P will be coded as 0 and the sequence of the remaining letters in the code would be TAETNR. Thus, the code becomes OTAETNR.
Hence, the answer is (c).

Ex. 5. In a certain code, FORGE is written as FPTJI. How is CULPRIT written in that code ? (UJ).C. 1996)
(a) CSJNPGR (6) CVMQSTU (c) CVNSVNZ ***(d)*** CXOSULW

Sol. Clearly, the first letter in the word FORGE remains as it is and the second, third, fourth and fifth letters are respectively moved one, two, three and four steps forward to obtain the corresponding letters of the code.
Applying the same rule to the letters of the word CULPRIT, C will remain unchanged, U will be coded as V, L as N, P as S, R as V, I as N and T as Z. Thus, the code becomes CVNSVNZ.
Hence, the answer is (c).

Ex. 6. If in a code, ALTERED is written as ZOGVIVW, then in the same code, RELATED would be written as (CJJ.1. 1995)
(a) IVOZGVW (6) IVOZGWV (c) IVOGZVW ***(d)*** VIOZGVW

Sol. Clearly, each letter of the word ALTERED is replaced by the letter which occupies the same position from the other end of the English alphabet, to obtain the code. Thus. A, the first letter of the alphabet, is replaced by Z, the last letter. L, the 12th letter from the beginning of the alphabet, is replaced by O, the 12th letter from the end. T, the 7th letter from the end of the alphabet is replaced by G, the 7th letter from the beginning of the alphabet, and so on.
Similarly, in the word RELATED, R will be coded as I, E as V, L as 0, A as Z, T as G and D as W. Thus, the code becomes IVOZGVW.
Hence, the answer is (a).

EXERCISE 4A

1. If in a certain language, MADRAS is coded as NBESBT, how is BOMBAY coded in that code ? (S.S.C. 1994)
   (a) CPNCBX (6) CPNCBZ (c) CPOCBZ
   (d) CQOCBZ (e) None of these
2. In a certain code, TRIPPLE is written as SQHOOKD. How is DISPOSE written in that code ? (Central Excise, 1995)
   (a) CHRONRD (6) DSOESPI (c) ESJTPTF
   (d) ESOPSID (e) None of these
3. If in a code language. COULD is written as BNTKC and MARGIN is written as LZQFHM, how will MOULDING be written in that code ?
   (a) CHMFINTK (6) LNKTCHMF (c) LNTKCHMF
   (d) NITKHCMF *(e)* None of these (Awri»tant Grade, 1997)
4. In a certain code, MONKEY is written as XDJMNL. How is TIGER written in that code ? (Assistant Grade, 1998)
   (a) QDFHS (6) SDFHS (c) SHFDQ
   (d) UJHFS (e) None of these
5. If FRAGRANCE is written as SBHSBODFG, how can IMPOSING be written ?
   (a) NQPTJHOJ (6) NQPTJOHI (c) NQTPJOHJ
   (d) NQPTJOHJ (c) None of these
6. In a certain code, COMPUTER is written as RFUVQNPC. How is MEDICINE written in the same code ? (Bank P.O. 1997)
   (a) EOJDJEFM (6) EOJDEJFM (c) MFEJDJOE
   (d) MFEDJJOE (e) None of these
7. If in a certain language. GAMBLE is coded as FBLCKF, how is FLOWER coded in that code ?
   (a) GKPVFQ (6) EMNXDS (c) GMPVDS
   (d) HNQYGT (e) EKNVDQ
8. If in a certain language, NATURE is coded as MASUQE, how is FAMINE coded in that code ?
   (a) FBMJND (6) FZMHND (c) GANIOE
   (d) EALIME (e) FZNJME
9. If in a certain code. TEACHER is written as VGCEJGT, how would DULLARD be written in the same code ?
   (a) FWMNCTF (6) FWNNBTE (c) FWNNCSF
   (d) FWNNCTF (e) None of these
10. If in a certain language FASHION is coded as FOIHSAN. how is PROBLEM coded in that code ?
    (a) ROBLEMP (6) PELBORM (c) PRBOELM
    (d) RPBOELM *(e)* PELBRONr
11. If in a certain language KINDLE is coded as ELDNIK, how is EXOTIC coded in that code ?
    (a) EXOTLC (6) CXOTIE (c) COXITE (d) CITOXE (e) EOXITC
12. If VICTORY is coded as YLFWRUB. how can SUCCESS be coded ?
    (a) VXEEIW (6) VXFFHW (c) VYEEHW
    (d) VYEFIW (e) None of these (1. Tax & Central Excise. 1994)

13. In a certain code. TOGETHER is written as RQEGRJCT. In the same code. PAROLE will be written as
(a) NCPQJG (6) NCQPJG (c) RCPQJK
(</) RCTQNG (e) None of these (Bank P.O. 1994)

14. If BOMBAY is written as MYMYMY, how will TAMIL NADU be written in that code ? (Assistant Grade, 1994)
(a) TIATIATIA (6) MNUMNUMNU (c) IATIATIAT
(d) ALDALDALD (e) None of these

15. If FRIEND is coded as HUM.JTK, how is CANDLE written in that code ?
(a) EDRIRL (6) DCQHQK (c) ESJFME
(rf) FYOBOC (e) DEQJQM (Railways., 1998)

16. If in a certain language,COUNSEL is coded as B1TIRAK, how is GUIDANCE written in that code ? (Assistant Grade, 1996)
(a) EOHYZKBB (6) FOHYZJBB (c) FPHZZKAB
(</) HOHYBJBA (e) None of these

17. If HEATER is written as KBDQHO, how will you encode COOLER ?
(a) ALRIHV (6) FLR1HO (c) FLIRHO
(d) FRLIHO (e) None of these

18. In a code. CORNER is written as GSVRIV. How can CENTRAL be written in that code ? (C.B.I. 1994)
(a) DFOUSBM (6) GIRXVEP (c) GJRYVEP
(d) GNFJKER (e) None of these

19. If MADRAS can be written as ARSARS. how can ARKONAM be written in that code ?
(a) ROAAKNM (6) ROAKANM (c) ROAKNNM
(d) ROAKNAM (e) ROKANAM

20. If JOSEPH is coded as FKOALD, then GEORGE will be coded as (8.8.C. 1994)
(a) CADMNO (6) CAKNIT (c) CAKNCA (d) JAKINS (e) DBLODB

21. If POND is coded as RSTL, how is HEAR written in that code ?
(a) GHIJ (6) GHIZ (c) JIGZ (d) JCLZ (e) None of these

22. If TABLE is coded as GZYOV, how is JUICE coded ?
(a) OZLFJ (6) QFRXV (c) HOFAD (<f) QZHMT *(e)* EPQIL

23. If CERTAIN is coded as XVIGZRM, how can MUNDANE be coded ?
(a) MFMXZMV (6) NFMWZMV (c) NFMWZMX ,
(d) VMZWMFN (e) None of these (Assistant Grade, 1996)

24. If DELHI is coded as CCIDD, how would you encode BOMBAY ? (M.B.A. 1997)
(a) AJMTVT (6) AMJXVS (c) MJXVSU
id) WXYZAX , (e) None of these

25. According to a military code, SYSTEM is SYSMET and NEARER is AENRER. What is the code for FRACTION ? (Assistant Grade, 1998)
(a) CARFTINO (6) FRACNOIT (c) CARFTION
(rf) ARFCNOIT (e) CARFNOIT

26. In a certain axle. INSTITUTION is written as NOITUTITSNI. How is PERFECTION written in that code ?
(a) NOICTEFREP (6) NOITCEFERP (c) NOITCEFRPE
id) NOITCEFREP (e) NOITCEFPER

27. If BELIEF is written as afkkdi, how is SELDOM written in that code ?
(a) tfkenp (6) rfkfnp (c) rfkenn (<f) rdkcnl (e) None of these
(Hotel Management, 1997)

28. In a code language, DISTANCE is written as IDTUBECN and DOCUMENT is written as ODDVNTNE. How is THURSDAY written in that language ?
ia) DTVSTEYA *ib)* HTTQRYAD *ic)* HTVSTYDA
id) HTVSYADS (e) HTVSTYAD (B.S.R.B. 1995)

29. In a certain language, CHAMPION is coded as HCMAIPNO, how is NEGATIVE coded in that code ?
ia) ENAGITEV *ib)* NEAGVEIT *ic)* MGAETVIE
id) EGAITEVN (e) NEC.ATIEV

30. If PEOPLE is coded as PLPOEE, how is TREND coded ?
ia) TREDN *ib)* DNERT *ic)* NDETR *id)* TRDNE *ie)* TNERD

31. In a certain code. MUNICIPALITY is written as INMUAPCIYTLI. How is JUDICIAL written in that code ?
ia) UJDILACI *ib)* IDUJLACI <c) IDJULAIC
(<f) IDJULACI *ie)* None of these

32. If CIGARETTE is coded as GICERAETT. then DIRECTION will be coded as
ia) RIDTCENOI (6) NORTECDII (c) NOIETCRID
id) IRDCTIONE *ie)* None of these (M.A.T. 1997)

33. In a certain code, PAPER is written as SCTGW. How is MOTHER written in that code ? (B.S.R.B. 1997)
(a) ORVLGW *ib)* PQVJGT (c) PQXJJT
id) PQXKJV (<?) None of these

34. In a certain code, SUBSTITUTION is written as ITSBUSNOITUT. How is DISTRIBUTION written in that code ? (Bank P.O. 1994)
(a) IRTSIDNOITUB *ib)* 1RTSIDNOIBUT *ic)* IRTDISNOITUB
id) IRTDISNOIUTB (e) None of these

35. In a certain code ADVENTURES is written us TDRESAUVEN. How is SURPRISING written in that code ?
ia) IUIPGSRSNR *ib)* IUINGSSRRP (c) IUIPGSSRNR
id) IRIPGSSNRR (e) None of these

36. In a certain code, EXPLAINING is written as PXEALNIGNI. How is PRODUCED written in that code ?
ia) ORPBUDEC (6) ROPUDECD *ic)* ORPUDECD
id) DORPDECU *ie)* None of these

37. In a certain code, GIGANTIC is written as GIGTANCI. How is MIRACLES written in that code ?
ia) MIRLCAES *ib)* MIRLACSE (c) RIMCALSE
id) RIMLCAES *ie)* RIMSCASE

38. If CONTRIBUTE is written as ETBUIRNTOC. which letter will be in the sixth place when counted from the left if POPULARISE is written in that code ?
(a) L (6) A (c) I *(d)* R
(Hotel Management, 1997)

39. If DIAMOND is coded as VQYMKLV, how is FEMALE coded ? (M.B.A. 1998)
(a) TUMYNU (6) UVNZOV (c) UVNYNV
(d) TVNYNV (e) TUMZOU

40. Which of the following words would correctly decode the word ZHOFRPH if the simple alphabet shifting code is used ? (MAT. 1997)
(o) ARTISTS (6) COMPUTE (c) MAILING
(d) WELCOME (*e*) None of these

Directions (***Questions 41 to SO): Below, the word EXPAND has been written in four different codes by applying four different rules which are given as four alternatives against it. In each of the questions which follow, a word has been written in one of these codes. Find the alternative applicable to each word and mark your answer.*** (Hotel Management. 1995)

EXPAND

(a) FYQBOE (6) EPDTCR (c) GYRBPE (</) CWNZLC

41. CONSULATE FVDPZYUWL
42. PERCEIVE NDPBCHTD
43. MUSHROOM KTQGPNML
44. MICROWAVE FXDATXJQV
46. HARMONIOUS FZPLMMGNSR
46. TRAVELLER USBWFMMFS
47. TRANSLATE USBOTMBUF
48. HURRICANE JVTSKDCOG
49. EARTHQUAKE FBSUIRVBLF
50. CONSULT EPPTWMV

ANSWERS

I. (6): Each letter in the word is moved one step forward to obtain the corresponding letter of the code.

2- (a): Each letter in the word is moved one step backward to obtain the corresponding letter of the code

3. (c) : Each letter in the word is moved one »Cep backward to obtain the corresponding letter of the code.

4. (a): The letters of the word are writtep in a reverse order and then each letter is moved one step backward to obtain the code.

5. *Id):* Each letter in the word is moVcd one step forward and the first letter of the group so obtained is put at the *nd, to obtain the code.

6. (a): The letters of the word are written in a reverse order and each letter, except the first and the last one, is moved one step forward, to obtain the code.

7. (6): The first, third and fifth letters are each moved one step backward, while the second. fourth and sixth letters are each moved one step forward to obtain the corresponding letters of the code.

8. *id) :* The second. fourth and sixth loiters of the words remain unchanged, while the first, third and fifth letters are each moved one step backward to obtain the corresponding letters of the code.

9 *A d):* Each letter of the word is moved two steps forward to obtain the code.

10. (b): The first and the last letters of the word remain as such and the remaining letters are written in a reverse order. to obtain the code.

11. (rf) : The letters of ths word are written in a reverse order to obtain the code.

12. (6): Each letter of the word is moved three steps forward to obtain the code.

13 . fhe letters at odd positions are each moved two steps backward and those at even positions are each moved two steps forward to obtain the corresponding letters of the code.

14. (6): The letters at the third and sixth places are repeated thrice to code BOMBAY as MYMYMY. Similarly, the letters at the third, sixth and ninth places are repeated thrice to code TAMIL NADU as MNUMNUMNU.

15. (a): The first, second, third, fourth, fifth and sixth letters of the word are respectively moved two, three, four, five, six and seven steps forward to obtain the corresponding letters of the code.

16. (6): The letters at odd positions are each moved one step backward, while the letters at even positions are respectively moved six, five, four, three, two..... steps backward to obtain the corresponding letters of the code.

17. (ft): The first, third and fifth letters of the word are each moved three steps forward while the second, fourth and sixth letters are each moved three steps backward to obtain the ccfrresponding letters of the code.

18. (6): Each letter of the word is moved four steps forward to obtain the code.

19. (a): The word is first written twice and the letters at the even positions in the word so obtained, form the code.

20. (c): Each letter of the word is moved four steps backward to obtain the code.

21. (c) : The first, second, third and fourth letters of the word are respectively moved two, four, six and eight letters forward to obtain the code.

22. (ft) : If in the word, a letter is the nth letter from the beginning of English alphabet, then in the code the corresponding letter is the nth letter from the end.

23.16): Each letter in the word is replaced by the letter which occupies the same position from the other end of the alphabet, to obtain the code.

24. (6) : The first, second, third..... letters of the word are respectively moved one, two, three,_____steps backward to obtain the corresponding letters of the code.

25. (e): The letters in the first half and the latter half of the word are separately reversed • to obtain the code.

28. (d): The letters of the word are written in a reverse order to obtain the code.

27. (6): The first, third and fifth letters of the word are each moved one step backward, while the second, fourth and sixth letters are respectively moved one, two and three • steps forward to obtain the corresponding letters of the code.

28. (<e): The places of the first two letters and the sixth and eighth letters of the word are interchanged, while the third, fourth and fifth letters arc each moved one step forward, to obtain the code.

29. (a) * The letters of th* word are reversed in order, taking two at a time, to obtain tne code.

30. (*): The lirst and the last letters of the word remain unchanged, while the second and second last, third and third last letters and so on are interchanged, to obtain the code.

31. (d) : The code formation can be shown as under :

Word : MUNI CIPA LITY

Code : INMU APCI YTU

32. (a): The word is divided into groups of three letters each and then the letters in each group are written in a reverse order to obtain the code.

33. (c): The first, third and fifth letters of the word are respectively moved three, four and five steps forward, while the letters at even positions are each moved two steps forward, to obtain the corresponding letters of the code.

34. (a): First, the first six letters and then the last six letters are written in a reverse order to obtain the code.

35. (c): The first and sixth, third and eighth, fifth and tenth letters of the word interchange places in the code.

38. (c): In the code, first three letters are reversed, then next two letters, then again next two letters and finally the last three letters are reversed in order.

37. (fc): In the code, the first three letters are kept as it is. the fourth letter is made fifth, fifth is made sixth and sixth is made fourth, then the last two letters are interchanged.

38. (a): The letters of the word are written in a reverse order and then the letters of the second and fourth pairs from the end of the word so formed are reversed in order, to obtain the code Thus, the code for POPULARISE is ESRIALPUOP.

39. (a): If in the word, a letter is nth letter from the beginning of the English alphabet, then in the code the corresponding letter is the (n + 1) th letter from the end of the alphabet.

40. (</): Clear) \ the given code is obtained by moving each letter of the word WELCOME three steps forward

Questions 41 to 50

Clearly in (a), each letter of the word is moved one step forward to obtain the code.

In (6), first the letters of the word are written in a reverse order and then the first, second, third..... letters of the word so obtained are respectively moved one. two. three..... steps forward to obtain the corresponding letters of the code

In (c), the letters at odd positions in the word are moved two steps forward, while those at even positions are moved one step forward to obtain the corresponding letters of the code.

In (</), the letters at odd positions in the word are moved two steps backward while those at even positions are moved one step backward to obtain the corresponding letters of the code.

41. <6> 42. *id)* 43. *id)* 44. (fc) 45. *id)*

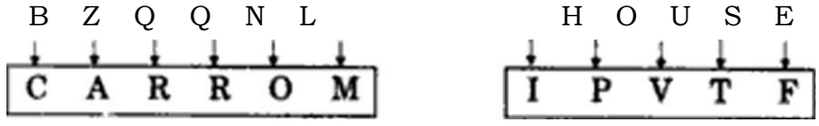
46. (a) 47. (a) 48. (c) 49. (a) 50. (c)

Case II : ***To find the word by analysing the given code (DECODING).***

Ex. 1. If in a certain language CARROM is coded as BZQQNL, which word will be coded as HOUSE ?

(a) IPVTF (6) GNTRD (c) INVRF *(d)* GPTID *(e)* FNSRC

Sol. Each letter of the word is one step ahead of the corresponding letter of the code.



So, H is coded as I, O as P, U as V, S as T and E as F *i.e.* HOUSE is coded as IPVTF.

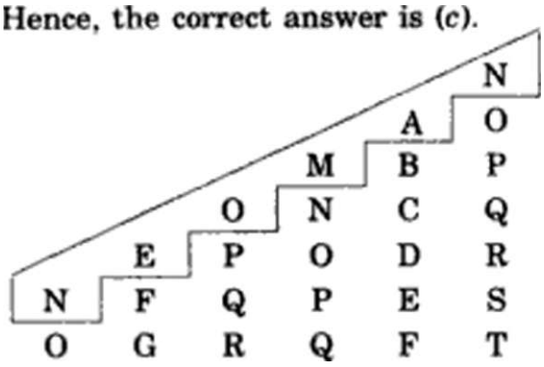
Hence, the answer is (a).

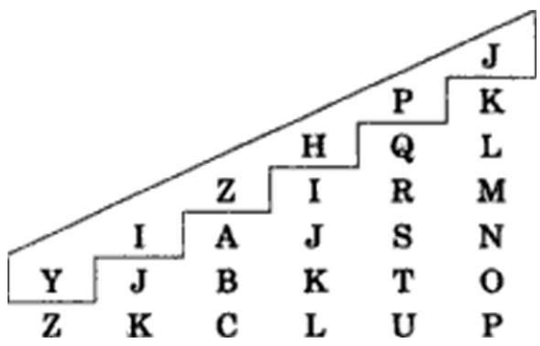
Ex. 2. If in a certain language, NEOMAN is coded as OGRQFT, which word will be coded as ZKCLUP ?

(a) YJBKTO (6) XIAJSN (c) YIZHPJ (d) YIAQKJ (e) YIZIRM

Sol. Clearly, as shown, in the word, the first letter is one place, second is two place3, third is three places, fourth is four places, fifth is five places and sixth is six placcs before the corresponding alphabet in the given code.

Hence, the correct answer is (c).





EXERCISE 4B

1. If in a certain language, POPULAR is coded as QPQVMBS, which word would be coded as GBNPVT ?
   (a) FAMOSU (fc) FAMOUS (c) FASOUM
   id) FOSAUM (e) FAMSUO
2. If ROBUST is coded as QNATRS in a certain language, which word would be coded as ZXCMP ?
   (o) YWBLO (6) YYBNO (c) AWDLQ *(d)* AYDNQ (e) BZEOR
3. If in a certain language, UTENSIL is coded as WVGPUKN, which word would be coded as DMSFXG ?
   (a) BKQEVE (b) BKQDWE (c) BKQDWF
   <<d) BKQDVF (e) BKQDVE
4. If in a certain code, SWITCH is written as TVJSDG, which word would be written as CQFZE ?
   (a) BARED (6) BRAED . (c) BREAD (d) BRADE (e) BRDAE
5. In n certain code, REFRIGERATOR is coded as ROTAREGIRFER. Which word would be coded as NOITINUMMA ?
   (a) ANMOMIUTNI (6) AMNTOMUIIN (c) AMMUNITION
   (d) NMMUNITIOA (e) None of these
6. If in a certain language, REMOTE is coded as ROTEME, which word would be coded as PNIICC ?
   (a) NPIICC (6) PICCIN (c) PINCIC *(d)* PICNIC (e) PICINC
7. If FULFNHW is the code for CRICKET, then EULGH is the code for which word ?
   (a) PRIDE *(b)* BRIDE (c) BLADE *(d)* BLIND *(e)* None of these
8. If in a certain language, SHIFT is coded as RFFBO, which word would be coded as LKUMB ?
   (a) MMXQG (b) MLVNC (c) KJVLA (d) MJVLC (e) KJTLA
9. If LBAEHC is the code for BLEACH, then which of the following is coded as NBOLZKMH ?
   (a) OBNKZLHM (6) LOBNHMKZ (c) OCPMALNI
   (d) MANKYJLG (e) BNLOKZHM

10. If in a certain language, GRASP is coded as BMVNK, which word would be coded as CRANE ?
    (a) FUDQH (fe) HWFSJ (c) GVERI (d) XMV1Z (e) BQZMD
11. If in a certain code, COVET is written as FRYHW, which word would be written as SHDUO ?
    (a) QUAKE (6) REPAY (c) STINK (d> PEARL (e) TIEVP
12. If in a certain language, TRIANGLE is coded as SQHZMFKD, which word would be coded as DWZLOKD ?
    (a) EXAMPLE (6) FIGMENT (c) DISMISS (d) DISJOIN (e) None
13. If ELCSUM is the code for MUSCLE, which word has the code LATIPAC ?
    (o) CONFESS (6) CONDUCE (c) CAPITAL (d) CAPRICE (?) None
14. If in a certain language. 1TNIETAM is the code for INTIMATE, which word has the code TREVNIETARBI ?
    (a) INVRETIBRATE (6) INVERTIBARTE (c) INVERTIBRETA
    (d) INVERTIBRATE (e) INVERITBARTE
15. If in a certain language, DIUGNAL is the code for LANGUID, which word would be coded as ELKCAHS ?
    (a) SHINGLE (6) SHERBET (c) SHACKLE (d) SHOCKLE (e) None
16. If EHFNRQ is the code for BECKON, which word has the code QDFWXULQ ?
    (a) NCAUTIRN (6) NACUTIRN (c) NATCRIUN
    (d) NACTURIN (e) NACUTRIN
17. If QKKQUGQL is the code for OMISSION, which word is coded as RYVIWZB ?
    (o) PATKUBZ *(b)* BZWIVYR (c) BZWVLYR
    <d) PTAKBZU (e) BZIWYVR
18. IfQOSCFLBJO is the code for PORCELAIN, which word is coded as BKMOUSPP ?
    (a) ALTOLROPY (6) ALLOTROPY (c) ALOTROLPY
    (d) ATLOROPLY (e) None of these
19. If in a certain code. ALMIRAH is written as BNPMWGO, which word would be written as DNRWLUA ?
    [a) COSGOLT (6) TOGSOLC (c) TOGCLOS
    (d) CLOSGOT *(e)* COLSTOG
20. If in a certain language, MACHINE is coded as LBBIHOD, which word would be coded as SLTMFNB ?
    (a) RKSLEMA (6) TKULGMC (c) RMSNEOA
    (d) TM1TNGOC (*) TMUNGMC
21. If NARGRUED is the code for GRANDEUR, which word is coded as SERPEVRE ?
    (o) PERSEVER *(b)* PRESEVER (c) PERSERVE
    id) PREVERSE *(e)* PRESERVE
22. If in a certain language, CALCUTTA is coded as GEPGYXXE, which word would be coded as FSQFCE ?
    (a) BOMBYA (6) BOMBAY (c) BOMYAB (d) BOBAYM (e) BOBAMY

ANSWERS

1. «>): Each letter of the word ia one step behind the corresponding letter of the code.
2. <d): Each letter of the word is one step ahead of the corresponding letter of the code.

3. *ie)* : Each letter of the word is two steps behind of the corresponding letter of the code.
4. ic): Each letter at odd place in the word is one step behind and each letter at even place in the word is one step ahead of the corresponding letter of the code.
5. (c): The order of letters of the word is reversed in the code. So, reverse the letters in the code to get the word.
6. The groups of second and third letters and fourth and fifth letters in the word interchange places in the code.
7. (6): Each letter of the word is three steps behind the corresponding letter of the code.
8. (a): The first, second, third, fourth and fifth letter in the word are respectively one, two, three, four and five steps ahead of the corresponding letter of the code.
9. (e): The word is formed into pairs of letters and the letters in each pair are reversed.
10. *ib)*: Each letter of the word is five steps ahead of the corresponding letter of the code.
11. *id)*: Each letter of the word is three steps behind the corresponding letter of the code.
12. (a): E/ich letter of the word is one step ahead of the corresponding letter of the code.
13* (c): In the code, the letters of the word are put in the reverse order of positions.
14. *id)*: The letters in the first half and the last half of the code are separately reversed to obtain the word.
15. *ic)*: In the code, the letters of the word are put in a reverse order.
16. *id)*: Each letter of the word is three steps behind the corresponding letter of the code.
17. *ia):* In the code, we have alternately one letter two places ahead and the other two places behind the corresponding letter in the word.
18. (6): In the code, we have alternately one letter one step ahead of and the other the same as the corresponding letter in the word.
19. *id):* In the code, the first letter is one step ahead, the second letter is two steps ahead and so on than the corresponding letter in the word
20. *ib):* In the code, we have alternately one letter one step behind and the other one step ahead of the corresponding letter in the word.
21. *ie).* In the code, the first four and the last four letters of the word are separately interchanged.
22. *ia)*: Each letter of the word is four steps behind the corresponding letter of the code.

TYPE 2 : NUMBER CODING

In these questions, either numerical code values are assigned to a word or alphabetical code letters are assigned to the numbers. The candidate is required to analyse the code as per the directions.

Case I : ***When numerical code values are assigned to words***

Ex. 1. If in a certain language A is coded as 1, B is coded as 2, and so on, how is BIDDIC coded in that code ?

ia) 294493 *ib)* 284563 (c) 375582 *id)* 394492

Sol. As given the letters are coded as

A	B	C	D	E	F	G	H	I
1	2	3	4	5	6	7	8	9

So, in BIDDIC, B is coded as 2, I as 9, D as 4, and C as 3. Thus, BIDDIC is coded as 29449%

Hence, the answer is (a).

Ex. 2. If PAINT is coded as 74128 and EXCEL is coded as 93596. then how would you encode ACCEPT ? (L Tax, 1996)
(a) 455978 (ft) 547978 (c) 554978 (d) 735961

Sol. Clearly, in the given code, the alphabets are coded as follows :

P A I N T E X C L
7 4 1 2 8 9 3 5 ' 6

So, in ACCEPT. A is coded as 4, C as 5, E as 9, P as 7 and T as 8. Hence, the correct code is 455978 arid therefore, the answer is (a).

Ex. 3. If D = 4 and COVER = 63, then BASIS = ? (Assistant Grade. 1997)
(a) 49 (6) 50 (c) 54 (d) 55

Sol. Clearly, in the given code, A = 1. B = 2, C = 3.... so that
COVER * 3 + 15 • 22 + 5 + 18 = 63.
Now. in BASIS. B = 2, A = 1, S = 19. I = 9.
Thus. BASIS <= 2 • 1 • 19 + 9 + 19 = 50.
Hence, the answer is (ft).

EXERCISE 4C

1. If DELHI is coded as 73541 and CALCUTTA as 82589662. how can CALICUT be coded ? (Assistant Grade. 1995)
(a) 5279431 (6) 5978213 (c) 8251896 (d) 8543691
2. In a certain code. RIPPLE is written as 613382 and LIFE is written as 8192. How is PILLER written in that code ?
(a) 318826 (ft) 318286 (c) 618826 (d) 338816
3. If ROSE is coded as 6821, CHAIR is coded as 73456 and PREACH is coded as 961473, what will be the code for SEARCH ? (Assistant Grade, 1993)
ia) 246173 (6) 214673 (c) 214763 (d)^216473
4. If in a certain code, TWENTY is written as 863985 and ELEVEN is written as 323039, how is TWELVE written in that code ?
(a) 863203 (ft) 863584 (c) 863903 (d) 863063
5. If the letters in PRABA are coded as 27595, and THILAK are coded as 368451, how can BHARATHI be coded ? (U.D.C. 1993)
(a) 37536689 (ft) 57686535 (c) 96575368 (d) 96855368
6. If GIVE is coded as 5137 and BAT is coded aa 924, how is GATE coded ?
(a) 5427 (ft) 5724 (c) 5247 (d) 2547
7. If PALE is coded as 2134, EARTH is coded as 41590, how is PEARL coded in that code ?
(a) 29530 (6) 24153 (c) 25413 (d) 25430

Directions *(Questions **8** to **12)** : If in a certain language, **ENTRY** is coded as **12345** and **STEADY** is coded as **931785,** then state which is the correct code for each of the given words.*

8. TENANT
(a) 956169 (ft) 196247 (c) 352123 ***Id)*** 312723
9. NEATNESS
(a) 25196577 (ft) 21732199 (c) 21362199 (d) 21823698

10. SEDATE
ia) 918731 *ib)* 954185 (c) 814195 *id)* 614781

11. ARREST
(a) 744589 *ib)* 744193 *ic)* 166479 *id)* 745194

12. ENDEAR
(a) 524519 *ib)* 174189 *ic)* 128174 *id)* 124179

13. If ENGLAND is written as 1234526 and FRANCE is written as 785291, how is GREECE coded ? (P.C.8.1995)
(a) 381171 (6) 381191 *ic)* 832252 *id)* 836546

Directions ***iQuestions 14 to 21) : If in a certain language CHARCOAL is coded as 45164913 and MORALE is coded as 296137, how are the following words coded in that language ?***

14. REAL
ia) 8519 *ib)* 6713 *ic)* 6513 *id)* 6719

15. ARCHER
ia) 193859 (6) 163546 *ic)* 164576 *id)* 193476

16. HEARL
ia) 57163 *ib)* 75163 (c) 75198 *id)* 57193

17. COACH
(a) 38137 (6) 49148 (c) 48246 *id)* 49145

18. ALLOCHRE
(a) 19943785 (6) 13394567 (c) 16693895 *id)* 13396875

19. ROCHEL
(a) 694573 (6) 693578 *ic)* 673958 *id)* 693857

20. COLLER
ia) 397758 (6) 497758 (c) 483359 *id)* 493376

21. MECHRALE
(a) 95378165 (6) 25378195 (c) 27456137 *id)* 27386195

22. If SHARP is coded as 58034 and PUSH as 4658, then RUSH is coded as
(a) 3568 (6) 3658 *ic)* 3685 *id)* 3583 (M.B.A. 1998)

23. In a certain code GARIMA is written as 725432 and TINA as 6482. How is MARTINA written in that code ? (Railways, 1998)
ia) 3256482 (6) 3265842 *ic)* 3645862 (d) 3658426

24. In a certain code, RIPSLE is written as 613082 and WIFE is written as 4192, how is PEWSLE written in that code ?
(a) 32408 (6) 69824 *ic)* 41632 *id)* 35612

Directions ***iQuestions 25 to 29) : If MISTAKE is coded as 9765412 and NAKED is coded as 84123, how are the following words coded ?***

25. DISTANT
ia) 3765485 *ib)* 4798165 (c) 3697185 (d) .4768296

26. NEM1SES
(a) 7598656 *ib)* 8597656 (c) 8297626 *id)* 7689565

27. ASSIST
ia) 166762 *ib)* 466765 *ic)* 488976 *id)* 435985

28. INTIMATE
(a) 89786145 (6) 79438163 (c) 78579452 (d) 78698365

29. STAIN
(a) 98175 (6) 89483 (c) 68194 (d) 65478

30. In a certain code language 24685 is written as 33776. How is 35791 written in that code ? (P.O. Exam, 1989)
(a) 44826 (6) 44880 (c) 46682 (d) 44682

31. In a certain code language 35796 is written as 44887. How is 46823 written in that code ? (P.O. Exam, 1991)
(a) 57914 (6) 55914 (c) 55934 (d) 55714

32. If MINJUR is coded as 312547 and TADA as 6898, how can MADURAI be coded ?
(a) 3498178 (6) 3894871 (c) 3849781 (d) 3894781

33. If PALAM could b* given the code number 43, what code number can be given to SANTACRUZ ? (Assistant Grade, 1995)
(a) 75 (6) 85 (c) 120 (d) 123

34. If Z = 52 and ACT = 48, then BAT will be equal to (CJBJL 1994)
(a) 39 (6) 41 (c) 44 (d) 46

35. If REASON is coded as 5 and BELIEVED as 7, what is the code number for GOVERNMENT ? (UJ).C. 1993)
(a) 6 (6) 8 (c) 9 (d) 10

36. If GO = 32, SHE = 49, then SOME will be equal to (8.S.C. 1996)
(a) 56 ***(b)*** 58 (***c***) 62 (d) 64

37. If XT » 20, BAT = 40, then CAT will be equal to
(a) 30 (6) 50 (c) 60 (d) 70
(Transmission Executives* 1994)

38. If MACHINE is coded as 19-7-9-14-15-20-11, how will you code DANGER ?
(a) }0-7-20-13-ll-24 (6) 11-7-20-16-11-24
(c) 13-7-20-9-11-25 (cO 13-7-20-10-11-25
(Assistant Grade, 1997)

39. If PRATAP could be given the code number 1618120116, what code number can be given to NAVIN ?
(a) 14122914 (6) 19274651 (c) 24639125 (d) 73957614

40. If MOBILITY is coded as 46293927, then EXAMINATION is coded as
(Assistant Grade, 1998; S.S.C. 1993)
(a) 45038401854 (6) 56149512965 (c) 57159413955 (d) 67250623076

4 If MASTER is coded as 41i259, then POWDER will be coded as
(a) 7 65439 (6) 765439 (c) 7 65459 (d) 7 65549
(L Tax & Central Excise, 1995)

ANSWERS

1. (c) : The alphabets are coded as follows :

D	E	L	H	I	C	A	U	T
7	3	5	4	1	8	2	9	6

So. in CALICUT, C is coded as 8, A as 2, L as 5, I as 1, U as 9 and T as 6. Thus, the code for CALICUT is 8251896.

2. (a): The alphabets are coded as shown :

R	I	P	L	E	F
6	1	3	8	2	9

So, in PILLER, P is coded as 3, I as 1. L as 8. E as 2 and R as 6. Thus, the code for PILLER is 318826.

3. (6): The alphabets are coded as shown :

R	O	S	E	C	H	A	I	P
6	8	2	1	7	3	4	5	9

So, in SEARCH, S is coded as 2, E as 1, A as 4, R as 6, C as 7, H as 3. ThUa. the code for SEARCH is 214673.

4. (a) : The alphabets are coded as '.hown .

T	W	E	N	Y	L	V
8	6 - 3	9	5	2	0	

So. in TWELVE. T is codcd as 8, W as 6. E as 3, L as 2. V aa 0. Thus, the code for TWELVE is 863203.

5. (c): The alphabets are coded as shown :

P	R	A	B	T	H	I	L	K
2	7	5	9	3	6	8	4	1

So, B is coded as 9. H as 6, A as 5, R as 7, T as 3 and I as 8.
Thus, the code for BHAKATHI is 96575368.

6. (c): The alphabets are coded as shown :

G	I	V	E	B	A	T
5	1	3	7	9	2	4

So, G is coded as 5, A as 2. T as 4 and E as 7.
Thus, tho code for GATE is 5247.

7. (6): The alphabets are coded as shown :

P	A	L	E	R	T	H
2	1	3	4	5	9	0

So. P is code as 2. E as 4. A as 1. R as 5 and L as 3.
Thus, the code for PEARL ia 24153.

Questions 8 to 12

The alphabets are coded as follows :

E	N	T	R	Y	S	A	D
1	2	3	4	5	9	7	8

8. (d): T is coded as 3. E as 1, N as 2 and A as 7.
So, TENANT is codcd as 312723.

9. (6): N is coded aa 2, E as 1, A as 7, T as 3 and S as 9

10. (a): S is coded as 9, E as 1, D as 8, A as 7 and T as 3.
So. SEDATE is coded as 918731.

11. (6): A is coded as 7. R as 4, E as 1, S as 9 and T as 3.
So. ARREST is coded as 744193.

12. (c): E is coded as 1, N as 2, D as 8, A as 7 and R as 4.
So, ENDEAR is coded as 128174.

13. (a): The alphabets are coded as shown :

E	N	G	L	A	D	F	R	C
1	2	3	4	5	6	7	8	9

» So. G is coded as 3. R as 8. E as 1 and C as 9.
Thus. GREECE is coded as 381191.

Questions 14 to 21

The alphabets are coded as follows :

C	H	A	R	O	L	M	E
4	5	1	6	9	3	2	7

14. (6): R is coded as 6. E as 7. A ^ 1 and L as 3.
So. the code for REAL ia 6713.
15. (c): A is coded as 1, R as 6. C as 4. H as 5 and E as 7.
So. the code for ARCHER is 164576.
16. (a) r H is coded as 5. E as 7. A as L R as 6 and L as 3.
So. the code for HEARL is 57163.
17. (d): C is coded as 4. O as 9. A as 1 and H as 5.
So. the code for COACH is 49145.
18. (6); A is coded as 1, L as 3. O as 9. C as 4. H as 5, R as 6 and E as 7.
So. the code for ALLOCHRE is 13394567.
19. (a): R is coded as 6. O as 9. C as 4, H as 5, E as 7 and L as 3.
So. the code for ROCHEL is 694573.
20. (d): C is coded as, 4. O as 9. L as 3, E as 7 and R as 6.
So. the code /or COLLER is 493376.
21. (c): M is coded as 2. E as 7, C as 4, H as 5. R as 6, A as 1 and L as 3.
^o. MECHRALE is coded as 27456137.
22. (6): The alphabets are coded as shown below :

5	H	A	R	P	U
5	8	0	3	4	6

So. the code for RUSH is 3658.
23. (a): The alphabets are coded as shown below :

G	A	R	I	M	T	N
7	2	5	4	3	6	8

So. M is coded as 3. A as 2, R as 5, T as 6, I as 4. and N as 8.
Thus. MARTINA is coded as 3256482.
24. (a): The alphabets are coded as shown below :

R	I	P	S	L	E	W	F
6	1	3	0	8.	2	4	9

So. the code for P is 3, E ia 2, W is 4. S is 0 and L is 8.
Thus, PEWSLE is coded as 324082.

Questions 25 to 29

The alphabets in the given words are coded as follows :

M	I	S	T	A	K	E	N	.	D
9	7	6	5	4	1	2	8		3

25. (a): D is coded as 3. I as 7. S as 6, T as 5, A as 4 and N as 8.
So, the code for DISTANT is 3765485.

26. Ic): Nit coded as 8. E as 2. M as 9. I as 7 and S as 6.
So. tho code for NEMISES is 8297626.

27. (b): A is coded as 4. S as 6. I as 7 and T aa 6.
So ASSIST is coded as 466765.

28. (c): I is coded as 7. N as 8. T as 5. M a* 9, A ar 4 and E as 2.
So. the code for INTIMATE is 78579452.

29. (d): S is coded as 6. T as 5, A as 4. I as 7 and N as 8.
So. STAIN is coded as 65478.

30. (a): Clearly, in the code the letters at odd places arc one place ahead and those at even piaces are one place before the corresponding letter in the word.
So. in 35791. 3 is written as 4. 5 as 4. 7 as 8. 9 as 8 and 1 as 0 *i.e.* the *rode* '.ecomes 44880.

31. (6): The same pattern as in Q. 30 is followed i.e. 4 will be written a* 5. 6 as 5, 8 as 9. 2 as 1 and 3 as 4. So. the code becomes 55914.

32. (</): The alphabets are codcd aa shown below :

M	'	l		N	J	U	R	T	A	D
3		1	2	5	4	7	6		8 *	9

i.e. M is coded as 3. A as 8. D as 9. U as 4. R as 7 and I as 1.
So. MADURAI is codcd as 3894781.

33. (d): In the given code. A = 1, B = 2, C = 3, Z = 26.
So. PALAM = 16 + 1 + 12 • 1 + 13 = 43
Similarly, SANTACRUZ * 19 • 1 • 14 • 20 + 1 + 3 + 18 + 21 * 26 = 123.

34. (d): In the given code. A • 2. B • 4, C - 6 , Z = 52.
Sp. ACT = 2 + 6 + 40 = 48 and BAT » 4 + 2 + 40 u 46.

35. (c): Code for the given word = (Number of letters in the word) - 1.
So. code for GOVERNMENT - 10 - 1 = 9.

36. (a): In the given code. Z = 1, Y =>2. X = 3.....C = 24. B = 25, A = 26.
So, GO * 20 + 12 = 32 and SHE =» 8 + 19 • 22 = 49.
Similarly. SOME - 8 + 1 2 + 14 + 22 - 56.

37. (c): Taking A = 1. B = 2,.... T = 20.....Z = 26, we have :
AT = A * T = 1 * 20 = 20; BAT = B * A * T = 2 x 1 x 2 0 = 40.
Similarly. C A T - C * A x T - 3 x 1 x 2 0 - 6 0 .

38. (a): Putting A - 7, B = 8. C = 9. D = 10.....X = 30. Y - 8 1 , Z =• 32, we'have :
MACHINE = 1 9 - 7 - 9 - 1 4 - 1 5 - 2 0 - 1 1 .
Similarly. DANGER - J,0 - 7 - 20 - 13 - 11 - 24.

39. (o): Putting A = 1. B = 2, C = 3.....Z = 26, we have :
PRATAP - 16 - 18 - 1 - 20 - 1 - 16 - 1618120116.
Similarly. NAVIN = 14 - 1 - 22 - 9 - 14 = 14122914.

40. (6): Let A = 1, B = 2, C = 3,.... X = 24, Y = 25, Z = 26.
Then. M = 13 = 1 + 3 =4; 0 = 15=1 + 5 = 6;
L = 12= 1 + 2 - 3 ; T - 2 0 = 2 + 0 = 2;
Y = 25 = 2 + 5 = 7.
So. MOBILITY =46293927.
Similarly. EXAMINATION = 56149512965.

41. (c): Let A = 1. B = 2, C = 3 , Z - 26.
Now. M = 13 = 4 (remainder obtained after dividing by 9);
S = 19 = i (remainder obtained after dividing by 9 twioe);
T = 20 = 2 (remainder obtained after dividing by 9 twice);
R = 18 = 9 (remainder obtained after dividing by 9).
So. MASTER * 411259.
Similarly, POWDER - 7 65459.

CASE II: NUMBER TO LETTER CODING

When alphabetical code values are assigned to the numbers

Ex. 1. In a certain code, 2 is coded as P, 3 as N, 9 as Q, 5 as R, 4 as A and 6 as B. How is 599423 coded in that code ?
(a) EIIDBC (*b*) RQPANB (c) EIMDBC (d) RQQAPN *(e)* RPPBQN

Sol. Clearly, as given 5 is coded as R, 9 as Q, 4 as A, 2 as P and 3 as N. So, 599423 is coded as RQQAPN. Hence, the answer is (d).

Ex. 2. In a certain code, 34ofc is coded as ROPE, 15526 is coded as APPLE, then how is 54613 coded ?
(a) RPPEO (6) ROPEA (c) POEAR (d) PAREO (e) None of these

Sol. Clearly in the given figures, the numbers are coded as follows :

3	4	5	6	1	2
R	O	P	E	A	L

i.e. 5 is coded as P, 4 as O, 6 as E, 1 as A and 3 as R. So, 54613 as coded as POEAR. Hence, the answer is (c).

EXERCISE 4D

1. In a certain code. 15789 is written as EGKPT and 2346 is written as ALUR. How is 23549 written in that code ?
(a) ALEUT (b) ALGTU (c) ALGUT (d) ALGRT (e) None of these
2. In a certain code, a number 13479 is written as AQFJL and 5268 is written as DMPN. How is 396824 written in that code ?
(a) QLPNKJ (6) QLPNMF (c) QLPMNF (d) QLPNDF (e) None of these

Directions (Questions ***3 to 5) : The number in each question below is to be codified in the following code :*** (Railways, 1991)

Digit	7	2	1	5	3	9	8	6	4
Letter	W	L	M	S	I	N	D	J	B

3. 184632
(a) MDJBS1. *(b)* MDJBIL (c) MDJBWL (d) MDBJIL (e) None of these
4. 879341
(a) DWNIBS (b) DWNBIM (c) DWNIBM (d) NDWBIM (e) None of these
5. 64928
(a) JBNLD (fc) JBLND (c) BJNLD (d) DBNLS (e) None of these
6. In a certain code, 15789 is written as AXBTC, 2346 is written as MPDU. How is 23549 written in that code ?
(a) MPXDT *(b)* MPADC (c) MPXCD (d) MPXDC (e) None of these

7. In a certain code, 15789 is written aa XTZAL and 2346 is written as NPSU. How is 23549 written in that code ? (Bank P.O. 1989)
   (a) NPTUL (6) PNTSL (c) NPTSL (d) NBTSL (e) None of these
8. In a certain code, 33946 is codcd as PPOAL and 1987 is coded as ROSE. How is 94678 coded in that code ?
   ia) ROSEP *ib)* OALES (c) POALE (d) OSEPL *(e)* REAPS
9. If in a certain language, 943 is coded as BED and 12448 is coded *as* SWEET, how is 492311 coded in that language ?
   (a) EDSWBS *ib)* TSWBDD (c) DSWTEE (d) EBDSWE <e) EBWDSS

Directions (***Questions 10 to 18) : In*** a ***certain language, the numbers are coded as follows :***

4	3	9	2	1	6	7	8	5	2	0
A	W	P	Q	R	B	E,	s	G	J	M

How are the following figures coded in that code ?

10. 421665
    (a) AQRBBG *(b)* PQBRSE (c) ASGRBE (d) QRPSSE *(e)* None of these
11. 67825
    (a) BESGJ (6) BSEJG (c) BESJG (d) BSEGJ *(e)* ESBJG
12. 55218
    (a) GJGRS *ib)* GGJSR (c) GGRJS (d) GGSRJ (e) GGJRS
13. 91352
    (a) PRWGJ (*b*) PRGWJ (c) RPGWJ (d) RGPWJ (e) PRWJG
14. 720435
    (a) EJMAGW *ib)* MAGJRW (c) EJMAWG (d) MGARJW (e) None of these
15. 6660
    ia) BBMG *ib)* BBGM *ic)* BGMB *id)* BMGB (e) None of these
16. 3215
    (a) WJRG (6) WJGR ic) JWRG id) JWGR (e) GRJW
17. 67852
    (a) BSEJG *ib)* BESJG *ic)* BSEGJ *id)* BESGJ (e) None of these
18. 439216
    (a) PQRWAB *ib)* AQRWPB (c) APWQRB *id)* PQRBAW *ie)* AWPQRB

Directions ***iQuestions 19 to 25) : In a certain language, 36492 is written as SMILE and 058 is written as RUN. How*** are ***the following figures coded in that language ?***

19. 33980 s
    ia) SSLNR *ib)* SSLRN *ic)* SLSNR
    id) Can't be determined (e) None of these
20. 6458
    (a) MUIN (6) MINU *ic)* INUM *id)* MIUN (e) IUMN
21. 92486
    (a) LEIMN (6) ELINR (c) LEINM *id)* EILNM *ie)* LIEMN

22. 54324
(a) Sl1TEI *(b)* UISEI (c) USIIE (d) UISIE *(e)* SUEII

23. 90089
(a) NLLRN (b) LRLNN (c) LLRRN (d) LRRNL (e) RLLNN

24. 3425
(a) SEIU (6) SIUE (c) SRUI (d) RUSI (e) SIEU

25. 29463
(a) ELISM *(b)* ELIMS (c) LIMSE *(d)* EILMS (e) None of these

ANSWERS

1. (O: In the given codes, the numbers are coded as shown :

1	5	7	8	9	2	3	4	6
E	G	K	/	P	T	A	L	U	R

i.e., 2 as A 3 as L, 5 as G. 4 as U and 9 as T. So. 23549 is coded as ALGUT.

2. (6): In the given codes, the numbers are coded as shown :

1		3	4	7	9	5	2	6	8
A	Q	F	J	L	D	M	P	N	

i.e., 3 as Q, 9 as L. 6 as P. 8 as N, 2 as M and 4 as F. So, 396824 is coded as QLPNMF.

3. *Id):* As given, 1 is coded as M, 8 as D, 4 as B, 6 as J, 3 as I and 2 as L. So. 184632 is coded, as MDBJIL.

4. (c): As given. 8 is coded as D, 7 as W, 9 as N, 3 as I. 4 as B and 1 as M. So. 879341 is coded as DWNIBM.

5. (a): As given. 6 is coded as J. 4 as B. 9 as N, 2 as L and 8 as D. So, 64928 is coded as JBNLD.

6. <d): The numbers are codcd as shown :

1	5	7	8	9	2	3	4	6
A	X	B	T	C	M	P	D	U

i.e.. 2 as M. 3 as P. 5 as X, 4 as D and 9 as C. So, 23549 is coded as MPXDC.

7. (c): The numbers are coded as shown :

1	5	7	8	9	2	3	4	6
X	T	Z	A	L	N	P	S	U

ie., 2 as N, 3 as P. 5 aa T. 4 as S and 9 as L. So. 23549 is coded as NPTSL.

8. (6): The numbers are coded as shown :

3	9	4	6	1	8	7
P	O	A	L	R	S.	E

i.e., 9 as O, 4 as A. 6 as L. 7 as E and 8 as S. So. 94678 is coded as OALES.

». *(e):* The numbers are coded as shown :

9	4	3	1	2	8
B	E	D	S	W	T

i.e.. 4 as E. 9 as B, 2 as W, 3 as D and 1 as S. So, 492311 is coded as EBWDSS.

10. (o): As given. 4 is coded as A 2 as Q, 1 as R, 6 as B and 5 as G. So. 421665 is coded as AQRBBG.

U. (c): As given, 6 is coded as B, 7 as E, 8 as S, 2 as J and 5 as G. So, 67825 is coded as BESJG.

12. (e): As given. 5 is coded as G, 2 as J. 1 as R and 8 as S. So. 55218 is coded as GGJRS.

13. (a): As given, 9 is coded as P. 1 as R. 3 as W, 5 as G and 2 as J. Thus. 91352 is coded ad PRWGJ.
14. (c): As given. 7 is coded as E. 2 as J. 0 as M. 4 as A, 3 as W and 5 as G. So. 720435 is coded as EJMAWG.
15. (6): As given. 6 is coded as B. 5 as G and 0 as M. So. 6650 is coded as BBGM.
16. (a): As given, 3 is coded as W. 2 as J, 1 as R and 5 as G. So, 3215 is coded as WJRG.
17. (rf) : As given, 6 is coded as B. 7 as E. 8 as S. 5 as G and 2 as J. So. 67o52 is coded as BESGJ.
18. (*): A* given, 4 is coded as A. 8 as W. 9 as P. 2 as Q. 1 as R and 6 as B. So, 439216 is coded as AWPQRB.

Questions 19 to 25

Clearly, the numbers in the given figures are coded as follows :

3	6	4	9	2	0	5	8
S	M	I	L	E	R	U	N

19. (o): 3 is coded as S, 9 as L, 8 as N and 0 as R. So, 33980 is coded as SSLNR.
20. (d) : 6 is coded as M, 4 as I, 5 as U and 8 as N. So, 6458 is coded as MIUN.
21. (c): 9 is coded as L, 2 as E. 4 as I, 8 as N and 6 as M. So, 92486 is coded as LEINM.
22. (6): 5 is coded as U, 4 as I, 3 as S, and 2 as E. So, 54324 is coded as UISEI.
23. *(d)*: 9 is codcd as L, 0 as R and 8 as N. So, 90089 is codcd as LRRNL.
24. (e): 3 is codcd as S, 4 as I, 2 as E and 5 as U. So. 3425 is coded as SIEU.
25. (6): 2 is coded as E, 9 as L, 4 as I, 6 as M and 3 as S. So. 29463 is coded as EUMS.

TYPE 3 : MATRIX CODING

EXERCISE 4E

Directions : ***In each of the following questions, a word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in the two given matrices. The columns and rows of matrix I are numbered from 0 to 4 and that of matrix II from 5 to 9. A letter from these matrices can be represented first by its row and next by column number in the matrices for question 1, A can be represented by 13, 23 etc. T can be represented by 58, 65 etc. Similarly, you have to identify the set for the word given in each question.***

Questions 1 to 3 (I. Tax & Central Excise, 1996)

1.

Matrix I

	0	1	2	3	4
0	D	K	A	E	C
1	C	D	K	A	E
2	K	C	E	A	D
3	K	C	D	E	A
4	E	D	A	K	C

Matrix II

	5	6	7	8	9
5	P	L	0	T	N
6	T	P	N	L	0
7	P	N	T	0	L
8	0	N	T	P.	L
9	L	0	P	N	T

COLD

(a) 44, 96. 95, 22 (6) 31, 99, 77, 22 (c) 30, 66. 86, 43 *(d)* 10, 85, 79, 24

2. Matrix I

	0	1	2	3	4
0	A	C	E	D	K
1	D	K	A	C	E
2	C	E	D	K	A
3	K	A	C	E	D
4	E	D	K	A	C

Matrix II

	5	6	7	8	9
5	T	0	P	N	L
6	N	L	T	0	P
7	0	P	N	L	T
8	L	T	0	P	N
9	P	N	L	T	0

POND

(a) 88. 99. 77. 33 (6) 76. 87. 65. 22 (c) 68. 99, 77, 33 (d) 57, 68. 89. 42

3. Matrix I

	0	1	2	3	4
0	E	A	T	S	H
1	A	H	T	E	S
2	E	H	A	S	T
•3	H	E	A	T	S
4	S	H	T	A	E

Matrix n

	5	6	7	8	9
5	0	R	K	L	P
6	L	P	0	R	K
7	0	K	R	P	L
8	P	R	K	L	O
9	R	L	K	0	P

REAP

(a) 96. 00. 01, 99 (6) 86. 34. 24. 69 (c) 68. 21, 22. 86 *id)* 56. 00. 22, 59

Questions 4-5 (CJELL 1996)

Matrix I

	0	1	2	3	4
0	E	A	H	T	S
1	A	T	S	H	E
2	E	S	T	H	A
3	T	H	A	E	S
4	S	T	H	E	A

Matrix II

	5	6	7	8	9
5	I	P	L	K	R
6	K	R	I	L	P
7	I	R	K	L	P
8	K	R	I	P	L
9	R	K	L	P	I

4. RISK

(a) 96. 66. 88. 98 (6) 95. 12. 67. 98 (c) 76, 21. 59, 89 *(d)* 59, 99, 21, 77

5. STEP

(a) 12. 22. 14, 69 (6) 12, 14, 96. 41 (c) 22, 41, 21, 96 *(d)* 41, 12, 14, 96

Questions 6 to 10 (&8.C. 1996)

Matrix I

	0	1	2	3	4
0	F	A	N	0	I
1	I	0	F	A	*y*
2	A	N	0	I	*F*
3	0	F	I	N	A
4	N	I	A	F	0

Matrix II

	5	6	7	8	9
5	S	E	H	B	T
6	H	S	E	T	B
7	B	T	S	E	H
8	E	H	T	B	S
9	T	S	E	H	B

6. NEST
   (a) 33, 85, 88, 86 (ft) 21, 76, 77, 76 (c) 14, 67. 66. 67 (d) 02. 56. 55, 59
7. FAITH
   (a) 43. 42. 41, 78. 89 (ft) 31. 34. 23. 76, 79
   (c) 24. 31. 10. 59. 57 (d) 12, 20. 40, 68. 65
8. FINE
   (<i) 31. 32. 33. 82 (ft) 24. 19. 21. 78 *(c)* 12. 10. 13. 67 (d) 00. 04. 02. 56
9. HEAT
   (a) 79, 53. 20. 87 (ft) 65, 56. 13. 57 (c) 57. 56. 01, 50 *id)* 29. 85. 34. 93
10. BOTH
    (a) 88. 30. 85. 86 (ft) 75. 22. 76. 79 (c) 69. 67, 68. 59 (d) 58, 02. 68. 65

Questions 11 to 15

Matrix I

	0	1	2	3	4
0	D	0	B	A	I
1	0	B	A	I	D
2	B	A	I	D	0
3	A	I	D	O	B
4	1	D	0	B	A

Matrix II

	5	6	7	8	9
5	W	N	R	M	L
6	N	R	M	L	W
7	R	M	L	W	N"
8	M	L	W	N	R
9	L	W	*U*	R	M

11. DRAW
    (a) 41. 66. 23. 55 (ft) 32. 75. 44. 76 (c) 23. 57, 30, 68 (d) 14. 89. 12. 78
12. BAND
    (a) 43. 21. 97. 33 (ft) 11. 21. 79. 41 (c) 34. 44. 66. 14 (d) 20. 30. 89. 23
13. BLOW
    (a) 11, 68. 42. 69 (ft) 21. 95. 33. 97 (c) 34. 68. 10, 88 (d) 34, 86. 44. 78
14. RAIN
    (a) 57. 12, 31, 56 (ft) 57. 21. 23. 79 (c) 66. 44. 42. 96 (d) 75. 30. 31, 87
15. LAMB
    (a) 68. 21. 58. 34 (ft) 77, 44, 76, 33 (c) 86, i\, 67, 12 (d) 95, 30. 80, 20

Directions (***Questions 16 to 20) i The hundred cells in the square below have been filled with letters. The columns and the rows are identified by the numbers 0 to 9. A letter in a cell is represented first by its column number and then by its row number e.g., G in column 3 and row 1 is represented by 31. In each of the following questions, a word has been given which is represented by one of the four alternatives given under it. Find the correct alternative.***

	o	1	2	3	4	5	6	7	8	9
0	I	L	B	P	K	N	H	S	A	E
1	M	A	Q	G	T	V	I	0	N	U
2	H	R	w	J	A	X	B	E	C	I
3	T	Y	A	I	U	u	0	N	J	F

4	F	O	B	M	E	G	U	K	W	R
5	A	C	L	J	X	R	A	A	X	T
6	P	s	U	E	Z	K	V	W	D	L
7	Z	D	Y	V	F	O	H	Y	I	O
8	M	I	Z	Q	E	A	U	E	I	S
9	P	E	O	D	E	U	Q	O	C	G

16. MIND
(a) 01, 61, 73. 36 (b) 08. 61. 55, 44. (c) 34. 33. 50, 17 *(d)* 73. 33. 61, 17

17. JAIL
(o) 32. 05, 25. 44 (6) 32, 05. 87, 96 (c) 35, 23, 26. 33 (d) 83, 65, 25, 44

18. BLOT
(a) 20. 10. 71, 22 (b) 24, 10, 26. 48 (c) 34. 35. 63. 03 (d) 62. 25. 57. 95

19. JOKE
(a) 32, 14. 56. 44 (6) 35. 14. 37. 78 (c) 83. 63. 40. 59 (d) 83. 71, 25, 36

20. OMIT
(a) 14, 34, 88, 95 (6) 63. 44, 88. 03 (c) 79. 09. 61. 41 (d) 97, 34. 62. 95

ANSWERS

1. (</): From matrix I, C can be codcd as 04. 10, 21. 31 or 44.
From matrix II, O can be coded as 57. 69, 78. 85 or 96.
From matrix II, L can be coded as 56, 68, 79. 89 or 95.
*Yom matrix I, D can be coded as 00, 11, 24, 32 or 41.
Clearly, only W) contains all correct codes.

2. (6): From matrix II, P can be coded as 57, 69, 76, 88 or 95.
From matrix II, O can be coded as 56, 68, 75, 87 or 99.
From matrix II, N can be coded as 58, 65, 77, 89 or 96.
From matrix I, D can be coded as 03, 10, 22, 34 or 41.

3. *(d)*: From matrix II, R can be coded as 56, 68, 77, 86 or 95.
From matrix can be coded as 00, 13, 20, 31 or 44.
From matrix I, A can be coded *hs* 01, 10, 22, 32 or 43.
From matrix II, P can be coded as 59, 66, 78, 85 or 99.

4. *(d):* From matrix II, R can be coded as 59, 66, 76, 86 or 95.
From matrix II, I can be coded as 55, 67, 75, 87 or 99.
From matrix I, S can be coded as 04, 12, 21, 34 or 40.
From matrix II, P can be coded as 56, 69, 79, 88 or 98.

5. (a): From matrix I, S can be coded as 04, 12, 21, 34 or 40.
From matrix I, T can be coded as 03, 11, 22, 30 or 41.
From matrix I_r E can be coded as 00, 14, 20. 33 or 43.
From matrix II, P can be coded as 56. 69, 79, 88 or 98.

6. (d): From matrix I, N can be coded as 02, 14, 21, 33 or 40.
From matrix II, E can be coded as 56, 67, 78, 85 or 97.
From matrix II. S can be coded as 55, 66, 77, 89 or 96.
From matrix II, T can be coded as 59, 68, 76, 87 or 95.

7. (6): From matrix I, F can be coded as 00. 12, 24, 31 or 43.

From matrix I, A can be coded as 01, 13, 20. 34 or 42.
From matrix I, I can be coded as 04. 10. 23. 32 or 41.
From matrix II, T can be coded as 59. 68, 76. 87 or 95.
From matrix II, H can be coded as 57. 65, 79, 86 or 98

8. *(d)* : From matrix I, F can be coded as 00, 12, 24, 31 or 43.
From matrix I, I can be coded as 04, 10, 23, 32 or 41.
From matrix I, N can be coded as 02. 14. 21, 33 or 40.
From matrix II, E can be coded as 56. 67. 78. 85 or 97.

9. (c): From matrix II. H can be coded as 57. 65, 79. 86 or 98.
From matnx II, E can be coded as 56, 67, 78. 85 or 97.
From matrix I, A can be coded as 01, 13, 20, 34 or 42.
From matrix II, T can be coded as 59. 68. 76, 87 or 95.

10. (*b)*: From matrix II, B can be coded as 58. 69, 75, 88 or 99.
From matrix I, O can be coded as 03, 11, 22. 30 or 44,
From matrix II, T can be coded as 59, 68, 76, 87 or 95.
From matrix II, H can be coded as 57, 65, 79, 86 or 98.

11. (</) : From matrix I, D can be coded as 00, 14, 23, 32 or 41.
From matrix II, R can be coded as 57, 66, 75, 89 or 98.
From matrix I, A can he coded as 03, 12, 21, 30 or 44.
From matrix II, W can be coded as 55, 69, 78, 87 or 96.

12. (6): From matrix I, B can be coded as 02, 11, 20, 34 or 43.
From matrix II, A can be coded as 03. 12. 21, 30 or 44.
From matrix II, N can be coded as 56, 65, 79, 88 or 97.
From matnx I, D can be coded as 00, 14, 23, 32 or 41.

13. (a): From matrix I, B can be coded as 02, 11, 20, 34 or 43.
From matrix II, L can be coded as 59, 68, 77. 86 or 95.
From matrix I. O can be coded as 01, 10, 24, 33 or 42.
From matrix II, W can be coded as 55, 69, 78. 87 or 96.

14. (a): From matrix II, R can be coded as 57. 66, 75, 89 or 98.
From matrix I, A can be coded as 03, 12, 21, 30 or 44.
From matrix I. I can be coded as 04. 13, 22, 31 or 40.
From matrix II, N can be coded as 56, 65, 79. 88 or 97.

15. (a): From matrix II, L can be coded as 59, 68. 77, 86 or 95.
From matrix I, A can be coded as 03, 12, 21, 30 or 44.
From matrix II, M can be coded as 57, 66, 75. 89 or 98.
From matrix I, B can be coded as 02, 11, 20, 34 or 43.

16. (c) 17. (6) 18. *(d)* 19. *(a)* 20. *(a)*

TYPE 4 : SUBSTITUTION

In this type of questions, some particular objects are assigned code names. Then a question is asked that is to be answered in the code language.

Ex. 1. If *cook* is qalled *butler, butler* is called *manager; manager* is called *teacher, teacher* is called *clerk* and *clerk* is called *principal*, who will teach in a class ?
(a) Cook (6) Butler ' (c) Manager « *(d)* Teacher (e) Clerk

Sol. Clearly, a 'teacher' teaches in a class and as given teacher' is called 'clerk*. So, a 'clerk* will teach in the class.
Hence, the answer is *(e).*

Ex. 2. If *diamond* is called *gold, gold* is called *silver, silver* is called *ruby* and *ruby* is called *emerald,* which is the cheapest jewel ?
(a) Diamond (6) Silver (c) Gold *(d)* Ruby *(e)* Emerald

Sol. We know that 'silver is cheapest. But, as given, 'silver' is called 'rub/. So, 'ruby* is the cheapest.
Hence, the answer is *(d).*

Ex. 3. If *eye* is called *hand, hand* is called *mouth, mouth* is called *ear, ear* is called *nose* and *nose* is called *tongue*, with which of the following would a person hear ?
(a) Eye (6) Mouth (c) Nose *(d)* Ear (e) Tongue

Sol. A person hears with his 'ear\ But as per the given information, 'ear' is called 4nose\ So, a person will hear with the 4nose\
Hence, the answer is (c).

EXERCISE 4F

1. If *white* is called *blue. blue* is called *red, red* is called *yellow, yellow* is called *green, green* is called *black, black* is called *violet* and *violet* is called *orange,* what would be the colour of human blood ? (Bank P.O. 1994)
(a) Red (6) Green (c) Yellow,. *id)* Violet *(e)* Orange
2. If *room* is called *bed. bed* is called *window, window* is called *flower* and *flower* is called *cooler*, on what would a man sleep ?
(a) Window (*b*) Bed (c) Flower *(d)* Cooler *(e)* None of these
3. If *orange* is called *butter, butter* is called *soap, soap* is called *ink, ink* is called *honey* and *honey* is called *orange*, which of the following is used for washing clothes ? (RB I. 1990)
(a) Honey (6) Butter (c) Orange *id)* Soap (e) Ink
4. If *sand* is called *air, air* is called *plateau, plateau* is called *well, well* is called *island* and *island* is called *sky*, then from where will a woman draw water ?
(a) Well (6) Island (c) Sky *(d)* Air (e) None of these
5. If *bangle* is called *cassette, cassette* is called *table*$_t$ *table* is called *game* and *game* is called *cupboard*, then which is played in the tape recorder ?
(a) Bangle (6) Cassette (c) Table *(d)* Cupboard *(e)* None of these
6. If *green* means *red, red* means *yellow, yellow* means *blue, blue* means *orange* and *orange* means *green*, what is the colour of clear sky ? (B.8.R.B. 1998)
(a) Blue (6) Red (c) Yellow (d) Green *(e)* Orange
7. If *cloud* is called *white, white* is called *rain, rain* is called *green, green* is called *air, air is* called *blue* and *blue* is called *water*, where will the birds fly ?
(a) Air (6) Cloud (c) White *(d)* Rain (e) Blue
(Bank P.O. 1991)
8. If *book* is called *watch, watch* is called *bag, bag* is called *dictionary* and *dictionary* is callcd *window*, which is used to carry the books ?
(a) Dictionary (6) Bag (c) Book *(d)* Watch *(e)* None of these
9. If the animals which can walk are called *swimmers*, animals who crawl are called *flying*, those living in water are called *snakes* and those which fly in the sky are called *hunters*. then what will a lizard be called ? (Bank P.O. 1991)
(a) Swimmers (6) Snakes (c) Flying *(d)* Hunters (e) None of these

10. If *rain* is *water, water* is *road, road* is *cloud,* cfoad is afcy, aAjy is *sea* and *sea* is paM, where do aeroplanes fly ?
(a) Road (6) Sea (c) Cloud (d) Water (e) None of these

11. If *water* is called *food, food is* called *tree,* free is called *sky, sky* is called *wall,* on which of the following grows a fruit ?
(a) Water (6) Food (c) Sky <d) Tree (e) Wall

12. If *water* is called *blue, blue* is called red, *red* is called w/ufe, w/rife is called *sky,* sAy is called rain, rain is called *green* and *green* is called air, which of the following is the colour of milk ? (Bank P.O. 1994)
(a) Air (6) Green (c) White (d) Rain (e) Sky

13. If *paper* is called *wood,* u>ood is called *straw*, sfraw is called *grass, grass* is called *rubber* and *rubber* is called clofA, what is the furniture made up of?
(a) Paper (b) Wood (c) Straw (d) Grass (e) Cloth

14. If *pen* is *table, table* is *fan, fan* is *chair* and *chair* is *roof*, on which of the following will a person sit ?
(a) Fan (6) Chair (c) Roof (d) Table (e) Pen

15. If *bat* is *racket, racket* is *football, football* is *shuttle, shuttle* is /udo and Zudo is carrom, what is cricket played with ?
(a) Racket (6) Football (c) Bat (d) Shuttle (e) Carrom

16. If *banana* is *apple, apple* is *grapes, grapes* is *mango, mango* is nufs, nute is *guava,* which of the following is a yellow fruit ?
(a) Mango (6) Guava (c) Apple (d) Nuts (e) Grapes

17. If air is called *green, green* is called *blue, blue* is called *sky*, sAy is called *yellow, yellow* is called u>afer and wafer is called *pink*, then what is the colour of clear sky ? (S.B.I.P.O. 1994)
(a) Blue *ib)* Sky (c) Yellow (d) Water (e) Pink

18. If *cushion* is called *pillow, pillow* is called rrraf, ma/ is called *bedsheet* and *bedsheet* is called *cover*, which will be spread on the floor ?
(a) Cover (6) Bedsheet (c) Mat (d) Pillow (e) None of these

19. If *wall* is called *window, window* is called *door, door* is called *floor, floor* is called *roof* and *roof* is called *ventilator*, what will a person stand on ?
, (a) Window (6) Wall (c) Floor (d) Roof (e) Ventilator

20. If *eraser* is called *box. box* is called *pencil, pencil* is called *sharpener* and *sharpener* is called *bag,* what will a child write with ?
(a) Eraser (6) Box (c) Pencil (d) Sharpener (e) Bag

21. If *clock* is called *television, television* is called *radio*, radio is called *oven, oven* is called *grinder* and *grinder* is called *iron,* in what will a lady bake ?
[1] (a) Radio (6) Oven (c) Grinder (d) Iron (e) Clock

22. If *sky vt* called *sea, sea is* called *water, ivater* is called air, air is called *cloud* and *cloud is* called *river*, then what do we drink when thirsty ? (Bank P.O. 1996)
(a) Sky (6) Air (c) Water (d) Sea (e) Cloud

23. If *man* is called *girl*, #ir/ is called *woman, woman* is called *boy* is called and *butler* is called rogue, who will serve in a restaurant ?
(a) Butler (6) Girl (c) Man (d) Woman <e) Rogue

24. If *train* is called *bus, bus* is called *tractor, tractor* is called *car, car* is called *scooter, scooter* is called *bicycle, bicycle* is called *moped*, which is used to plough a field ?
(a) Train (6) Bus (c) Tractor (</) Car (e) Moped

25. If /ead is called *stick, stick* is called *nib, nib* is called *needle, needle* is called *rope* and *rope* is called *thread*, what will be fitted in a pen to write with it ?
(a) Stick *(b)* Lead (c) Needle *(d)* Nib (e) Thread

26. If rose is called *popy, popy* is called *lily, lily* is called *lotus* and *lotus* is called *glandiola*, which is the king of flowers ?
(a) Rose *(b)* Lotus (c) Popy *(d)* Lily (e) Glandiola

27. If *rat* is called *dog, dog* is called *mongoose, mongoose* is called *lion, lion* is called snaAe and *snake* is called *elephant*, which is reared as pet ?
(a) Rat (6) Dog (c) Mongoose (d) Lion (e) Elephant

28. If *finger* is called *toe, toe* is called *foot, foot* is called *thumb, thumb* is called *ankle, ankle* is called *palm* and *palm* is called *knee,* which one finger has a different name ?
(a) Thumb (6) Ankle (c) Knee (d) Palm (e) Toe

ANSWERS

1. (c): The colour of the human blood is 'red' and as given, 'red' is callcd •yellow'. So, the colour of human blood is 'yellow[4],
2. (a) : A man sleeps on a 'bed' and as given, "bed' is called "window*. So, the man will sleep on the "window*.
3. (e): Clearly, 'soap' ia used for washing the clothes. But, "aoap* is called Snk\ So, Ink* is used for washing the clothes.
4. (6): A woman shall draw water from a 'well' but a *weir is called 'island'. So, the woman will draw water from an Island'.
6. (c): Clearly, a 'cassette* is played in the tape-recorder. But a 'cassette' is called 'table. So, a table will be played in the tape-recorder.
6. (c): The colour of clear sky is 'blue' and as given, 'yellow' means 'blue'. So, the colour of clear sky is 'yellow*.
7. (e): Clearly, the birds fly in the 'air' and 'air" is called 'blue'. So, the birds fly in the %lue\
8. (a): Clearly, a 'bag is used to carry the books but a 'bag* is called 'dictionary'. So, a "dictionary' will be used to carry the books.
9. (c): Clearly, a lizard crawls and the animals that crawl are called 'flying'. So, a lizard' is called "flying.
10. (6): The aeroplanes fly in the 'sky' and the 'sky* is called 'sea'. So. the aeroplanes fly in the 'sea*.
11. (c): The fruits grow on a 'tree' and "tree' is called "sky\ So, the fruits grow on the 'sky\
12. (e): The colour of milk is 'white' and as given Svhite' is called 'sky'. So, the colour of milk is "sky'.
13. (c): The furniture is made up of "wood' and as given 'wood' is called 'straw'. So, the sky is made up of "straw*. %
14. (c): A person will sit on the 'chair' but a 'chair' is called "roof. So, the person will sit on the roof.
15. (o): Cricket if played with a 'bat' and a 'bat' is called a 'racket'. So. cricket is played with a 'racket'.

16. (d): Clearly, 'mango' is the yellow fruit but 'mango' is called "nuts'. So, 'nuts is the yellow fruit
17. (A): The colour of clear sky is 'blue* and as given, "blue' ia called 'sky'. So, the colour of clear sky is 'sky\
18. (6): 'Mat' will be spread on the floor. But 'mat' is called 'bedsheet[1]. So, a bedsheet' will be spread on the floor.
19. (d): A person will stand on the floor* and 'floor' is called 'roof. So, a person will stand on the 'roof.
20. (d) : The child will write with a 'pencil' and 'pencil' is called 'sharpener'. So, the child will write with a 'sharpener.
21. (c): The lady shall bake in an 'oven* but 'oven' is called 'grinder'. So, the lady will bake in a 'grinder'
22. (6): One drinks *water' when thirsty and as given, 'water is called 'air'.
23. (e): A 'butler' serve* in a restaurant but 'butler' is called 'rogue'. So, a 'rogue* will serve in the restaurant.
24. *id)*: A tractor' is used to plough a field. But a 'tractor' is called *car\ So, a W will be used to plough the field.
25. (c): Clearly, a 'nib' is fitted in the pen to write with it. But a 'nib[1] is called 'needle[1]. So, a 'needle' will be fitted in the pen.
26. <*J : The king of flowers is the 'lotus'. But 'lotus' is called 'glandiola'. So, 'glandiola* is the king of flowers.
27. (c): Clearly, 'dog* is reared as pet. But 'dog' is called 'mangoose'. So, a 'mangoose' is reared as pet.
28. (M: Clearly, the thumb' is a finger having a different name. But 'thumb' is called 'ankle'. So. 'ankle' is the finger that has a different name.

TYPE 5 : MIXED LETTER CODING

In this type of questions, throe or four complete messages are given in the coded language and the code for a particular word is asked. To analyse such codes, any two messages bearing a common word are picked up. The common code word will mean that word. Proceeding similarly by picking up all possible combinations of two, the entire message can be analysed.

Ex. 1. If *'nso ptr kli chn'* stands for *'Sharma gets marriage gift\ 'ptr Inm wop chn'* stands for '*wife gives marriage gift\ tti wop nhi'* stands for *'he gives nothing* what would mean *'gives'* ? (Assistant Grade, 1995)

(a) chn (6) nhi (c) ptr (d) wop

SoL j In the second and third statements, the common word is **gives[9]* and the common code word is *'wop'*. So, *'wop** means *'gives'.*

I Hence, the answer is (d).

Ex. 2. If 'tee *see pee'* means '*Drink fruit juice'; [4]see kee lee'* means *'Juice is sweet[9]* ; ' and *'lee ree mee'* means *'He is intelligent*which word in that language means *'sweet'?*

(o) see (6) kee (c) lee (d) pee (e) tee

Sol. In the first and second statements, the common word is *'Juice'* and the common code word is *'see'*. So, [4]*see[9]* means *'Juice[9].*

In the second and third statements, the common word is *'is'* and the common , code is *'lee[9]*. So, *'lee'* means *Hs*

Thus, in the second statement, the remaining word *'sweet'* is coded as *'kee'*. Hence, the answer is (6).

EXERCISE 4G

1. If *'ish Ito inm'* atgnds for *'neat and tidy': 'qpr inm sen'* stands for *'small but neat'* and *'hsm sen rso'* stands for *'good but erratic*\ what would *'but'* stand for ?
   (a) inm (6) qpr (c) sen (d) hsm
   (Assistant Grade, 1996)
2. In a certain code, *'nee tim see* means *'how are you'; 'ble nee see'* means *'where are you*\ what is the code for *'where' ?*
   (a) nee (6) tim (c) see
   (d) Can't be determined (e) None of these
3. In a certain code language, *'col tip mot'* means *'singing is appreciable'; 'mot baj min* means *'dancing is good'* and *tip nop baj'* means *'singing and dancing',* which of the following means *'good* in that code language ? (NABARD, 1994)
   (a) not (6) min (c) big
   id) Can't be determined *(e)* None of these
4. If *'ski rps tri'* stands for *'nice Sunday morning'; 'teh sti rps'* stands foV *'every Tuesday morning'* and *'ski ptr qlm'* stands for *'nice market place*\ .what would *'Sunday'* stand for ?
   (a) ski (6) rps (c) tri *(d)* qlm :
5. In a certain code, *'bi nie pie'* means *some good jokes'; 'nie bat lik'* means *'some real stories'*; and *'pie lik tol* means *'many good stories'.* Which word in that code means *jokes'* ? <B.S.k.B. 1996)
   (a) bi (6) nie (c) pie
   (d) Can't be determined *ie)* None of these /
6. In a certain language, *'pre nat bis* means *'smoking is harmful'vog dor nat'* means *'avoid harmful habit'* and *'dor bis yeV* means *'please avoid smoking'.* Which of the following means *'habit'* in that language ?
   (a) vog *(b)* nat • (c) dor (d) bis *ie)* None of these
7. If *'gnr tag zog qmp'* stands for *'Seoul Olympic Organising Committee'; 'hyto gnr emf* stands for *'summer Olympic games'* and *'esm sdr hyto'* stands for *'modern games history*\ what would be the code for *summer ?*
   (a) hyto (6) gnr (c) emf (d) *zog*
   (L Tax & Central £xcis«, 1969)
8. If in a certain language, *oka peru'* means *'fine cloth'; 'meta lisa'* means *'clear water'* and *'dona lisa peru'* means *'fine clear weather*\ which word in that language means *'weather'* ? (U.T.I. 1990)
   (a) peru (6) oka (c) meta , (d)dona
9. In a code language, *mok dan siV* means *'nice big house'; 'fit kon dan'* means *'house is good'* and *'warm tir fit'* means *'cost is high*\ Which word stands for *'good'* in that language ? (B.S.ELB. 1996)
   (a) rpok *ib)* dan (c) fit *(d)* kon
10. In a certain code language, *'Mink Yang Pe'* means *'Fruits are ripe'; 'Pe Lao May Mink'* means *Oranges are not ripe'* and *'May Pe Nue Mink'* means *'Mangoes are not ripe'.* Which word in that language means *'Mangoes' ?*
    (a) May (6) Pe (c) Nue (d) Mink

11. In a certain code language, Tom *Kun Sud'* means *Dogs are barking'Kun Jo Mop'* means *Dogs and horses'* and *[1]Mut Tom Ko[9]* means *Donkeys are mad.* Which word in that language means *'barking[9]* ? (Railways, 1991)
ia) Sud (6) Kun (c) Jo *id)* Tom (e) Ko

12. In a certain code langyage, *'put tir fin'* means *'delicious juicy fruit; 'tie dip sig'* means *'beautiful white lily[9]* and *[4]sig Ion fin[9]* means *'lily and fruit'* Which of the following stands for *'and'* in that language ?
ia) Ion (6) sig (c) fin *id)* None of these

13. If *'nitco sco tingo[9]* stands for *'softer than flower'; 'tingo rho mst[9]* stands for *'sweet flower fragrance[9]* and *'mst sco tmp'* stands for *'sweet than smile'* what would *fragrance[9]* stand for ? (Central Excise, 1989)
(a) rho (6) mst (c) tmp *id)* sco

14. In a certain code language, *'dom pul ta'* means *'bring hot food[9]; 'pul tir sop* means *food is good[9]* and *'tak da sop[9]* means *'good bright boy'* Which of the following does mean *[4]hot[9]* in that language ? (Bank P.O. 1992)
(a) dom (6) pul (*c*) ta
id) Can't be determined , *ie)* None of these

15. If *[4]sti nro kti[9]* stands for *'clouds pour down', 'nro bsi mit[9]* stands for *'down he goes* and *'bsi nro zpi'* stands for *died down he'* which word would mean *'goes'?*
ia) nro (6) mit (c) kti *id)* bsi

Directions ***iQuestions 16-17)***s

In a certain code language,

(A) *'pit dar na'* means *'you are good';*

(B) *'dar tok pa[9]* means *'good and bad[9];*

(C) *Him na tok[9]* means *they are bad[9].* (Bank P.O. 1994)

16. In that language, which word stands for they' ?
ia) na (6) tok (c) tim *id)* pit (e) None of these

17. To find the answer to the above question, which of the following statements can be dispensed with ?
ia) Only A (6) Only B (c) A or B *id)* B and C *ie)* None of these

Directions ***iQuestions 18-19):***

In a certain code language,

(A) *'pic vie nic'* means *'winter is cold[9];*

(B) **to nic re[9]* means *'summer is hot;*
're pic boo' means *'winter and summer*

(D) Vic *tho pa* means *'nights are cold'*

18. Which word in that language means *'summer ?*
ia) nic *ib)* re *ic)* to. *id)* pic *ie) vie*

19. Which of the given statements is superfluous ?
ia) Only A *ib)* Only D *ic)* Both A and D
id) Neither A nor D (e) None of these

Directions ***iQuestions 20-21):***

In a certain code language.

(A) *'pit na som'* means *'bring me water[9];*

(B) *'na jo tod'* means *'water is life';*
(C) *'tub od pit'* means *'give me toy';*
(D) *jo lin hot'* means *'life and death* (Bank P.O. 1998)

20. Which of the following represents *'is'* in that language ?
ia) jo (6) na (c) tod *id)* lin (e) None of these

21. To find out the answer to the above question, which of the following statements can be dispensed with ?
(a) A only (6) C only (c) B or C only ***(d)*** D only ***(e)*** None of these

Directions (***Questions 22-23)*** s
In a certain code language,
(A) *'mxy das zci'* means *'good little frock';*
(B) *'jmx cos zci'* means *'girl behaves good';*
(C) *'nvg drs cos'* means *'girl makes mischief*
(D) *'das ajp cos'* means *'little girl fell'.*

22. Which word in that language stands for *'frock' ?*
(a) zci *(b)* das (c) nvg *id)* cyp (e) None of these

23. Which of the given statements is superfluous ?
(a) A (6) B (c) C *id)* D (e) None of these

Directions (***Questions 24-25) i***
In a certain code language,
(A) *'pod na joe** means *'very bright boy';*
(B) *'tam nu pod'* means *'the boy comes';*
(C) *'nu per ton'* means *'keep the doll';*
•(D) *'joc ton su'* means *'very good doll'.* [4] (Bank P.O. 1994)

24. Which of the following means *'bright'* in that language ?
(a) joc (6) pod (c) ton (d) na (e) None of theae

25. Which of the following statements can be dispensed with for answering the above question ?
(o) A only (6) C only (c) C or D only *a f*
id) D only (e) None of these

26. In a certain code language, *'po ki top ma'* means *'Usha is playing cards'; 'hop ja ki ma'* means *'Asha is playing tennis'; 'ki top sop ho'* means *'they are playing football';* and *'po sur hop'* means *'cards and tennis'.* Which word in that language means *'Asha'* ? (R.B.I. 1988)
ia) ja (6) ma (c) kop *(d)* top (e) ki

Directions (***Questions 27-28) :***
In a certain code,
(A) *'Kemp Lamp Terns'* means *'Speak the truth';*
(B) *'Bis Tim Nak'* means *'Always seek knowledge';*
(C) *Tim Terns Sik'* means *'Knowledge is truth';*
(D) *'Lik Bis Zap'* means *'Never seek violence'.*

27. Which letter code stands for *'Always' ?*
ia) Nak (6) Tim (c) Bis *id)* Zap *ie)* Terns

28. To find the answer to the above question, which of the given statements is not necessary ?
(a) A *ib)* B (c) C (*id*) D (e) None of these

29. In a certain code language, *nee muk pic'* means *'grave and concern'; 'ill die so'* means *'every body else';* and *tur muk so9* means *'body and soul9.* Which of the following would mean *'every concern'* ? (Bank P.O. 1995)
(a) die pic *ib)* ill nee (c) pic nee
(d) Can't be determined (e) None of these

30. In a certain code language, *'Ka Bi Pu Ya* means *You are very intelligent'; Ya Lo Ka Wo'* means *They seem very intelligent'; 'La Pu Le'* means *You can see'* and *'Sun Pun Yun Ya'* means *'How intelligent she is'.* In that language, which of the following words means *'are' ?*
(a) Ka (6) Bi (c) Le (d) Pu *(e)* Ya

31. If in a certain code, *'bir le nac'* means *'green and tasty'; 'pic nac hor'* means *'tomato is green'* and *'coc bir hor9* means *food is tasty*\ Which of the following means *'tomato is tasty9* in that code ?
(a) bir le hor (6) pic hor nac (c) hor bir pic *id)* None of these

32. In a certain code language, *'kew xas huma deko'* means *'she is eating apples'; 'kew tepo qua'* means *'she sells toys'* and *'sul lim deko9* means 7 *like apples*\ Which word in that language means *'she'* and •*apples' ?*
(a) xas & deko *ib)* xas & kew (c) kew & deko
id) kew & xas *ie)* deko & tepo

33. If *'cinto baoli tsi mro9* means *'her village is Sarurpur9; 'mhi cinto keepi tsi oind'* means *'her first love is literature'* and *'oind geit tsi cinto pki9* means *'literature collection is her hobby',* which word would mean *'literature' ?*
ia) cinto (6) baoli (c) oind (d) geit

Questions 34 to 36 (Bank P.O. 1998)

In a certain code, *4il be pee9* means *'roses are blue9; 'sik hee9* means *'red flowers* and *'pee mit hee9* means *'flowers are vegetables9.*

34. How is *'red'* written in that code ?
ia) hee (6) sik tc) be (d) Cannot be determined (e) None of these

35. How is *'roses'* written in that code ?
ia) il *ib)* pee (c) be (d) Cannot be determined *ie)* None of these

36. How is *'vegetables are red flowers9* written in this code ?
< *ia)* pee sik mit hee (6) sik pee hee be (c) il sik mit hee
. { (d) Cannot be determined (e) None of these

ANSWERS

1. ic): In the second and third statements, the common code word is *'sen'* and the common word is *'but*\ So. *'sen'* means *'but'.*

2. (e): In the first and wxond statements, the common code words *'nee'* and *'see'* mean *'are'* and *'you'.* So, in the second statement, the remaining code 1*ble'* means **where*\

H. ib): In the first and second statement*, the common codc word is *imoi'* and the common word is *'is'.* So. *'mot'* means ***'is***\
In the second and third statements, the common code word is *tbof* and the common word is *'dancing'.* So, **baf* means J*dancing*\
Thus, in the second statement, *'min'* means *'good'.*

4. (c): In the first and second statements, the common code word is **rps'* and the common word is *'morning'*. So, **rps⁹* means *"morning'*.
In the first and third statements, common code is *'skf* and the common word is *¹nice*
So, *'ski'* means *'nice'*.
Thus, in the first statement, *tri'* means *'Sunday'*.

5. *(a):* In the first and second statements, the common code word is *'nie'* and the common word is *'some'*. So. *'nie'* means *'some'*.
In the first and third statements, the common code word is *'pie'* and the common word is *'good'*. So. *'pie'* means *'good'*.
Thus, in the first statement, *'bi'* means *'jokes'*.

6. (a): In the first and second statements, the common code word is *'not'* and the common word is *'harmful'*. So, *Viat'* stands for *'harmful'*.
In the second and third statements, the common code word is *'dor'* and the common word is *'avoid'*. So, *'dor'* stands for *'avoid'*.
Thus, in the second statement, *'vog'* means *'habit'*.

7. (c): In the first and second statements, the common code word ia *'gnr'* and the common word is *Olympic'*. So, *'gnr'* means *'Olympic'*.
In the second and third statements, the common code is *'hyto'* and the common word is *'games'*. So. *⁴hyto'* means *'games'*.
Thus, in the second statement, *'emf'* means *'summer'*.

8. *id):* In the first and third statements, the common code word is *'peru⁹* and the common word is *'fine'*. So, *'peru'* means *fine'*.
In the second and third statements, the common code word is *'lisa'* and the cofhmon word is *'clear'*. So, *'lisa'* means *'clear'*.
Thus, in the third statement, *'dona'* means *'weather'*.

9. *id)*: In the first and second statements, the common code word is *'dan'* and the common word is *'house⁹*. So, *'dan'* stands for *'house'*.
In thv socond and third statements, the common code word is *fit.* So, *fit'* stands for *'is'*.
Thus, in the second statement, *'kon'* stands for *'good'*.

10. (c): In the second and third statements, the common code words are *'Pe', 'Mink'* and *'May'* and the common words are *'are', 'not'* and *'ripe'*.
So, in the third statement, **Nue'* stands for *'mangoes'*.

11. (a): In the first and second statements, the common code word is *Kun'* and the common word is *Dogs'*. So, *Kun'* means *'Dogs'*.
In the first and third statements, the common code word is *Tom'* and the common word ia *'are'*. So, *Tom'* means *'are'*.
Thus, in the first statement, *'Sud'* means *1barking'*.

12. (a): In the first and third statements, the common code word is *fin'* and the common word is *'fruit'* So. *'fin'* stands for *fruit'*.
In the second and third statements, the common code word is *'sig'* and the common word is *lily'. So, 'sig'* stands for *'lily'*.
Thus, in the third statement, *'Ion'* means *'and'*.

13. (a): In the first and second statements, the common code word is *'tingo'* and the common word is *'flower'*. So, *'tingo* stands for *'flower'*.
In the second and third statements, the common code word is *'mst'* and the common word is *'sweet'*. So, *'mst'* stands for *'sweet'*.
Thus, in the second statement, *'rho'* stands for *fragrance*

14. *id) :* We can find the code for *food'* from the first and second statements Now, to find the code for *'hot',* we need the code for *'bring'* which cannot be determined from the given information.

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15. (6): In the first and second statements, the common code word is *'nro'* and the common word is *'down'*. So, *'nro'* means *'down.*
In the second and third statements, the common code word is *'bsi'* and the common word is *%e* So, *'bsi'* means *'he'.*
Thus, in the second statement, *'mit'* means *'goes'.*
16. (c): In the first and third statements, the common code word is *'na'* and the common word is *'are'.* So. Via' stands for *'are'.*
In the second and third statements, *the* common code word is *'tok* and the common word is *'bad⁹.* So. *tok'* stands for *'bad'.*
Thus, an the third statement, *tim'* stands for *they'.*
17. *ie)*: Since all the statements have been used to find the answer, so none of the given statement* can be dispensed with.
18. *ib)*: In statements B and C, the common code word is *'re'* and the common word is *'summer* So. *>e'* means *'summer'.*
19. (c): Clearly, both statements A and D are superfluous.
20. Cc): In statements A and B, the common code word is *'na'* and the common word is *¹water* So. *'na'* means *'water*
In statements B and D, the common code word is *'jo'* and the common word is *'life'.* So, *'Jo'* means *'life'.*
Thus, in statement B, *'tod'* represents *'is'.*
21. *ib)*: Clearly, statement C is not necessary and hence can be dispensed with.
22. *ie):* In statements A and B. the common code word is *'zci'* and the common word is *'good'.* So. *'zci'* stands for *'good'.*
In statements A and D, the common code word is *'das'* and the common word is *'little'.* So, *'das'* stands for *little'.*
So. in (A), *'mxy'* means *'frock'.*
23. (c): Clearly, statement (C) is not required.
24. *id)*: In statements (A) and (B), the common code word is *'pod'* and the common word is *'boy'.* So, *'pod'* stands for *'boy'.*
In statements (A) and (D). the common code word is *'joc'* and the common word is *1very'.* So, *'joc'* stands for ta/.
So. in (A), Via' stands for *'bright⁹.*
25. (&): Clearly, statement (C) is not required and can be dispensed with.
26. (o): In the first and second statements, the common code words are and *'ma'* and the common words are *ts'* and *'playing'.* So. *'ki'* and *'ma'* are the codes for *'is'* and *'playing'.*
In the second and fourth statements, the common code word is *'kop'* und the common word is *tennis'.* So, *'kop'* stands for *tennis'.*
Thus, in the second statement, *'ja'* stands for 'Asha\
27. (a): In statements (B) and (C), the common code word is *Tim'* and the common word is *'knowledge'.* So, *Tim'* stands for *knowledge'.*
In statement (B) and (D), the common code word is *'Bis'* and the common word is *'seek'.* So, *Bis'* stands for *'seek*.*
So, in (B), *'Nak'* stands for *'Alurays'.*
28. *ia)*: Clearly, statement (A) is not required.
29. *id):* Proceeding as in>bove questions, the code for *'every'* is either *'ill'* or *'die'* and the code for *'concern'* is either *'nee'* or *'pic'.*
30. (6): In the first and second statements, the common code words are *'Ka'* and *Ya⁹* and the common words are *'very'* and *intelligent'.* So, *Ka'* and *Ya'* are the codes for **iery'* and *'intelligent'.*

In the first and third statements, the common code word is TV and the common word is You' So, 'JV stands for You'.

Thus, in the first statement, $^{4}Bi'$ stands for *'are*^{9}.

31. (c): In the first and second statements, the common code word is *'nac* and the common word is *'green*^{9}. So, *'nac*^{9} stands for *'green*^{9}.

In the second and third statements, the common code word is Tior' and the common word is So. *'hor'* stands for *'is*^{9}.

So, in the second statement, *'pic*^{9} means *tomato*\ In the first and third statements, the common code word is *'bir** and the common word is *tasty'*. So, **bir* stands for *tasty*^{9}.

32. (c): In the first and second statements, the common code word is *'kew*^{9} and the common word is *'she*^{9}. So, ^{4}*kew*^{9} stands for *'she*^{9}.

In the first and third statements, the common code word is *deko*^{9} and the common word is *'apples*^{9}. So, *'deko*^{9} stands for *'apples*^{1}.

33. (c>: In the first and second statements, the common code words are *'cinto*^{9} and *tsi*^{9} and the common words are *'her*^{9} and **is*\ So, *'cinto*^{9} and *tsi*^{9} are the codes for ^{4}*her*^{1} and *'is*^{9}.

In the second and third statements, the common code words are *'cinto', 'tsi*^{9} and *'oind'* and the common words are *'her*^{9}*, 'is*^{9} and *literature*^{9}.

Now, *'cinto'* and *tsi*^{9} are codes for *'her'* and **is'*. So, *'oind*^{9} stands for *literature*^{9}.

34. *(b):* In the second and third statements, the common code word is *'hee*^{9} and the common word is *flowers*^{9}. So. *'hee*^{9} stands for *flowers'*.

Thus, in the second statement, *'sik*^{9} stands for *'red*^{9}.

35. (d): Since from the given information, we can .only find the code for *'are'* in the first statement, it cannot be determined which of the remaining two codes for ***Yeses'.***

36. (a): Clearly, the required code will consist of the same codcs as in the third statement with the code for *'red'* added to it.

TYPE 6 : MIXED NUMBER CODING

In this type of questions, a few groups of numbers each coding a certain short message, are given. Through a comparison of the given coded messages, taking two at a time, the candidate is required to find the number code for each word and then formulate the code for the message given.

Ex. 1. In a certain code, ***'786'*** means ***'study very hard',*** '958' means ***'hard work pays'*** and '645' means ***'study and work***\ Which of the following is the code for *1very*^{9} ? (&BJJP.O.1994)

(a) 8 (***b***) 6 (c) 7 ***(d)*** Can't be determined ***(e)*** None of these

Sol. In the first and second statements, the common word is ***'hard'*** and the common code digit is '8'. So, ***'8'*** means ***hard*^{9}.**

In the first and third statements, the common word is ***'study*^{9}** and the common code digit is '6'. So, '6' means ***'study*^{9}.**

Thus, in the first statement, ***T*** means ***'very*^{9}.** Hence, the answer is (c).

Ex. 2. If in a certain code language, '324' means ***'Light is bright629' means 'Girl is beautiful*^{9}** and '4758' means 7 ***prefer bright clothes***which digit means ***'Light*^{9}*** in that language ?

(a) 3 (6)2 (c) 4 ***(d)*** 7 (e) 5

V }

Sol. In the first and second statements, the common word is ***'is'*** and the common code digit is 42'. So, *2' means ***'is'.***

In the first and third statements, the common word is ***'bright'*** and the common code digit is '4*. So, '4' means ***'bright'.***

Thus, in the first statement, '3' means ***'Light'.*** Hence, the answer is (a).

EXERCISE 4H

1. In a certain code, '37' means *'which class'* and '583' means *'caste and class'.* What is the code for *'caste'* ? (Bank P.O. 1993)
   (a) 3 (b) 7 (c) 8 (<f) Either 5 or 3 (e) Either 5 or 8
2. In a certain code language, '743' means *'mangoes are good'-, '65T* means *'eat good food'* and '934' means *'mangoes are ripe'.* Which digit means *'ripe'* it. that language ? (Hotel Management, 1992)
   (a) 9 (6) 4 (c) 5 (rf) 7
3. In a certain code language, '134* means *'good and tasty'-,* '478* means *'see good pictures'* and '729' means *'pictures are faint'.* Which of the following digits stands for 'see' ?
   (a) 9 (*b*) 2 (c) 1 *(d)* 8
4. In a certain code, '247' means *'spread red carpet'-,* '256' means *'dust one carpet'* and '234' means *'one red carpet'.* Which digit in that code means *'dust' ?*
   (a) 2 (6) 3 (c) 5 ***d)** 6 (e) Can't say
   (R.B.I., 1990)
5. In a certain code language, '123' means *'bright little boy',* '145' means *'tall big boy'* and '637' means *'beautiful little flower'.* Which digit in that language means *'bright' ?*
   (a) 1 *(b)* 3 (c) 4 (<f) 6 *(e)* None of these
6. In a certain code, '256' means *'you are good'-,* '637* means *'we are bad'* and '358' means *'good and bad'.* Which of the following represents *'and'* in that coda ?
   (a) 2 (6) 5 (c) 8 *(d)* 3
   (Railways, 1994)
7. In a certain code, '467' means *'leaves are green'-,* '485' means *'green is good'* and '639' means *'they are playing'.* Which digit stands for *'leaves'* in that code V
   (a) 4 (6) 6 (c) 7 (d) 3 (e) None of these
   (Bank P.O. 1991)
8. In a certain code language, '851' means *'good sweet fruit'-,* *783' means *'good red rose'* and '341' means *'rose and fruit'.* Which of the following digits stands for *'sweet'* in that language ? (B.b.K.B. 1998)
   (a) 8 (b) 5 (c) 1 (</) 3 (e) None of these
9. In a certain code language, '479' means *'fruit is sweet':* '248' means *'very sweet voice'* and '637' means *'eat fruit daily'.* Which digit stands for *'is'* in that code ?
   (a) 7 (6) 9 (c) 4 (d) Can't be determined (e) None of these
   (B.S.R.B. 1995)
10. In a certain code language, '123' means 'hot *filtered coffee'-,* '356' means *'very hot day'* and '589' means *'clay and night'.* Wlych digit stands for *'very' ?*
    (a) 9 (6) 5 (c) 8 *(d)* 2 *(e)* 6

1?. In a certain code, "256' means *'red colour chalk'-,* '589' means *green colour flower'* and '245' means *'white colour chalk'.* Which digit in that code means *'white' ?*
(a) 2 *(b) 4* *(c)* 5 *(d)* Can't be determined *(e)* None of these
(Bank P.O. 1991)

12. In a certain code language, '526' means *'sky is blue'; '24'* means *'blue colour'* and '436' means *'colour is fun'.* Which digit in that language means *'fun' ?*
(a) 5 (6) 4 (c) 3 <d) 2 *(e)* None of these

13. In a certain code language, '381' means *'Hari is honest'-,* '162' means *'Shashi is intelligent'* and *948' means *'Hari should go'.* Which digit in that language means *'honest' ?*
(a) 3 (6) 8 (c) 1 (d) 9 (e) None of these

14. In a certain code, *253' means *'books art old'-,* '546' means *'man is old'* and '378' means *'buy good books'.* What stands for *'are'* in that code ? (8.B.I.P.0.1990)
(a) 2 *(b)* 4 (c) 5 (<f) 6 (e) 9

15. In a certain code, *975' means *Throw away garbage';* '528' means '*Give away smoking'* and "213' means *'Smoking is harmful'.* Which digit in that code means *Vive'?*
(a) 5 (6) 2 (c) 8 *(d)* 3 (e) None of these

Directions (Questions ***16-17):***
In a certain code, *289' means *'read from paper'-,* means *'tea from field'* and '85' means *'wall paper'.*

16. Which of the following is the code for *'tea' ?*
(a) 2 (6) 6 (c) Either 2 or 6
(d) Either 2 or 7 (e) Either 7 or 6

17. Which of the following is the code for *'paper" ?*
' (a) 2 *(b)* 8 (c) 9
(d) Can't be determined (e) None *pi* these

Directions ***(Questions 18-19) :***
(A) '134' means *'you are well'-,*
(B) '758' means *they go home'-,*
(C) '839' means *'we are home'.* (Bank P.O. 1994)

18. Which of the following represents they' in that code language ?
(a) 5 *ib)* 7 (c) 3 *(d)* 8 (e) Data inadequate

19. Which of the statements can be dispensed with while answering the above question ?
(a) A only (6) B only (c) A or C only
(d) B and C only (e) None of these

20. In a certain code language, '617* means *'sweet and hot,* '735' means *'coffee is sweet'* and '263' means *'tea is hot'.* Which of the following would mean *'coffee is hot'?*
(a) 731 (6) 536 (c) 367 (d) 753 (e) None of these

21. In a certain code language, *'3a, 2b, 7c'* means *Truth is Eternal'-, '7c, 9a, 8b, 3a'* means *'Enmity is not Eternal'* and *'9a, 4d, 2b, 8b'* means *Truth does not perish'.* Which of the following means *'enmity'* in that language ? (8.B.I.P.O. 1991)
(a) 3a (b) Ic (c) 8b (d) 9a (e) None of these

ANSWERS

1. (e): In the given statements, the common code digit is 43' and the common word is *'class'.* So. 43f means *'class'.*

Thus, in the second statement, either 5 or 8 stands for *'caste'.*

2. (a): In the *first* and third statements, the common code digits are 44' and 43' and the common words are *'mangoes'* and *'are'.*

So. 44* and 43* are the codeH for 4*mangoes*9 and *'are'.*

Thus, in the third statement, means *'ripe'.*

3. *id):* In the first and second statements, the common code digit is 44' and the common word is *'good'.* So, '4' stands for *'good'.*

In the second and third statements, the common code digit is *'T* and the common word is *'pictures'.* So. T means *'pictures'.*

Thus, in the second statement, *'8'* means *'see'.*

4.(c): In the first and second statements, the common code digit is and the common word is *'carpet'* So. 42' means *'carpet'.*

In the second and third statements, the common code digit is *6a and the common word is *'one'.* So, 4ff means *'one'.*

Therefore, in the second statement, 45' means *'dust'.*

5. (<•): In the first and second statements, the common code digit is T and the common word is *'boy'.* So, T means *'boy'.*

In the first and third statements, the common code digit is 43' and the common word is *'little'.* So. 43' means *little'.*

Thus, in the first statement, *'2'* means *'bright'.*

6. (c): In the first and third statements, the common code digit is 45* and the common word is *'good*9. So, 45" means *'good'.*

In the. second and third statements, the common code digit is 43* and the common word is 'bad\ So, 43' means *'bad'.*

Thus, in the third statement, 48' means *'and*

7. (c): In the first and second statements, the common code digit is 44' and the common word is *'green'.* So, 44' means *'green'.*

In the first and third statements, the common code digit is 46' and the common word is *'are'.* So. 46' means *'are'.*

Thus, in the first statement. T means *'leaves'.*

8. (6): In the first and second statements, the common code digit is 48' and the common word is *'good*9. So, *8*9 means *'good'.*

In the first and third statements, the common code digit is T and the common word is *fruit'.* So, T means *fruit'.*

Thus, in the first statement. 45' means *'sweet'.*

». (6): In the first and second statements, the common code digit is 44* and the common word is *'sweet*9. So, 44' means *'sweet'.*

In the first and third statements, the common code digit is *'T* and the common word is ***fruit'.*** So, 47 means ***'fruit'.***

Thus, in the first statement, ***V*** means ***is*9.**

10. *(e):* In the first and second statements, the common code digit is ^ and the common word is ***'hot*9.** So, 43' means ***'hot'.***

In the second and third statements, the common code digit is '5% and the common word is *'day'.* So, 45* means *'day'.*

Thus, in the second statement, '& means ***'very*9.**

11. (6): In the second and third statements, the common code digit is '5' and the common word is *'colour'*. So, [4]5' means *'colour'*.

In the first and third statements, '5* means *'colour'*. The other common code digit is "2" and the common word is *'chalk*'*. So, means *'chalk'*.

Thus, in the third statement, [4]4* means *'white'*.

12. (c): In the First and third statements, the common code digit is '6' and the common word is V. So, [4]6[f] means %$".

In the second and third statements, the common code digit is '4' and the common word is *'colour'*. So, [4]4' means *'colour'*.

Thus, in the third statement. means *'fun'*.

13. (a): In the first and second statements, the common code digit is T and the common word is *ts*[9]. So, T means *'is'*.

In the first and third statements, the common code digit is '8* and the common word is *'Hari'*. So, '8' stands for *'Hari'*.

Thus, in the first statement, *3' means *'honest'*.

14. (a): In the first and second statements, the common code digit is [4]5' and the common word is *'old'*. So, '5* means *'old'*.

In the first and third statements, the common code digit is '3' and the common word is *'books'*. So, [4]3* means *'books'*.

Thus, in the first statement, *2' meaiis *'are'*

16. (c): In the first and second statements, the common code digit is [4]5* and the common word is *'away'*. So, '5' means *'away'*.

In the second and third statements, the common code digit is "2* and the common word is *'smoking'*. So, [4]2' means *'smoking'*.

Thus, in the second statement, [€]*ff* means *'Give'*

Questions 16-17

In the first and second statements, the common code digit is '2' and the common word is *from'*. So, *2' is the code for *'from'*.

In the first and third statements, the common code digit is '8* and the common word is *'paper'*. So, [4]8' is the code for *'paper'*.

16. *ie):* Clearly, in the second statement, either [l]*T* or may be the code for *tea'*.

17. (6): As shown above, *'8'* id the code for *'paper'*.

Questions 18-19

We can find the code for [4]home' from the second and third statements.
For finding the code for "they", we need the code for [4]go' which cannot be determined from the given data.

18. (e): Data inadequate

19. (a): Clearly, statement A is not necessary.

20. (6): In the first and third statements, the common code digit is *6' and the common word is *'hot'*. So, [4]6* means *'hot'*.

In the second and third statements, the common code digit is [4]3' and the common word is *'is'*. So. *'3*[9] means *ts*\

In the first and second statements, the common code digit is T and the common word is *'sweet*[9].

So. in the second statement, [4]6' means *'coffee*[9].

Clearly, '636' would mean *'coffee is hot'*.

21. (c): In the sccond and third statements, the common code is **9a'* and the common word is *'not'*. So, *'9a'* means *'not'*.

In the first and second statements, the common codes arc *'7c'* and *'3a*[9] and the common words are *ts*[9] and *Eternal'*.

So, in the second statement, *'8b'* means *'enmity'*.

I [1]

TYPE 7: DECIPHERING INDIVIDUAL LETTER CODES BY ANALYSIS I

In this type of questions, certain sample words are given along with their codes. The candidate is required to decipher individual codes for different letters by comparing, taking two words at a time, and then answer the given[1] questions accordingly.

i Example : ***Below, in column I, are given some words. These have been translated into a code language. The code equividents of the words in column I given in column II are not necessarily opposite to the corresponding words. Moreover, the codes for the different letters in each word have also not been given in the same order as these letters occur in the original word. Study the two columns carefully and then of the four alternatives given in each question, find the one that has the code equivalents of the letters of the word given in the question. This is your answer.*** (Hotel Management, 1906)

Column I	Column II
DELIBERATION	aemrqs
CONSIDERATE	ccehlmo
GHOSTLIKE	cfhmoqqrx
WORLDLY	cdgmqrsxz
KNOWLEDGE	adefmopqqsz
ROCKET	cefkmopqqszz

1. SOLACE
   (a) aedpqr (6) acemoq (c) acdmpq (i*d*) demopq
2. KNIGHT
   (a) fgrsxz *(b)* gprsxz (c) fhrapqr *(d)* ghrxyz
3. WORDY
   (a) fhlmq (6) ehlmo (c) efhlm *id)* adeop
4. NOTICE
   (a) acdeqs (6) afmqsz (c) efhpqs *(d)* fghpqr
5. BLOAT
   (a)Ikpqz (6) hrnpqz (c) cmpqs *(d)* ckmps

Solution : We first find the exact codes of the given words.

DELIBERATION is a twelve-letter word. So, its code is cefkmopqqszz.

CONSIDERATE is an eleven-letter word So, its code is adefmopqqsz.

GHOSTLIKE and KNOWLEDGE are nine-letter words and the codes are cfhmoqqrx and cdgmqrsxz. KNOWLEDGE has two E's and so its code will also contain two identical letters. Thus, its code is cfhmoqqrx.

So, the code for GHOSTLIKE is cdgmqrsxz.

WORLDLY is a seven-letter word. So, its code is ccehlmo.

ROCKET is a six-letter word. So, its code is aemrqs.

Rearranging the words and their codes, we have :

DELIBERATION ,	cefkmopqqszz
CONSIDERATE	adefmopqqsz
GHOSTLIKE	cdgmqrsxz
WORLDLY	ccehlmo
KNOWLEDGE	cfhmoqqrx
ROCKET	aemrqs

The common letter in the given words is O and the common code letter is m. So, m stands for O.

In WORLDLY and ROCKET, the common code letter m stands for O. The other common code fetter e stands for R.

In GHOSTLIKE and WORLDLY, the other common code letter c stands for L.

In DELIBERATION and WORLDLY, the common code letters, c, e and m stand for L. R and O respectively. The other common code letter o stands for D.

In WORLDLY and KNOWLEDGE, the common code letters, m. c and o stand for O, L and D respectively. So. the other common code letter h stands for W.

In KNOWLEDGE, there are two E's and the letter q occurs twice in the code. So, q stands for E.

In KNOWLEDGE and ROCKET, the common code letters m and q stand for O and E respectively. So, the other common code r stands for K.

In GHOSTLIKE and ROCKET, the common code letters, m, r and q stand for O, K and E respectively. S6. the other common code letter s stands for T.

In ROCKET, the remaining code letter a stands for C.

In GHOSTLIKE and KNOWLEDGE, the common code letters m. c, r and q stand for O, L, K and E respectively. So. the other common code letter x stands for G.

In KNOWLEDGE, the remaining code letter f stands for N.

In DELIBERATION and GHOSTLIKE, the common code letters q, c, s and m stand for E. L. T and O respectively. So, the common code letter z stands for L

In CONSIDERATE and GHOSTLIKE, the common code letters m, z, q and s stand for O, I, E and T respectively. So, the common code letter d stands for S.

In GHOSTLIKE, the remaining code letter g stands for H.

In CONSIDERATE, the remaining code letter p stands for A.

In DELIBERATION, the remaining code letter k stands for B.

The information can be summarised as below :

Code f m	c	o	»	1		r	s	«	x	f	z	d	F	P 1 k 1
[Letter [0	R	D	W	Y	E	K	T	C	G	N	I	s	H	A 1 B :

1. (c): The code for S is d, for O is ro$_f$ for L is c$_f$ for A is p, for C is a and for E is q.
   So, the code for SOLACE is dmcpaq or acdmpq.
2. (a): The code for K is r$_f$ for N is f, for I is z« for G is x, for H is g and for T is »«.
   So, the code for KNIGHT is rfzxgs or fgrsxz.
3. (A): The code for W is h$_f$ for O is m, for R is e, for D is o and for Y is L
   So, the code for WORDY)is hmeol or ehlmo.
4. (6): The code for N is f$_t$ for 0 is m$_9$ for T is s, for I is z, for C is a and for E is q.
   So. the code for NOTICE is fmszaq or afmqsz.
5. (d): The code for B is k, for L is c, for O is m, for A is p and for T is s.
   So, the code for BLOAT is kcmps or ckmps.

EXERCISE 41

Directions (***Questions 1 to 10) : According to a code language, words in capital letters in column I are written in small letters in column II. The letters in column II are jumbled up. Decode the language and choose the correct code for the word given in each question.***

Column I	Column II
(1) CURSE	(A)opkif

17. S (a) k (6) p (c) v ***(d)*** None of these
18. T (a) a *(b)* b (c) e (d) None of these

Directions (Questions ***19 to 25) : Below in column I are given some words and in column II are given their equivalents in some code language. Words in column II do not appear in the same order as in column I. Moreover, the order of letters is also jumbled. Decode the language and choose the correct alternative which is the equivalent of the given word.***

Column I	Column II
(1) TAPE	(A) moij
(2) COUP	(B) lhhpok
(3) TIE	(C) nls
(4) ROTATE	(D) nhpk
(5) SAY	(E) nkpl
(6) TREAT	(F) msr
(7) YEAR	(G) khlph
(8) SIP	(H) hrp
(9) TYRE	(I) pmlh

19. SOUP
(a) osny *(b)* sojm (c) osjm *(d)* somj (e) joms
20. REACT
(a) lhpjk *(b)* lihpr (c) pkjih *(d)* jklph (e) kplih
21. TRACE
(a) hiklp (6) hlkip (c) hklip *(d)* piklh (e) pklih
22. POSSESS
(a) msoopoo (6) mosspss (c) porrprr *id)* mpiioii (e) mpjjojj
23. CREATE
(a) ljhkhn (6) jknlhn (c) jlphip *(d)* ikplhp (e) ilpknp
24. EASY
(a) lnps (6)lpns (c) pisn (d) pnls (e) snpl
25. CURE
(a) ykp (6) pikj (c) ikpj (d) kipj (e) jikp

Directions (***Questions 26 to 35) : In column I, some words are given. In column II, their codes are given but they are not arranged in the same order in which they are in column I. Study the letters in both columns and find out the code to the letter given in each of the following questions.***

(A.J.Q. Exam, 1986)

Column I	Column II	Column I	Column II
(1) BID	(A) nnrw	(8) ROSE	(H) iotx
(2) BAT	(B) emps	(9) VEX	(I) aceenoww
(3) BAD	(C) lwz	(10) WAVE	(J) elu
(4) CHEAP	(D) aejmnq	(11) NAMELY	(K) befms
(5) HILL	(E) kms	(12) FAMILIAR	(L) moty
(6) PORK	(F) emrux	(13) HAZY	(M) elz
(7) QUOTE	(G) ehqr	(14) VAGUE	(N) dfmtu

v

(2) INCUR
(3) TALLY
(4) CADET
(5) DRIP
(6) TOIL
(7) VARY

(B) fbpoc
(C) ughvg
(D) rkufh
(E)rotc
(F)jugc
(G) vwoh

1. DAIRY
(a) cvohr (6) gkvbf (c) rctvo (d) whtou
2. TODAY
(a) ijuyh (6) kjuvh (O rjuvh *id)* ijuvk
3. PIECE
(a) fvuyr (6) fktck (c) fbocv *(d)* frgkp
4. CIVIL
(a) gfwcc (6) ghcww (c) ggwfc (d) gwffc
5. SUSTAIN
(a) hibucpi (*b*) hkcrjbk (c) hwojfvw (d) hgpukgc
6. TRIED
(a) ukfhr *(b)* ubovc (c) ukhbp (d) ukorc
7. RACE
(a) kovp (6) kbcf (c) khfo (d) krbh
8. ENVOY
(a) kbjwu (6) jvbkw (c) I\jbvw (d) vbpuk
9. RIVET
(a) wckou (6) ckwiu *id)* wckov (d) kcvow
10. SUN
(a) pih (6) bih (c) pib (d) ikh

Directions ***(Questions 11 to 18) : In column I below, some words are given. In column II, their codes are given hut they are not arranged in the same order in which they are in column I. Study the letters in both the columns and find out the code to the letter given in each of the following questions, from among the given alternatives.*** (A^V-O. Exam, 1988)

Column I
(1) SOUND
(2) ADDRESS
(3) CRUX
(4) NET
(5) CRONY
(6) CROWDY

Column II
(A) abi
(B) cjmv
(C) ikmop
(D) yktv
(E)jkgotv
(F) blooppv

11. A (a) b (6)1 (c) v (d) None of these
12. C (a) j (6) k (c)l *(d)* None of these
13. D (a) k (6) 1 (c) m *(d)* None of these
14. N (a) a (6) e (c) q *(d)* None of these
15. 0 (a)i (6) j (C)k *(d)* None of these
16. R (a) o <6)p (c) v *(d)* None of these

26. B	(a) I	(6) u	(c) e	(*d*) z
27. C	(a) e	(6) z	(c) u	(c0 p
28. D	(a)e	(6) z	(c) u	*(d)* k
29. F	(a) r	(6)f	(c) w	*id)* c
30. G	(a) a	(6) c	(c) b	(d) j
31. H	(a) t	(6) r	(c) 1	*id)* s
32. A	(a) r	(6) t	(C) 8	*(d)* e
33. K	(a) h	(6) j	(c) i	*(d)* k
34. M	(a) b	(6) a	(c) c	(d)d
35. Z	(a) h		(c) f	*(d)* i

Directions (***Questions 36 to 40) : According to a code language, words in column I are given in column IL Decode the language and choose the correct code for each of the words given in the following questions. The Utters in column II need not appear in the same order as they do in column I.***

Column I	Column II	(olumn I	Column II
(1) CHIEF	(A) knqwy	(9) BASED	(I) gstnd
(2) NIGHT	(B) akwjh	(10) PSYCO	(J) qutzb
(3) THIRD	(C) kvhwg	(11) TOWEL	(K) nzche /
(4) MONEY	(D) njumz	(12) FALSE	(L) ynest
.5) WOMAN	(E) zcjms	(13) DOWRY	(M) cvguz
(6) WORKS	(F) ctvzo	(14) STOCK	(N) toqhz
(7) BASIC	(G) dtwsq	(15) TRAIN	(0) swhvj
(8) HENRY	fH) jvunk		

36. AUGUST

(a) hhatdb	(fe) llstah	(c) altpss	*(d)* nstddz

37. BOARD

(a) wtvgz	*(b)* ctdzg	- (c) sdwqz	*Id)* gzdvs

38. JUNIOR

(a) jlwzvf	*(b)* clogwj	(c) flogvz	*(d)* ljfzco

39. DIGEST

(a) kwghqv	(6) angwht	*(c)* aknthj	*(d)* gonqwt

40. DEAF

(a) tgnz	*(b)* knty	(c) ygns	*(d)* wgsd

Directions (***Questions 41 to 45) : In each of the following questions, a word has been written in four different code languages. One of the code languages is common to all the five questions. The code equivalent of the. word in that code language is your answer in each question.***

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41. CLUSTER

(a) YHPQDXE	(6) BKTUSDQ	(c) BITSVEO	(W) XP'JNOQP

42. LIGHT

(a) HVWJD	(6) KHIGS	(c) CIMKN	*(d)* KJHGS

43. TRIVIAL

(a) SQHXHCK	(6) DEVCVZH	(c) VOHXHAI	*(d)* SQJUJBK

i t

44. NUMBER

ia) ZJAWQP (6) MTOADQ *ic)* GPTMXE (*d*) MVNAFQ

45. I^RAVE

(a) AQBUF *ib)* WRYJQ (c) DOAXE *id)* MEZCX

ANSWERS

Questions 1 to 10

In CURSE and VARY, the common code letter is o and the common letter is R.

V 8o, o stands for R.

In CADET and VARY, the common code letter is h and the common letter is A.

So, h stands for A s /

In TALLY and VARY, the common code letter h means A The other common code letter is v and the other common letter is Y. So, v stands for Y.

Thus, in VARY, the remaining code letter w stands for V.

In CADET aqd TOIL, the common code letter is u and the common letter is T.

So. u stands for T.

In INCUR and TOIL, the common code letter is c and the common letter is I.

So, c stands for I.

In TALLY and TOIL, the common code letter u stands for T. The other common code letter is g and the other common letter is L. So, g stands for L.

Thus, in TOIL, the remaining code letter j stands for O.

In CADET and DRIP, the common code letter is r and the common letter is D.

So, r stands for D.

In DRIP, o stands for R, c stands for I. So. the remaining code letter t stands for P.

In INCUR. CURSE and CADET, the common code letter is f and the common letter is C. So, f stands for C.

In INCUR and CURSE, the common code letters f and o mean C and R respectively.

So, the remaining code letter p stands for U.

Thus, in IN^UR. the remaining code letter b stands for N.

In CURSE and CADET, the common code letter f means C. So, the other common code letter k means E.

ThuV, in CURSE, the remaining code letter i means S.

The information can be summarised as below :

Code-	o	V	w	u	c	g	j	r	t	f	P	»	k	&
Letter	- A j	Y_	V	TT-vi		L	O	D	P	c	u	N	E	S

1. *ia)*: The code for D is r, for A is h_f for I is c_f for R is o and for Y is v.
   So. code for DAIRY is rhcov.
2. (c) r-The code for T is u, for O is j_f for D is r, for A is h and for Y is v.
   So. the code for TODAY is lyrhv.
3. (6): The code for P is t, for I is c, for E is k and for C is f.
   So. the code for PIECE is tckfk or fttck.
4. (a): The code for C is f_9 for I is c_f for V is w and for L is g.
   So, the code for CIVIL is fcwcg or gfwcc.
5. *ia):* The code for S is i_f for U is p_f for T is u, for A is h, for I is c and for N is b.
   So. the code for SUSTAIN is ipiuhcb or hibucpi.
6. *id):* The code for T is u* for R is o_f for I is c, for E is k and for D isr.
   So, the code for TRIED is uockr or ukorc.

> / *i*

7. (c) : The code for R is o, for A is h_f for C is f and for E is k.
So. the code for RACE is ohfk or khfo.

8. (6): The code for E is k, for N is b_f for V is w, for O is j and for Y is v.
So. the code for ENVOY is kbwjv or jvbkw.

9. (a): The code for R is o, for I is c, for V is w, for E is k and for T is u.
So. the code for RIVET is ocwku or wckou.

10. (c): The code for S is i, for U is p and for N is b.
So, the code for SUN is ipb or pib.

Questions 11 to 18

Clearly, the only three letter word is NET. So, its code is abi. The only four letter word is CRUX. So. its code is cjmv. The two five letter words are SOUND and CRONY and codes are ikmop. and yktv. Clearly, CRONY has two common letters C and R with CRUX and the letters j and v in the code for CRUX are common with the code yktv. So, the code for CRONY is ijktv and that for SOUND is ikmop. The only six letter word is CROWDY. So, its code is jkgotv. The only seven letter word is ADDRESS. So, its code is blooppv. So, rearranging the words and their codes, we have :

NET	abi
CRUX	cjmv
CRONY	ijktv
SOUND	ikmop
CROWDY	jkgotv
ADDRESS	blooppv

In NET and CRONY, the common code letter is i and the common letter is N.

So, i stands for N.

In NET and ADDRESS, the common code letter is b and the common letter is E.

So. b stands for E. Thus, in NET, the remaining code letter a stands for T.

In CRUX and ADDRESS, the common code letter is v and the commons-letter is R.

So. v stands for R.

In CRUX and CRONY, the common code letter v stands for IL So, the other common code letter j stands for C.

In CRUX and SOUND, the common code letter is ***m*** and the common letter is UT

So. m stands for U.

Thus, in CRUX, the remaining code letter c stands for X.

In CRONY and SOUND, the common code letter i stands for N. So, the other common code letter k stands for O.

Thus, in CRONY, the remaining code letter t stands for Y.

In SOUND and CROWDY, the common code letter k means O. So, the other common code letter o stands for D.

Thus, in SOUND, the remaining code letter p stands for S.

In CROWDY, the remaining code letter g stands for W.

In ADDRESS, the remaining code letter 1 stands for A.

Thus, the information can be summarised as follows :

Code	i	b	a	v	i	m	c	k	t	o	8	P	1
Letter	N	E	T	R	C	U	X	O	Y	D	W	**S**	A

11. (6): Clearly, the code letter for A is L

12* (a): Clearly, the code letter for C is j.

13. (d): The code letter for D is o and none among the choices.

14. *(d)* : The code letter for N is i and none among the choices.

15. (c): The code letter for O *is* k.
16. (c): The code letter for R is v.
17. (6): The code letter for S is p.
18. (a): The code letter for T is a.

Questions 19 to 25

The? only seven letter word is ROTATE. So, its code is lhhpok.

The only five letter word is TREAT. So, its code i* khlph.

The four letter words are TAPE. COUP, YEAR and TYRE and the codes are moij. nhpk, nkpl and pmlh. COUP has one letter O common with ROTATE. So, its code is mog which has only one code letter V common with that of ROTATE.

TAPE has one letter P common with COUP. So, its code is pmlh which has one code letter 'm* common with that of COUP. YEAR and TYRE have the codes nhpk and nkpl, the common code letters n, k and p standing for Y, E and R. Now in TREAT, the letter T appears twice and in its code the letter h appears twice. So, h is for T. Thus, the code for TYRE is nhpk and that for YEAR will be nkpl.

The three letter words are TIE, SAY, SIP and the three letter codes are nls, msr, hrp. The code V is for T. So, TIE is coded as hrp. SIP has I common with TIE. So, its code will be msr. Thus, the code for SAY is nls.

Rearranging the words and their codes, we have :

SAY	nls
SIP	msr
TIE	hrp
YEAR	nkpl
TYRE	nhpk
TAPE	pmlh
COUP	moij
TREAT	khlp
ROTATE —•	lhhpok

Iii SAY and SIP, the common code letter is s and the common letter is S.
So, 9 stands for S.
In SAY and TYRE, the common code letter is n and the common letter is Y.
So, n stands for Y. Thus, in SAY, the remaining code letter 1 stands for A
In SIP and TIE, the common code letter is r and the common letter is L
So, r stands for L Thus, in SIP, the remaining code letter m stands fo*t* P.
In TIE and YEAR, the common code letter is p and the common letter is E.
So, p stands for E. Thus, in TIE; the remaining code letter h stands for T.
In YEAR and TYRE, the coomion code letters n and p stand for Y and E.
So, the remaining common code letter k stands for R.
In COUP and ROTATE, the common code letter o stands for O.
Thus, in COUP, the remaining code letters i and j stand for C and U.
Thu^. the information can be summarised as follows :

Code	s	n	1	r	m	P	h	k	o	J	i
| Letter	s " 4	Y	A	I	P	E	T	R	O	U	C

19. (6): The code for S^is s, for 0 is o* for U is J or i and for P is m. But in the queation. i is nowhere mentioned. So, code for U iq j. Thus, the code for SOUP is aojm.
20. (e): The code for R is k, for E is p, for A is 1, for C is i and for T is h. So, the code for REACT is kplih.

21. (c): The code for T is h, for R is k, for A is I, for C is i and for E is p. So, the code for TRACE is hklip.

22. (6): The code for P is m_f for O is o_t for S is s and for E is p. So, the code for POSSESS is mosspss.

23. (<d): The code for C is u for R is k, for E is p_f for A is 1 and for T is h. So, the codo for * CREATE is ikplhp.

24. *(c)*: The oode for E is p, for A is I for S is s and for Y is il So, the code for EASY is plsn.

26. (a): The code for C is i, for U is j, for R is k and for E is p. So, the code for CURE is ijkp.

Questions 26 to 35

The only eight letter word is FAMILIAR. So, its code is aceenoww.

The only six letter word is NAMELY. So, its code is aejmnq.

The five letter words are CHEAP, QUOTE and VAGUE and the codes are emrux, befms, afmtu. A is common to FAMILIAR. CHEAP and VAGUE. So, the common code letter e stands for A and thus CHEAP and VAGUE have codes emrux and befms. So, the code for QUOTE is altatu. VAGUE has two common letters with QUOTE. So. its cod* befms. Thus, the code for'CHEAP is emrux.

The four letter words are HILL, PORK, ROSE, WAVE, HAZY and the codes are nnrw, emps, ehqr, iotx, and moty. Only HILL has a letter repeated twice. So, it* code is nnrw. Only WAVE has three letters common with VAGUE. So, its code is empt. The code for A is e. So, the code containing e and a code letter common with HILL is the code for HAZY. Thus, code for HAZY is ehqr. Now the code having common letter with that of WAVE is the code for ROSE. So, the code for ROSE is moty. Thus, the code for PORK is iotx.

The three letter words are BID, BAT, BAD and VEX and the codes are Iwz, kms, elu and elz. VEX has two letters common with WAVE. So, its code is kms. BAT has a letter T common with QUOTE. So, its code is elu. BAD has two letters common with BAT. So, its code is elz. So, the code for BID is lwz.

Rearranging the words and their codes, we have :

BID	lwz
BAD	elz
BAT	elu
VEX	km*
PORK	iotx
ROSE	moty
HAZY	ehqr
WAVE	
HILL	
CHEAP	omrux
VAGUE	befms
QUOTE	dfmtu
NAMELY	aejmnq
FAMILIAR	aceenoww

In BID, BAD and BAT, the common code letter is 1 and the common letter is B.

So, 1 stands for B. In BID and BAT, the other common code letter z stands for D.

So, the remaining code letter w in BID stands for I and e in BAD stands for A.

In WAVE and ROSE, the common code letter is m and the common letter is E.

So, m stands for E. In VEX and WAVE, the other common code letter s stands for V. Thus, in VEX, the remaining code letter k stands for X.

In WAVE, the remaining code letter p stands for W.

In PORK and QUOTE, the common code letter is t and the common letter is O. So, t stands for O.

In PORK and ROSE, the other common code letter o stands for R.

In PORK and CHEAP, the common code letter is x and the common letter is P. So, x stands for P.

Thus, in PORK, the remaining code letter i stands for K.

In ROSE, the remaining code letter y stands for 8.

In HAZY and NAMELY, the other common code letter q stands for Y.

In HAZY and HILL, the common code letter is r and the common letter is H. So, r stands for H.

Thus, in HAZY, the remaining code letter h stands for Z.

In HILL, the code repeated twice is n and letter is L. So, n stands for L.

In CHEAP, the remaining code letter u stands for C.

In VAGUE and QUOTE, the common code letter m means E.

So, the remaining code letter f stands for U.

Thus, in VAGUE, the remaining code letter b means G.

In QUOTE, the remaining code letter d stands for Q,

In NAMELY and FAMILIAR, the common code letter e and n stand for A and L respectively. So, the remaining common code letter a stands for M. Thus, in NAMELY, the remaining code letter j stands for N. In FAMILIAR, the remaining code letter c stands for F.

The information can be summarised as below :

Code	1	z	w	e	m	•	k	p	t	o	x	i
Letter	B	D	I	A	E	V	X	w	0	R	P	K
Code	y	9	r	h	n	u	f	b	d	a	i	c
Letter	s	Y	H	Z	L	C	u	G	9	M	N	F

26. (a): The code for B is L
27. (c): The code for C is u.
28. (6): The code for D is z.
29. *Id)*: The code for F is c.
80. (c): The code for G is b.
31. (6): The code for H is r.
32. (d): The code for A is e.
33. (c): The code for K is L
34. (6): The code for M is a.
36. (a): The code for Z is fau

Questions 36 to 40

In CHIEF and PSYCO, the common code letter is q and the common letter is C.

So, q stands for C.

In CHIEF and MONEY, the common code letter n stands for E.

In CHIEF and HENRY, the common code letter n stands for E.

So, the other common code letter k stands for H.

In CHIEF and BASIC, the common code letter q stands for C.

So, the other common code letter w stands for 1.

Thus, in CHIEF, the remaining code letter y stands for F.

In NIGHT and MONEY, the common code letter j stands for N.

In NIGHT and TOWEL, the common code letter h stands for T.

Thus, in NIGHT, the remaining code letter a stands for G.

In THIRD and BASED, the common code letter g stands for D.

Thus, in THIRD, the remaining code letter v stands for R.

In MONEY and WORKS, the common code letter *z* stands for O.

In MONEY and PSYCO, the common code letter *z* stands for O.

So, the other common code letter u stands for Y. In MONEY and WOMAN, the common code letter % stands for O and j stands for N. So. the remaining code letter m stands for M. In WORKS and TOWEL, the common code letter *z* stands for O.

So, the remaining common code letter c stands for W.

In WORKS and BASIC, the common code letter is t and the common letter is 8.

So, t stands for S. Thus, in WORKS, the remaining code letter o stands for K.

In BASIC and FALSE, the common code letter t stands for 8.

So. the other common code letter 8 stands for A.

In BASIC and BASED, the common code letters s and t stand fo»- A and 8 respectively.

So, the remaining code letter d stands for B. In PSYCO, the remaining code letter b stands for P.

The information can he summarised as follows : -

Code	q	n	k	w	y	j	h	a	K	V	z	u	m	c	t	0	s	d	b 1
Letter	c	E	H	I	F	N	T	G	D	R	0	Y	M	W	S	K	A	B	p 1

36. (6) : The code for A is s, for G is a, for S is t and for T is h.
So, the code contains the letters, sath which are contained in llstah only.

37. *id)* : The code for B is d, for O is z, for A is s, for R is v and for D is g.
feo. BOARD is coded as dzsvg or gzdvs.

38. (a): The code for U as in Q. 36 is I, for N is j, for I is w, for O is z and for R is v.
So. the code for JUNIOR contains \jwzv.

39. *(b):* The code for D is g. for I is w_f for G is a, for E is n, for S is t and for T is h.
So. the code for DIGEST is gwanth or angwht.

40. (c): The code for D is g_9 for E is n, for A is *s* and for F is y.
So, the code for DEAF is gnsy or ygns.

Questions 41 to 45

This is a special type of problem. In such type of questions, the code letters in the code equivalent of the word are in the same sequence as the letters in the word.

41. (a): Clearly, the letters E and R are common to CLUSTER, NUMBER and BRAVE.
According to the alternatives in Q. 41, the codes for E and R could be X and E or D and Q or E and O or Q and P.
According to the alternatives in Q. 44. the codes for E and R could be Q and P or D and Q or X and E or F and Q,
According to the alternatives in Q. 45. the codes for E and R could be-F and Q or Q and R or E and O or X and E.
The codes common to all the three possibilities above are X and E.
Since only (a) contains these codes, so (a) is the right code equivalent for CLUSTER.
Thus, code for C is Y, for L is H, for U is P, for S is Q. for T is D and so on.

42. (a): The code for L is H and only (a) contains H at the first place.

43. (6): The code for T is D and only (6) contains D at the first place.

44. (cj: The codes for E and R are X and E respectively and only (c) contains X and E at the last two places.

45. (d): The codes for R and E are E and X respectively and only (d) contains E and X at the corresponding place* i.e., the second and fifth places.