

SSC REASONING

Covers the entire syllabus of the following Entrance Tests:

- ❖ SSC CGL TIER I and TIER II
- ❖ SSC CPO for SI and ASI posts in: CRPF, ITBP, CBI, CISF, BSF, DP
- ❖ SSC CHSL
- ❖ SSC MTS
- ❖ SSC Constable (GD)
- ❖ Section Officer (Audit)
- ❖ Section Officer (Commercial Audit)
- ❖ FCI
- ❖ DMRC

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1

CHAPTER

CODING-DECODING

QUESTIONS

TYPE 1. Number Coding

- In a certain code language, 'AROUND' is coded as '52182412144' and 'FIX' is coded as '63624'. How will 'PLASTIC' be coded in that language? [SSC CGL 2021]
(a) 1612521920363 (b) 1612261920183
(c) 1612522021363 (d) 1812521920383
- In a certain code language, 'VIRTUE' is coded as '201' and 'TRAGEDY' is coded as '218'. How will 'PROFANE' be coded in that language? [SSC CGL 2021]
(a) 570 (b) 342 (c) 456 (d) 432
- In a certain code language, 'CROW' is coded as '64' and 'EAGLE' is coded as '125'. How will 'PARROT' be coded in that language? [SSC CGL 2021]
(a) 232 (b) 216 (c) 249 (d) 88
- In a certain code language, 'FRENCH' is coded as '114' and 'LOSS' is coded as '47'. How will 'COURSE' be coded in that language? [SSC CGL 2021]
(a) 103 (b) 120 (c) 87 (d) 81
- In a certain code language, 'ALPINE' is coded as '171' and 'SPRING' is coded as '83'. How will 'CAPITAL' be coded in that language? [SSC CGL 2021]
(a) 186 (b) 93 (c) 62 (d) 124
- In a certain code language, 'SAFETY' is coded as '95' and 'EXPAND' is coded as '87'. How will 'GATHER' be coded in that language? [SSC CGL 2021]
(a) 84 (b) 86 (c) 88 (d) 90
- In a certain code language, 'REASON' is coded as '5410219' and 'HEALTHY' is coded as '716231216'. How will 'DIVULGE' be coded in that language? [SSC CGL 2021]
(a) 10733494 (b) 24134383
(c) 13704349 (d) 21435438
- In a certain code language, 'HARVEST' is coded as '22-21-7-24-20-3-10'. How will 'FARMER' be coded as in that language? [SSC CGL 2020]
(a) 20-7-14-21-3-8 (b) 19-7-15-19-3-8
(c) 19-7-15-20-3-7 (d) 20-7-15-20-3-8
- In a certain code language, 'PEN' is coded as '32108'. How will 'TUB' be coded as in that language? [SSC CGL 2020]
(a) 40422 (b) 40424
(c) 42404 (d) 44024
- In a certain code language 'SERVANT' is coded as '192182211420'. How will 'MAGNIFY' be coded as in that language? [SSC CGL 2020]
(a) 1426693625 (b) 1316143522
(c) 1317143625 (d) 1417139625
- In a certain code language, LARVAE is coded as 15-1-9-5-1-2. How will INSECT be coded as in that language? [SSC CGL 2020]
(a) 3-13-8-2-24-8 (b) 9-13-8-22-24-7
(c) 18-13-8-2-24-7 (d) 3-13-8-2-24-7
- If POSTER is coded as 592314 and DARK is coded as 8647, then how will STROKE be coded as? [SSC CGL 2018]
(a) 234917 (b) 234971
(c) 493287 (d) 329417
- If SMOKE is coded as 81643 and PRANK is coded as 72954, how would you code ROSE? [SSC CGL 2018]
(a) 2682 (b) 3276
(c) 9238 (d) 2683
- In a certain code language, 'NUMBER' is written as '156897' and 'GUARD' is written as '45073'. How is 'BURDEN' written in that code language?
(a) 857314 (b) 854317 (c) 853697 (d) 857391
- If DANGER is coded as 11-8-21-14-12-25, then how will the word MACHINE be coded?
(a) 20-10-15-14-26-17-18 (b) 20-8-10-15-16-21-12
(c) 20-10-8-12-15-16-7 (d) 20-8-10-16-17-22-13
- If DEAF is written as 6154, then FROWN is written as:
(a) 142215176 (b) 142314166
(c) 142315186 (d) 142214176
- If LACK is written as 396, then DRAG is written as:
(a) 418 (b) 504 (c) 612 (d) 796
- If A = 1, CAT = 60, then MAN = ?
(a) 52 (b) 96 (c) 182 (d) 214
- If BEAT = 25-22-26-7, then how will you code 'BURST'?
(a) 25-6-9-8-7 (b) 25-9-6-8-7
(c) 25-9-8-7-6 (d) 25-22-9-8-7
- If REASON is coded as 5 and BELIEVED as 7, what is the code number for GOVERNMENT?
(a) 6 (b) 7 (c) 9 (d) 10
- If J = 10, JASMINE = 71, then ESTIMATE = ?
(a) 71 (b) 82 (c) 92 (d) 91
- If HUMBLE is written as 834235 and REASON is written as 951165, then STRIKE can be written as:
(a) 1029945 (b) 129925
(c) 129825 (d) 129935

23. If RAM is written as 14 and SHYAM is written as 30, then SONAKSHI can be written as:
(a) 32 (b) 33 (c) 50 (d) 51
24. If SHE is written as 96 and THEM is written as 184, then ME can be written as:
(a) 18 (b) 36 (c) 54 (d) 72
25. If LAMB is written as 7 and CAT is written as 8, then Hotel can be written as:
(a) 12 (b) 10 (c) 13 (d) 11
26. If RAHUL is written as 36 and AKSH is written then PRIYANKA can be written as:
(a) 169 (b) 196 (c) 225 (d) 256
27. If SHIMLA is written as 4 and DELHI is written as - 5 then INDORE can be written as:
(a) 0 (b) 1 (c) 2 (d) - 1
28. If TABLE is written as 101 and HIM is written as 65. Then HUMBLE can be written as:
(a) 167 (b) 177 (c) 187 (d) 197
29. If THEM = 4589, WHITE = 82475, MINE = 4912 and HIM = 289, then WHEAT = ?
(a) 75406 (b) 85407 (c) 28954 (d) 75906
30. In a certain code language, N is coded as '30' and 'COT' is coded as '78'. How will 'PET' be coded as in that language? [CHSL 2020]
(a) 70 (b) 84 (c) 100 (d) 41
31. In a certain code language, GOLF is written as 60 and START is written as 117. How will NEST be written in that language? [CHSL 2020]
(a) 58 (b) 21 (c) 87 (d) 78
32. If O = 20, LIT = 46, how will PIG be coded using the same code language? [CHSL 2020]
(a) 46 (b) 53 (c) 37 (d) 41
33. In a code certain code language, MUSIC is coded as 60 and TUNE is coded as 56. How will LYRIC be coded in that language? [CHSL 2020]
(a) 65 (b) 63 (c) 62 (d) 67
34. In a certain code language 'WAND' is coded as '240153' and 'CURD' is coded '420193'. How will 'EAST' be coded as in that language? [CHSL 2020]
(a) 421719 (b) 612120 (c) 421821 (d) 602019
35. In a certain code language, 21683 is coded as UFHC and 15654 is coded as OFED. How will 15236 be coded as in that language? [CHSL 2020]
(a) FAEB (b) OBCF (c) AEFOF (d) FOX
36. In a certain language, STAR is coded as 55 and CUT is coded as 42. How will 'PEN' be coded as in that language? [CHSL 2020]
(a) 51 (b) 68 (c) 55 (d) 33
37. In a code language, 'DENT' is written as '51' and 'LOAD' is written as '40'. How will 'COST' be written in that language? [SSC CPO 2020]
(a) 57 (b) 65 (c) 75 (d) 62
38. In a code language, 'BLOCK' is written as '31316412'. How will 'SUPREME' be written in that language? [SSC CPO 2020]
(a) 192116185605 (b) 202317206146
(c) 192217196156 (d) 202217196146
39. If in a coding system, FIXED is coded as 86 and COMPANY is coded as 101, then how will INTERIM be coded in the same coding system? [SSC CPO 2020]
(a) 102 (b) 100 (c) 99 (d) 101
40. If FAKE is coded as 52106 and MAD is coded as 1225, then how will DEER be coded as? [SSC CPO 2019]
(a) 36419 (b) 36420 (c) 47520 (d) 35418
41. If CAB = 13 and FEED = 41, then JADE = [SSC CPO 2019]
(a) 45 (b) 41 (c) 35 (d) 43
42. If each English alphabet is assigned even numerical value like A = 2, B = 4 and so on, what will be the code of EARTH? [SSC CPO Tier-1, 2019]
(a) 102384218 (b) 122384216
(c) 102364016 (d) 102364018
43. If Y = 50, SEA = 50, then 'YACHT' will be equal to? [SSC CPO Tier-1, 2019]
(a) 114 (b) 102 (c) 104 (d) 100
44. In a certain code language, 'ATUL' is coded as '1-20-21-12' and 'RAJU' is coded as '18-1-10-21'. How will 'GITA' be coded in that language? [SSC GD Constable 2021]
(a) 5-11-22-1 (b) 8-9-20-1
(c) 7-9-20-1 (d) 6-10-20-1
45. In a certain code language, 'KNOW' is coded as '1614154'. How will 'HIRE' be coded in that language? [SSC GD Constable 2021]
(a) 18191822 (b) 89185
(c) 1991822 (d) 199922
46. In a certain code language, MACHINE is coded as 5861944. How will STORK be coded in that language? [SSC CHSL 2021]
(a) 96479 (b) 12692 (c) 87397 (d) 86496
47. In a code language, if SEND is written as 168, then how will PURSE be written in the same language? [SSC CHSL 2021]
(a) 185 (b) 225 (c) 395 (d) 415
48. In a certain code language, if MATERIAL is written as QDXHVLDP, then how will ONTOLOGY be written in the same code language? [SSC MTS 2021]
(a) RMSRORJB (b) SRXSPSKC
(c) RRSSOSGC (d) RRRXPRKC
49. If in a coding system, OPULENT is coded as 84 and LEARNER is coded as 114, then how will PHYSICS be coded in the same coding system? [SSC MTS 2021]
(a) 97 (b) 88 (c) 99 (d) 90
50. If CROWN is coded as 68 and DEPEND is coded as 42, then how would IMAGERY be coded? [SSC MTS 2021]
(a) 68 (b) 67 (c) 71 (d) 73

TYPE 2. Letter Coding

51. In a certain code language, 'DOLPHIN' is written as 'EPMPGHHM'. How will 'CORDIAL' be written in that language? [SSC CGL 2021]
 (a) EPTDHzK (b) DPSDHAl (c) DPSDHZK (d) DPSEGZK
52. In a certain code language, 'COUNTRY' is written as 'BOWKXLF'. How will 'DESPAIR' be written in that language? [SSC CGL 2021]
 (a) ULDSHVG (b) UFDmVBG (c) GBVMDFU (d) GBPSXIO
53. In a certain code language, 'PRINT' is written as 'YMNIU'. How will 'MAGIC' be written in that language? [SSC CGL 2021]
 (a) HRLZR (b) HDLVR (c) HLDRV (d) HRLRZ
54. In a certain code language, 'MORBID' is written as 'THGMID'. How will 'OBTAIN' be written in that language? [SSC CGL 2021]
 (a) JGOFDS (b) JOFGSD (c) GJFOSD (d) GFOJDS
55. In a certain code language, 'AND' is written as 'C-LP-F' and 'NOR' is coded as 'P-MQ-T'. How will 'BUT' be written in that language? [SSC CGL 2021]
 (a) C-SU-V (b) D-SW-V (c) C-TV-U (d) D-SW-U
56. In a certain code language, 'DEPEND' is written as 'EPHTJJ'. How will 'TRAVEL' be written as in that language? [SSC CGL 2020]
 (a) MGWEWY (b) NGYFWZ (c) MGYEWZ (d) MGZEXZ
57. In a certain code language, STRAIGHT is written as TSARGITH. How will THURSDAY be written as in that language? [SSC CGL 2020]
 (a) UHTDRSYA (b) AYSDURTH (c) HTRUDSYA (d) HTRUDSAY
58. In a certain code language, 'PERMIT' is written as 'VVLNOG'. How will 'INERTIA' be written in that language? [SSC CGL 2020]
 (a) OHYXZCU (b) XOYHCZU (c) OMYIZRU (d) XYOHBCU
59. In a certain code language, 'MARGIN' is written as 'SBNOJH'. How will 'PRAYER' be written in that language? [SSC CGL 2020]
 (a) BSQZFS (b) QSBSFZ (c) BSQQFZ (d) BSQSfZ
60. In a certain code language, WARDROBE is written as YXVYXHJV, How will ACCURATE be written as in that language? [SSC CGL 2020]
 (a) BZHPXTBV (b) CZHPYTBV (c) CZGPXTBV (d) DZGPXTBV
61. In a certain code language, 'HAMMER' is written as 'ICPQJX'. How will 'WRENCH' be written as in that language? [SSC CGL 2020]
 (a) XTIRIN (b) XTIRHN (c) XTHRIN (d) XTHRHN
62. In a code language, TEACHING is written as SDBDGHOH. How will BOOKWORM be written as in that language? [SSC CGL 2018]
 (a) ANPLXNNS (b) ANPLXPSL (c) CPNJXPSL (d) ANPLVNSN
63. In a code language, STROKE is written as FLPSUT. How would BRIGHT be written in the same code language? [SSC CGL 2018]
 (a) UIHJSC (b) CSJHIU (c) SGFHQA (d) UJHHCS
64. If LSJXVC is the code for MUMBAI, the code for DELHI is [CSAT 2018]
 (a) CCIDD (b) CDKGH (c) CCJFG (d) CCIFE
65. In a certain code language, EMPHASIS is written as NDIOBRJR. How do you write CREATURE in that code? [APPSC]
 (a) SBDUTSD (b) QBBDTUSD (c) DSDBSTSP (d) SBDBUTDS
66. If 'MOHAN' is coded as 'KMFYL', then 'COUNT' will be coded as:
 (a) ANSKR (b) AMSLR (c) ANSLR (d) AMSKR
67. If in a certain code, DIAGRAM is written as AFXDOXJ, then how can PICTURE be written in the code?
 (a) MFAQSOB (b) MFAQRNB (c) MFZQSNB (d) MFZQROB
68. In a certain code language, 'INDIA' is written as 'LQGLD', then 'JAPAN' will be written as:
 (a) MDTDR (b) MDSDQ (c) MDSDR (d) MDTDQ
69. In a certain code language, ABSOLUTE is written as ESBL0TUA. How will CALENDAR be written in that code language?
 (a) RALNEADC (b) RANLAEDC (c) RLAENADC (d) RLANEADC
70. If GOPAL is coded as MIVUR, then how will RADHA be coded as:
 (a) XTJBG (b) XUJCG (c) XVJBG (d) XUJBG
71. If HOUSE is written as FQSUC, then how can CHAIR be written in that code?
 (a) SHBGD (b) AJYKP (c) DIBJS (d) SBJID
72. In a certain code language, APPROACH is coded as CHOAPRAP. How will RESTRICT be coded?
 (a) CTRISTRE (b) TCIRSTRE (c) CTRISTER (d) ERTSIRTc
73. If FRIEND is coded as HUMJTK, then how can CANDLE be written in that code?
 (a) DCQHOK (b) DEQJQM (c) EDRIRL (d) ESJFME
74. In a certain code, GIVE is written a VIEG and OVER is written as EVRO. How will DISK be written in that code?
 (a) KDSI (b) SIKD (c) SIDK (d) KISD

75. In a certain code 'MOUSE' is written as 'PRUQC'. How is 'SHIFT' written in that code?
 (a) VIKRD (b) RKTVD
 (c) VKIDR (d) VJIDR
76. In a certain code DEPUTATION is written as ONTADEPUTI. How is DERIVATION written in that code?
 (a) ONVAEDIRTI (b) ONVADEIRIT
 (c) ONVADERITI (d) ONDEVARITI
77. If in a code, GONE is written as ILPB, then how may CRIB be written in that code?
 (a) EUKY (b) EKUY (c) EYUK (d) EOKY
78. If GOODNESS is coded as HNPCODTR, then how GREATNESS can be written in that code?
 (a) HQFZUFRTM (b) HQFZSMFRT
 (c) HQFZUMFRT (d) HQFZUODTR
79. In a certain code language, 'GARNISH' is written as 'RGAINHS'. How will 'GENIOUS' be written in that code?
 (a) NEGIOUS (b) ENGOIUS
 (c) GENOISU (d) NGEOSU
80. If MOBILE is written as ZAMSUM, then how TUMOR can be written in that code?
 (a) HGYAD (b) GGXYA
 (c) IHZBE (d) BRAIN
81. If in a certain code HYDROGEN is written as JCJZYSSD, then how can ANTIMONY be written in that code?
 (a) CPVKOQPR (b) CRZQWABO
 (c) ERXMQSRC (d) GTZOSUTE
82. In a certain code language, 'BROWSE' is written as 'GUYQTD'. How will 'AMALGAM' be written as in that language? [CHSL 2020]
 (a) PMDGCPD (b) CONCICO
 (c) DPMDGCP (d) OCINCOC
83. In a certain language code, 'SMART' is written as AMRST. How will 'DESIGN' be written as in that language? [CHSL 2020]
 (a) DEGINs (b) SGITMD
 (c) EIADGS (d) DAISGN
84. In a certain code language, if 'BURMUD' is written as 'RKHCKT', then how will 'ANGLE' be written as in that language? [CHSL 2020]
 (a) QDWBU (b) HOPLY
 (c) PCVAT (d) REXCV
85. In a certain code language 'APRICOT' is written as 'GLXRIKZ' then how will 'ORANGE' be written in the same code language? [CHSL 2020]
 (a) LHZMSV (b) LIZMTV
 (c) VTNZHM (d) VTMZIL
86. In a certain code language, PAGER is written as MIDOO. How will ANGEL be written as in that language? [CHSL 2020]
 (a) IKDOI (b) AVIDI (c) AOIDIK (d) ILVDN
87. In a certain language, JONAIL is written as IRMDHO. How will PLMUTG be written as in code language? [CHSL 2020]
 (a) OPLXSJ (b) OOLXRK
 (c) OOLXSJ (d) OOLYTJ
88. In a certain code language, 'salute' is written as 'iuamet'. How will 'mango' be written as in that language? [CHSL 2020]
 (a) phobn (b) uhpen (c) uhobn (d) uhoen
89. In a certain language, 'MARINE' is written as 'IRMVEQ'. How will 'BEAUTY' be written as in that language?
 (a) CXYEIF (b) CIGZYD [CHSL 2020]
 (c) CDOPLY (d) CJHZE
90. In a certain code, CATHODE is written as X5GS2W4. How will RELATION be written in that code? [SSC CPO 2018]
 (a) J4O1G32N (b) I3O1G32M
 (c) I4O5G32M (d) J3O5G32M
91. In a code language, 'TORCH' is written as 'UNPSDI' and 'BEST' is written as 'CDFTU'. How will 'MARKS' be written in that language? [SSC CPO 2020]
 (a) NZBSLT (b) OZBSMT
 (c) NABLU (d) NZCSLT
92. In a code language, 'PLACARD' is written as 'TPEYEVH'. How will 'MONSTER' be written in that language?
 (a) QSROXIV (b) RTSOXIV [SSC CPO 2020]
 (c) QSRRXIV (d) PSSOXJV
93. In a code language, 'OBESITY' is written as 'EBOHYTI'. How will 'FIXTURE' be written in that language?
 (a) XIFGEUS (b) XIFMERU [SSC CPO 2020]
 (c) XIFGERU (d) IFYGERU
94. In a code language, 'PLUM' is written as 'KQOMFVNN'. How will 'BIG' be written in that language? [SSC CPO 2020]
 (a) YCRKTM (b) YCRJTH
 (c) CYRJGT (d) XCSJTH
95. In a certain coding system, if CHICANERY is written as DNODTHVKS, how will CRANE be written in the same coding system? [SSC CPO 2020]
 (a) DKTHV (b) HKSHO
 (c) CJSJU (d) DOTKV
96. In a certain system, if OXBRIDGE is written as BDEGIORX, how will MOUTHFUL be written in the same coding system? [SSC CPO 2020]
 (a) HFULMOUT (b) FGLNOTUU
 (c) FHLMOTUU (d) FLHMOTUV
97. In a code language, BACHELOR is written as SNMDIBBA. How will COHESION be written as in that language? [SSC CPO 2019]
 (a) ONIFTIBP (b) ONJRFGBB
 (c) NPHTDIND (d) BPJTFINO
98. In a code language, MACHINE is written as CAMHENI. How will MONSTER be written as in that language?
 (a) OMNSETR (b) NOMSRET [SSC CPO 2019]
 (c) SNOMRET (d) NOMETSR
99. In a code language, HONEY is written as G4M2X. How is STATUE written in that language? [SSC CPO Tier-1, 2019]
 (a) RS1S5D (b) TS1S5D
 (c) RS1T5D (d) RS1S52
100. In a code language, SILVER is written as JDQMXQ and WISDOM is written as IDRJXR. How will KENSTAR be written as in that language? [SSC CHSL 2021]
 (a) FZPWINY (b) FZPIWNY
 (c) FZWIPYN (d) FPZWINY

101. In a certain code language, PROFANE is written as KOLCZKV. How will DISOBEY be written in that language?

[SSC CHSL 2021]

- (a) APRYLVV (b) WFHLYBB
(c) WHGYLBB (d) ARPLYVV

TYPE 3. Symbol Coding

102. In a certain code language, ROM is written as $\alpha \times @$ and HEIGHT is written as $\epsilon \div \beta \odot \epsilon^*$. How will TIGER be written in that language?

[SSC GD Constable 2021]

- (a) $* \beta \odot \div @$ (b) $\odot \div @ * \beta$
(c) $\times \div \beta \odot *$ (d) $* \beta \odot \div \alpha$

103. In a certain code language, 'PEPPER' is written as '@#@@@#^' and 'AIM' is written as '^?*. How is 'PAMPER' written in that code language?

- (a) @ ↑ * @ # ^ (b) @ ↑ * # @ ^
(c) @ ^ * @ # ↑ (d) @ ^ * # @ ↑

104. If WING is written as *£?= and THEN as @\$©?, then how will NITE be written?

- (a) ?\$©@ (b) ?£@© (c) ?\$@© (d) ?£©@

105. In a certain code, 'R' is '%', 'E' is '#', 'D' is '@' and 'A' is 'Δ'. How is 'DARE' written in that code?

- (a) @#%Δ (b) Δ%#@# (c) Δ@%# (d) @Δ%#

106. If 1986 is coded as $\wedge \theta \Delta >$ and 2345 as $+ \times - \uparrow$, then $\Delta > - \times + \uparrow$ will be the code for

- (a) 864325 (b) 864952 (c) 865324 (d) 865423

107. If $\alpha \delta \gamma \chi \epsilon$ is decoded as ARGUE and $\sigma \phi \lambda \pi \epsilon$ is SOLVE, what is $\pi \gamma \epsilon \sigma \delta \lambda$?

- (a) VGOSRL (b) VUESOL
(c) VUASEL (d) VGESRL

108. In a certain code, P is #, A is %, C is ϕ and E is @. How is 'PACE' written in that code?

- (a) # ϕ #% (b) ϕ %@% (c) % ϕ @ (d) %@# ϕ

109. If 'PENCIL' is coded as ? @, =; 7 and 'PAPER' is coded as ? 9 ? @ 5 how will you code 'CLIP'?

- (a) @7; ? (b) @?; ? (c) =7; ? (d) =7; ?

110. Given below are numbers in the first line and symbols in the second line. Numbers and symbols are code for each other. Choose the correct code for given symbols.

1	2	3	4	5	6	7	8	9
+	-	x	÷	≠	↑	→	□	β

Which number can be decoded from the following:

$\neq \square \uparrow \times \rightarrow$

- (a) 57638 (b) 58637 (c) 57648 (d) 58647

111. Following words are written in a code language. Study them carefully and find out the word to the given code.

CAR - $\phi \alpha \delta$

SIT - $\eta \psi \kappa$

WELL - $\sigma i \gamma \gamma$

MAP - $\mu \alpha \beta$

Given code - $\phi \alpha \gamma \mu$

- (a) CARP (b) CARE (c) CALM (d) CAMP

TYPE 4. Substitution Coding

112. If 'Red' is called 'White', 'White' is called 'Blue', 'Blue' is called 'Green', 'Green' is called 'Orange' and 'Orange' is called 'Pink', then what is the color of 'grass'?

- (a) White (b) Green (c) Orange (d) Pink

113. If Pen is called Paper, Paper is called Laptop, Laptop is called Eraser, Eraser is called Bottle then where do we write?

- (a) Laptop (b) Paper (c) Pen (d) None of these

114. If cat is called as dog, dog is called as goat, goat is called as horse, horse is called as lion, lion is called as Hen, then who among these is not a pet animal?

- (a) Lion (b) Horse (c) Hen (d) None of these

115. 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?

[RRB JE CBT 1, 2019]

- (a) Honey (b) Ink (c) Soap (d) Orange

116. In 'Red' means 'White', 'white' means 'Green', 'Green' means 'Black' and 'Black' means 'Pink', then tell what is colour of milk?

- (a) Red (b) Green (c) Black (d) Pink

TYPE 5. Sentence Coding

117. In a certain code, 'BRING WATER' is written as 'JA PA' and 'WATER IS COLD' is written as 'TE JA BO'. How is 'BRING' written in that code?

- (a) TE (b) JA (c) PA (d) BO

118. In a certain code language, 'Sue Re Nik' means 'she is brave', 'Pi Sor Re Nik' means 'she is always smiling' and 'Sor Re Zhi' means 'is always cheerful'. What is the code used for the word 'smiling'?

- (a) Pi (b) Sor (c) Re (d) Nik

119. In a certain language,

A. PIC VIC NIC means 'winter is cold'

B. TO NIC RE means 'summer is hot'

C. RE TOO PA means 'nights are hot'

Which of the following is the code for 'summer'?

- (a) TO (b) NIC (c) PIC (d) VIC

120. In a certain code, '253' means 'books are old'; '546' means 'man is old' and '378' means 'buy good books.' What stands for 'are' in that code?

- (a) 2 (b) 3 (c) 4 (d) 5

121. In a certain code language, '481' means 'sky is blue', '246' means 'sea is deep' and '698' means 'sea looks blue'. What number is the code for 'blue'.

- (a) 8 (b) 6 (c) 1 (d) 9

122. In a code language, 123 means 'hot filtered coffee', 356 means 'very hot day', 589 means 'day and night'. Which numerical stands for 'very'?

- (a) 5 (b) 6 (c) 8 (d) 9

123. If 'ski rps tri' stands for 'nice Sunday morning', 'teh sti rps' stands for 'every Tuesday morning' and 'ski ptr qlm' stands for 'nice market place', which word stands for 'Sunday'?

- (a) ski (b) rps (c) tri (d) qlm

124. In a certain code 'easy path to win' is coded as 'ad mi ja no', 'the path to heaven' is coded as 'ku ja ig ad', 'win of the tomorrow' is coded as 'be ku zo mi' and 'to tell of night' is coded as 'be li ya ja'. What is the code used for the word 'tell'?
- (a) be (b) li
(c) ya (d) Cannot be determined
125. In a certain language, 'colors of the sky' is written as 'ki la fa so', 'rainbow colors' is written as 'ro ki' 'sky high rocket' is written as 'la pe jo' 'the rocket world' is written as 'pe so ne'. Which of the following is the code for 'colours sky high'?
- (a) Ro jo la (b) ki jo la
(c) la ki so (d) fa ki jo
126. In a certain language, 'aa be rs' means 'go went gone', 'ub rs wa' means 'you go home', 'wa de' means 'you want' and 'lo aa' means 'went do'. What is the meaning of the code 'wa'?
- (a) you (b) do (c) home (d) go
127. In a certain coding system, 'how are you' is coded as '639', 'are you fine today' is coded as '6453', and 'stay fine' is coded as '58'. What is the code for 'today' in this system?
- (a) 5 (b) 8 (c) 4 (d) 6 [SSC CPO 2020]
128. In a certain system 'Read this book' is coded as '689'. 'This book is useful' is coded as '9675', and 'Useful book is good' is coded as '5479'. What is the code for 'This book is good' in this system?
- (a) 8495 (b) 6457 (c) 4965 (d) 7859 [SSC CPO 2020]
129. A person wired his brother as R T D F M O C E L N N P S U G I D F Q S R T N P N P M O and he meant "Send mother soon". A day later he received the reply, LNNPSUGIDFQSHJRTNPKMKM. What did he mean?
- (a) Mother is arriving (b) Mother cannot come
(c) Mother is ill (d) Mother not here [APPSC]

TYPE 6. Conditional Coding

DIRECTIONS (130–131): In the question given below, there is a group of letters followed by four combinations of digits/symbols lettered (a), (b), (c), and (d). You have to find out which of the combinations correctly represents the group of letters and numbers based on the coding system and mark the letter of that combination as your answer.

Number code	6	2	5	0	9	4	7	1	3	8
Codes	A	€	Z	μ	K	@	Ř	&	\$	Ů

Conditions:

- If the first digit is odd and the last digit is even then both digits are to be coded as the code of the second digit.
- If the first digit is even and the last digit is odd then both are to be coded as the code for the first digit.
- If both the first and the last digits are odd numbers then both are to be coded as '#'.

130. What is the code of '2394587'?

(a) €\$K#ZŮ@ (b) €\$K@ZŮ€
(c) €\$K@Z€Ů (d) €\$K@Ů€Z

131. What is the code of '3721639'?

- (a) #Ř€&A\$% (b) #Ř€&A#
(c) @Ř€&A\$# (d) #Ř€&A\$#

DIRECTIONS (132–133): In the question given below, there is a group of letters followed by four combinations of digits/symbols lettered (a), (b), (c), and (d). You have to find out which of the combinations correctly represents the group of letters based on the coding system and mark the letter of that combination as your answer.

Letters	P	E	C	K	G	T	I	N	S	M	O	A	L
Codes	@	7	#	Z	R	α	4	Ř	2	3	&	5	X

Conditions:

- If both the first and the last letters are consonants, then all the vowels are to be coded as the code of D.
- If both the first and the last letters are vowels, then both are to be coded by '♥'.
- If the first letter is a consonant and the last letter is a vowel, then their codes are to be interchanged.
- If the first letter is a vowel and the last letter is a consonant, then their codes are to be replaced by the code of 'G'.

132. What is the code of 'PEOPLE'?

- (a) &7&7X@ (b) @7&7X@
(c) 77&@X@ (d) 77&7@X

133. What is the code of 'ITALICA'?

- (a) α♥5X4#1 (b) ♥α5X4#♥
(c) ♥5X3#♥2 (d) ♥α4X5#♥

SOLUTIONS

1. (a) All the consonants are replaced by the number representing their position in the English alphabetical series. While each vowel is replaced by the number which is two times the place value of its opposite letter.

We have

A	R	O	U	N	D
↓	↓	↓	↓	↓	↓
52	18	24	12	14	4

Therefore,

P	L	A	S	T	I	C
↓	↓	↓	↓	↓	↓	↓
16	12	52	19	20	36	3

2. (b) The words are coded according to the following pattern:
Sum of the place values of the opposite letters of the word × Total number of vowels in the word = code
V I R T U E →
5(E) + 18(R) + 9(I) + 7(G) + 6(F) + 22(V) = 67 × 3 = 201
Similarly, P R O F A N E →
11(K) + 9(I) + 12(L) + 21(U) + 26(Z) + 13(M) + 22(V) = 114 × 3 = 342
3. (b) The code represents the cube of the total number of letters in the word.
For example,
CROW → 64 = 4³ (There are four letters in the word CROW)
Similarly, PARROT → 6³ = 216.
4. (c) For each word total number of letters in the word is added to the sum of the positions of the opposite of each letter of the word, to obtain the code:

For example:

$$\begin{aligned} \text{FRENCH} &\rightarrow 21(\text{U}) + 9(\text{I}) + 22(\text{V}) + 13(\text{M}) + 24(\text{X}) + 19(\text{S}) \\ &= 108 \rightarrow 108 + 6 = 114. \end{aligned}$$

Similarly,

$$\begin{aligned}\text{COURSE} &\rightarrow 24(\text{X}) + 12(\text{L}) + 6(\text{F}) + 9(\text{I}) + 8(\text{H}) + 22(\text{V}) \\ &= 81 \rightarrow 81 + 6 \rightarrow 87.\end{aligned}$$

5. (a) The code represents the number obtained by multiplying the number of vowels in the word with the sum of the numbers representing the position of the letters in the English alphabetical series.

For example:

$$\text{ALPINE} \rightarrow [1 + 12 + 16 + 9 + 14 + 5] \times 3 = 171.$$

Similarly,

CAPITAL $\rightarrow [3 + 1 + 16 + 9 + 20 + 1 + 12] \times 3 = 186$.

6. (b) If $\begin{array}{cccccc} S & & A & & F & & E & & T & & Y \\ \downarrow & & \updownarrow \text{Opp.} & & \downarrow & & \updownarrow \text{Opp.} & & \downarrow & & \updownarrow \text{Opp.} \\ 19 & + & 26 & + & 6 & + & 20 & + & 20 & + & 2 = 95. \end{array}$

And,
$$\begin{array}{ccccccc} \text{E} & \text{X} & \text{P} & \text{A} & \text{N} & \text{D} \\ \downarrow & \updownarrow_{\text{Opp.}} & \downarrow & \updownarrow_{\text{Opp.}} & \downarrow & \updownarrow_{\text{Opp.}} \\ 5 & + & 3 & + & 16 & + & 26 & + & 14 & + & 23 = 87. \end{array}$$

Similarly,

G	A	T	H	E	R
↓	↕ Opp.	↓	↕ Opp.	↓	↕ Opp.
7	+ 26	+ 20	+ 19	+ 5	+ 9
= 86.					

7. (d) All the vowels are coded as per following pattern:

$A \rightarrow 1, E \rightarrow 2, I \rightarrow 3, O \rightarrow 4, U \rightarrow 5$

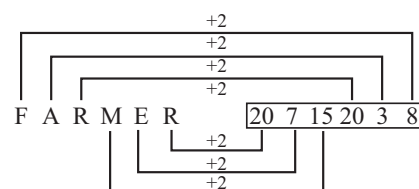
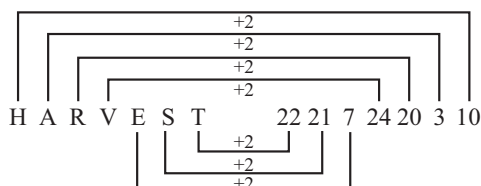
- ❖ Consonants which have the positional value less than 10, are replaced by the number which is two times the positional value of that consonant.
- ❖ All the other consonants are replaced by a number which is equal to the sum of the digits of the positional value of that consonant.
- ❖ After replacing the letters with numbers, the whole arrangement is reversed.

$$\begin{array}{ccccccccc} \text{R} & \text{E} & & \text{A} & & \text{S} & & \text{O} & & \text{N} \\ (18) & & & & & (19) & & & & (14) \\ \downarrow (1+8) & \downarrow & & \downarrow & & \downarrow (1+9) & & \downarrow & & \downarrow (1+4) \\ 9 & 2 & & 1 & & 10 & & 4 & & 5 \end{array} \xrightarrow{\text{Reverse}} 5410129$$
$$\begin{array}{ccccccccccc} \text{and} & \text{H} & \text{E} & & \text{A} & & \text{L} & \text{T} & \text{H} & \text{Y} & \\ & (8) & & & & & (12) & (20) & (8) & (25) & \\ & \downarrow \times 2 & \downarrow & & \downarrow & & \downarrow (1+2) & \downarrow (2+0) & \downarrow \times 2 & \downarrow (2+5) & \\ & 16 & 2 & & 1 & & 3 & 2 & 16 & 7 & \\ & & & & & & & & & \xrightarrow{\text{Reverse}} & 716231216 \end{array}$$

Similarly,

$$\begin{array}{ccccccc}
 \text{D} & \text{I} & \text{V} & \text{U} & \text{L} & \text{G} & \text{E} \\
 (4) & & (22) & & (12) & (7) & \\
 \downarrow \times 2 & \downarrow & \downarrow (2+2) & \downarrow & \downarrow (1+2) & \downarrow \times 2 & \\
 8 & 3 & 4 & 5 & 3 & 14 & 2
 \end{array}
 \xrightarrow{\text{Reverse}} \boxed{21435438}$$

8. (d) 2 is added to the place value (position of the letters in the English alphabetical series) of each letter, and the resultant numbers are written in reverse order.



9. (b) Each alphabet is replaced by the number, which is twice of that alphabet's place value.

P E N Similarly, T U B

$\downarrow \times 2$ $\downarrow \times 2$ $\downarrow \times 2$ $\downarrow \times 2$ $\downarrow \times 2$ $\downarrow \times 2$

32 10 28 40 42 4

10. (c) Each consonant is replaced by its position in the English alphabetical series. Each vowel is replaced by numbers in the order:

$$A \rightarrow 1, \quad E \rightarrow 2, \quad I \rightarrow 3, \quad O \rightarrow 4, \quad U \rightarrow 5$$

We have,

S	E	R	V	A	N	T
↓	↓	↓	↓	↓	↓	↓
19	2	18	22	1	14	20

Therefore,

M	A	G	N	I	F	Y
↓	↓	↓	↓	↓	↓	↓
13	1	7	14	3	6	25

11. (d) All the consonants are coded by finding the reverse of their corresponding positions.

The vowels are coded as

A E I O U
↓ ↓ ↓ ↓ ↓
1 2 3 4 5

Thus,

L	A	R	V	A	E
↓	↓	↓	↓	↓	↓
12	1	18	22	1	2
↕		↕	↕		
15		9	5		

Similarly,

I	N	S	E	C	T
↓	↓	↓	↓	↓	↓
3	14	19	2	3	20
	↑	↑		↑	↑
	13	8		24	7

- 12. (b)**

P	O	S	T	E	R	D	A	R	K
5	9	2	3	1	4	8	6	4	7

So, the codes for STROKE \rightarrow 234971.

13. (d)

S	M	O	K	E	P	R	A	N	K
8	1	6	4	3	7	2	9	5	4

Code for Rose $\rightarrow 2683$.

14. (d)
- | | | | | | | | | | | | |
|---|---|---|---|---|---|--|---|---|---|---|---|
| N | U | M | B | E | R | | G | U | A | R | D |
| ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | | ↓ | ↓ | ↓ | ↓ | ↓ |
| 1 | 5 | 6 | 8 | 9 | 7 | | 4 | 5 | 0 | 7 | 3 |

From the above two codes, we get:

B	U	R	D	E	N
↓	↓	↓	↓	↓	↓
8	5	7	3	9	1

15. (b) We have

D	A	N	G	E	R
↓	↓	↓	↓	↓	↓
4	1	14	7	5	18
↓+7	↓+7	↓+7	↓+7	↓+7	↓+7
11	8	21	14	12	25

Similarly,

M	A	C	H	I	N	E
↓	↓	↓	↓	↓	↓	↓
13	1	3	8	9	14	5
↓+7	↓+7	↓+7	↓+7	↓+7	↓+7	↓+7
20	8	10	15	16	21	12

16. (c) We have,

D	E	A	F
↓	↓	↓	↓
4	5	1	6

→ 6154

Similarly,

F	R	O	W	N
↓	↓	↓	↓	↓
6	18	15	23	14

→ 142315186

17. (b)

L	A	C	K
↓	↓	↓	↓
12	1	3	11

→ $12 \times 1 \times 3 \times 11 = 396$

Similarly,

D	R	A	G
↓	↓	↓	↓
4	18	1	7

→ $4 \times 18 \times 1 \times 7 = 504$.

18. (c) If A → 1

C	A	T
↓	↓	↓
3	1	20

→ $3 \times 1 \times 20 = 60$

Similarly,

M	A	N
↓	↓	↓
13	1	14

→ $13 \times 1 \times 14 = 182$.

19. (a) We form the opposite alphabet series as shown below:

A	B	C	D	E
↓	↓	↓	↓	↓
Z	Y	X	W	V
↓	↓	↓	↓	↓
26	25	24	23	22

... and so on.

Clearly, the code for any letter (alphabet) with position number n is given by $(26 - n + 1)$.

Now, $B = 26 - 2 + 1 = 25$

$E = 26 - 5 + 1 = 22$

$A = 26 - 1 + 1 = 26$

$T = 26 - 20 + 1 = 7$

∴ BEAT = $25 - 22 - 26 - 7$.

Similarly, $B = 26 - 2 + 1 = 25$

$U = 26 - 21 + 1 = 6$

$R = 26 - 18 + 1 = 9$

$S = 26 - 19 + 1 = 8$

$T = 26 - 20 + 1 = 7$

∴ BURST = $25 - 6 - 9 - 8 - 7$.

20. (c) Code for any word = Number of letters - 1.

∴ REASON has 6 letters. Its code is $6 - 1 = 5$;

BELIEVED has 8 letters. Its code is $8 - 1 = 7$;

GOVERNMENT has 10 letter. Its code is $10 - 1 = 9$.

21. (c) As,

J	A	S	M	I	N	E
↓	↓	↓	↓	↓	↓	↓
10	1	19	13	9	14	5

$= 71$

(Positions of the letters in the alphabetic series).

Therefore,

E	S	T	I	M	A	T	E
↓	↓	↓	↓	↓	↓	↓	↓
5	19	20	9	13	1	20	5

$= 92$

22. (b)

H	U	M	B	L	E
↓	↓	↓	↓	↓	↓
8	21	13	2	12	5
	↓+1	↓+3		↓+2	
	3	4		3	

In this concept, digits of codes are added to convert it into single digit code.

R	E	A	S	O	N
↓	↓	↓	↓	↓	↓
18	5	1	19	15	14
			↓+9		
			10	↓+5	↓+4
			↓+0	6	5
			1		

Similarly,

S	T	R	I	K	E
↓	↓	↓	↓	↓	↓
19	20	18	9	11	5
↓+9					
10	↓+0	↓+8		↓+1	
↓+0	2	9		2	
1					

23. (d) R A M

$18 - 1 - 13$

⇒ $1 + 8 + 1 + 1 + 3 = 14$

S H Y A M

$19 - 8 - 25 - 1 - 13$

⇒ $1 + 9 + 8 + 2 + 5 + 1 + 1 + 3 = 30$

Similarly, S O N A K S H I

$19 \ 15 \ 14 \ 1 \ 11 \ 19 \ 8 \ 9$

⇒ $1 + 9 + 1 + 5 + 1 + 4 + 1 + 1 + 1 + 1 + 9 + 8 + 9 = 51$.

24. (b) S H E

$19 \ 8 \ 5$

⇒ $(19 + 8 + 5) \times 3 = 96$.

T H E M

$20 \ 8 \ 5 \ 13$

⇒ $(20 + 8 + 5 + 13) \times 4 = 184$,

To get answer = Sum of codes of letters × Number of letters

Similarly, M E

$13 \ 5$

⇒ $(13 + 5) \times 2 = 36$.

25. (a) L A M B

$12 \ 1 \ 13 \ 2$

⇒ $(12 + 1 + 13 + 2) \div 4 = 7$

C A T

$3 \ 1 \ 20$

⇒ $(3 + 1 + 20) \div 3 = 8$

To get answer = sum of codes of letters ÷ number of letters.

Similarly, H O T E L
8 15 20 5 12

$$\Rightarrow (8 + 15 + 20 + 5 + 12) \div 5 = 12.$$

26. (b) RAHUL $\rightarrow 18 + 1 + 8 + 21 + 12 = 60 \Rightarrow 6 + 0 = 6 \Rightarrow 6^2 = 36$
AKSH $\rightarrow 1 + 11 + 19 + 8 = 39 \Rightarrow 3 + 9 = 12 \Rightarrow 12^2 = 144$

Similarly, PRIYANKA $\rightarrow 16 + 18 + 9 + 25 + 1 + 14 + 11 + 1 = 95$
 $\Rightarrow 9 + 5 = 14 \Rightarrow 14^2 = 196.$

27. (b) SHIMLA $\rightarrow 19 + 8 + 9 + 13 + 12 + 1 = 62 \Rightarrow 6 - 2 = 4$
DELHI $\rightarrow 4 + 5 + 12 + 8 + 9 = 38 \Rightarrow 3 - 8 = -5$

Similarly,

INDORE $\rightarrow 9 + 14 + 4 + 15 + 18 + 5 = 65 \Rightarrow 6 - 5 = 1.$

28. (c)
- | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| T | A | B | L | E |
| 20 | 1 | 2 | 12 | 5 |
| $\downarrow \times 1$ | $\downarrow \times 2$ | $\downarrow \times 3$ | $\downarrow \times 4$ | $\downarrow \times 5$ |
| 20 | 2 | 6 | 48 | 25 |

$$\Rightarrow 20 + 2 + 6 + 48 + 25 = 101$$

H	I	M
8	9	13
$\downarrow \times 1$	$\downarrow \times 2$	$\downarrow \times 3$
8	18	39

$$\Rightarrow 8 + 18 + 39 = 65$$

Similarly,

H	U	M	B	L	E
8	21	13	2	12	5
$\downarrow \times 1$	$\downarrow \times 2$	$\downarrow \times 3$	$\downarrow \times 4$	$\downarrow \times 5$	$\downarrow \times 6$
8	42	39	8	60	30

$$\Rightarrow 8 + 42 + 39 + 8 + 60 + 30 = 187.$$

29. (b)
- | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| T | H | E | M | = | 4 | 5 | 8 | 9 | | |
| W | H | I | T | E | = | 8 | 2 | 4 | 7 | 5 |
| M | I | N | E | = | 4 | 9 | 1 | 2 | | |
| H | I | M | = | 2 | 8 | 9 | | | | |

Now, W (7), H (8), E (4), T (5), A (?), So code for A should be different, so all these numbers comes in (b) option.

30. (b) N is coded as $30 = 14 \times 2 + 2 = 30$

And, 'COT' is coded as 78.

$$= (3 + 15 + 20) \times 2 + 2 = 78$$

Hence, 'PET' $= (16 + 5 + 20) \times 2 + 2 = 41 \times 2 + 2 = 84.$

31. (c) We have, 'GOLF' = 60

$$= (7 + 15 + 12 + 6) + (7 + 15 + 12 + 6) \div 2$$

$$= 40 + (40 \div 2) = 60.$$

START = 117

$$= (19 + 20 + 1 + 18 + 20) + (19 + 20 + 1 + 18 + 20) \div 2$$

$$= 78 + (78 \div 2) = 78 + 39 = 117.$$

Similarly,

$$\text{NEST} = (14 + 5 + 19 + 20) + (14 + 5 + 19 + 20) \div 2$$

$$= 58 + 58 \div 2 = 58 + 29 = 87.$$

32. (c) We have, O = 15 + 5 = 20.

Similarly, LIT = $(12 + 9 + 20) + 5 = 46$

Hence, PIG = $(16 + 9 + 7) + 5 = 37.$

33. (c) We have,

$$\text{MUSIC} = (13 + 21 + 19 + 9 + 3) - 5$$

$$= 65 - 5 = 60.$$

Similarly, TUNE = $(20 + 21 + 14 + 5) - 4$
 $= 60 - 4 = 56.$

The code value is the differences of sum of the values of the letters and number of letters in the word.

Hence, 'LYRIC' = $(12 + 25 + 18 + 9 + 3) - 5$
 $= 67 - 5 = 62.$

34. (d) We have,
- | | | | |
|-----------------|-----------------|-----------------|-----------------|
| 23 | 1 | 14 | 4 |
| W | A | N | D |
| $\downarrow +1$ | $\downarrow -1$ | $\downarrow +1$ | $\downarrow -1$ |
| 24 | 0 | 15 | 3 |
- | | | | |
|-----------------|-----------------|-----------------|-----------------|
| 3 | 21 | 18 | 4 |
| C | U | R | D |
| $\downarrow +1$ | $\downarrow -1$ | $\downarrow +1$ | $\downarrow -1$ |
| 4 | 20 | 19 | 3 |

Similarly,

5	1	19	20
E	A	S	T
$\downarrow +1$	$\downarrow -1$	$\downarrow +1$	$\downarrow -1$
6	0	20	19

35. (b) We have, UFHC = 21683 (place value of each letter in the English alphabet)

Similarly, OFED = 15654

Hence, the word for the code '15236' is 'OBCF'.

36. (d) We have,

$$\text{STAR} = (19 + 20 + 1 + 18) - 3 \text{ (number of consonants)}$$

$$= 58 - 3 = 55$$

Similarly, CUT = $(3 + 21 + 20) - 2 \text{ (number of consonants)}$
 $= 44 - 2 = 42$

Hence, PEN = $(16 + 5 + 14) - 2 \text{ (number of consonants)}$
 $= 35 - 2 = 33.$

37. (b) We have, DENT = $(4 + 5 + 14 + 20) + 8 = 43 + 8 = 51$

Similarly, LOAD = $(12 + 15 + 1 + 4) + 8 = 32 + 8 = 40$

Hence, 'COST' will be written as,

$$= (3 + 15 + 19 + 20) + 8 = 57 + 8 = 65.$$

38. (d)

Letter	B	L	O	C	K
Positional Value	2	12	15	3	11
Code	$2 + 1 = 3$	$12 + 1 = 13$	$15 + 1 = 16$	$3 + 1 = 4$	$11 + 1 = 12$

Similarly,

Letter	S	U	P	R	E	M	E
Positional Value	19	21	16	18	5	13	5
Code	$19 + 1 = 20$	$21 + 1 = 22$	$16 + 1 = 17$	$18 + 1 = 19$	$5 + 1 = 6$	$13 + 1 = 14$	$5 + 1 = 6$

Hence, the correct answer is 202217196146.

39. (b) The logic is: Positional values of letters in reverse alphabetical series.

$$\text{FIXED} = [21 + 18 + 3 + 22 + 23] - 1 = 87 - 1 = 86.$$

$$\text{COMPANY} = [24 + 12 + 14 + 11 + 26 + 13 + 2] - 1$$

$$= 102 - 1 = 101.$$

Similarly,

$$\text{INTERIM} = [18 + 13 + 7 + 22 + 9 + 18 + 14] - 1$$

$$= 101 - 1 = 100.$$

40. (a)

Word	F	A	K	E
Positional Value	6	1	11	5
Code	$5(6-1)$	$2(1+1)$	$10(11-1)$	$6(5+1)$

Word	M	A	D
Positional Value	13	1	4
Code	$12(13-1)$	$2(1+1)$	$5(4+1)$

Similarly,

Word	D	E	E	R
Positional Value	4	5	5	18
Code	$3(4-1)$	$6(5+1)$	$4(5-1)$	$19(18+1)$

Hence, DEER will be coded as 36419.

41. (b) The logic is: $(C + A + B) \times 2 + 1 = (3 + 1 + 2) \times 2 + 1 = 13$
 $(F + E + E + D) \times 2 + 1 = (6 + 5 + 5 + 4) \times 2 + 1 = 41$
 Similarly, $(J + A + D + E) \times 2 + 1 = (10 + 1 + 4 + 5) \times 2 + 1 = 41$.

42. (c) The logic is: Positional value of letter $\times 2$

$$A = 1 \times 2 = 2$$

$$B = 2 \times 2 = 4$$

Similarly, EARTH = 102364016

43. (a) Positional value of Y = 25; code = $25 \times 2 = 50$

$$SEA = (19 + 5 + 1) \times 2 = 50$$

Similarly, YACHT = $(25 + 1 + 3 + 8 + 20) \times 2 = 114$.

44. (c) Each letter of the word is replaced by its positional value in the English alphabetical series.

A	T	U	L	G	I	T	A
↓	↓	↓	↓	↓	↓	↓	↓
1	20	21	22	7	9	20	1

45. (c) The first and the last letters are replaced by the number which represents the positional value of its opposite letter. Second and third letters are replaced by the number representing the positional value of that letter.

K	N	O	W	H	I	R	E
↓	↓	↓	↓	↓	↓	↓	↓
P	↓	↓	D	S	↓	↓	V
↓	↓	↓	↓	↓	↓	↓	↓
16	14	15	4	19	9	18	22

46. (c)
- | | | | | | | |
|-------|-------|-------|----------|-------|-------|-------|
| M | A | C | H | I | N | E |
| ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| N | Z | X | S | R | M | V |
| ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| 14 | 26 | 24 | 19 | 18 | 13 | 22 |
| $1+4$ | $2+6$ | $2+4$ | $1+9=10$ | $1+8$ | $1+3$ | $2+2$ |
| 5 | 8 | 6 | $1+0=1$ | 1 | 9 | 4 |

Therefore,

S	T	O	R	K
↓	↓	↓	↓	↓
H	G	P	I	P
↓	↓	↓	↓	↓
8	7	11	9	16
$1+1$		$1+6$		
8	7	2	9	7

47. (c) The words are coded as: Sum of the positional values of all the letters in the word \times Total number of letters in the word.

S	E	N	D	and	P	U	R	S	E
↓	↓	↓	↓		↓	↓	↓	↓	↓
11	5	14	4		16	21	18	19	5
$42 \times 4 = 168$					$79 \times 5 = 395$				

48. (d) Each vowel is replaced by its third next letter of the English alphabetical series. Each consonant is replaced by its fourth next letter of the English alphabetical series.

We have, M A T E R I A L
 $\downarrow +4 \downarrow +3 \downarrow +4 \downarrow +3 \downarrow +4 \downarrow +3 \downarrow +4$
 Q D X H V L D P

Similarly, O N T O L O G Y
 $\downarrow +3 \downarrow +4 \downarrow +4 \downarrow +3 \downarrow +4 \downarrow +3 \downarrow +4$
 R R X R P R K C

49. (b) We have, O P U L E N T
 $\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
 L K F O V M G
 $\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
 $12 + 11 + 6 + 15 + 22 + 13 + 7 = 86$
 $86 - 2 = 84$
 L E A R N E R
 $\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
 O V Z I M V I
 $\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
 $15 + 22 + 26 + 9 + 13 + 22 + 9 = 116$
 $116 - 2 = 114$

Similarly, P H Y S I C S
 $\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
 K S B H R X H
 $\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
 $11 + 19 + 2 + 8 + 18 + 24 + 8 = 90$
 $90 - 2 = 88$

50. (c) The code is: Sum of the positional values of all the letters of the word – Total number of letters in the word.

We have, C R O W N D E P E N D
 $\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
 $3 + 8 + 15 + 23 + 14 = 73$ $4 + 5 + 16 + 5 + 14 + 4 = 48$
 $73 - 5 = 68$ $48 - 6 = 42$

Similarly, I M A G E R Y
 $\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
 $9 + 13 + 1 + 7 + 5 + 18 + 25 = 78$
 $78 - 7 = 71$

51. (c) We have, D O L P H I N
 $\downarrow +1 \downarrow +1 \downarrow +1 \downarrow -1 \downarrow -1 \downarrow -1$
 E P M P G H M
 Therefore, C O R D I A L
 $\downarrow +1 \downarrow +1 \downarrow +1 \downarrow -1 \downarrow -1 \downarrow -1$
 D P S D H Z K

52. (b) We have, C O U N T R Y B O W K X L F
 $\downarrow +3 \downarrow -3 \downarrow +3 \downarrow -3 \downarrow +3 \downarrow -3 \downarrow +3$
 D E S P A I R U F D M V B G
 $\downarrow +3 \downarrow -3 \downarrow +3 \downarrow -3 \downarrow +3 \downarrow -3 \downarrow +3$

53. (a) We have, P R I N T Y M N I U
 $\downarrow +5 \downarrow \downarrow +5 \downarrow \downarrow +5 \downarrow \downarrow +5$
 M A G I C H R L Z R
 $\downarrow +5 \downarrow \downarrow +5 \downarrow \downarrow +5 \downarrow \downarrow +5$

54. (c) We have, $\begin{matrix} M & O & R & B & I & D \\ -5 & +5 & -5 & +5 & -5 & +5 \\ T & H & G & M & I & D \end{matrix}$

Therefore, $\begin{matrix} O & B & T & A & I & N \\ -5 & +5 & -5 & +5 & -5 & +5 \\ G & J & F & O & S & D \end{matrix}$

55. (b) In each word, the first and the last letter is replaced by its second next letter of the English alphabetical series. The middle letter is replaced by a set of two letters, i.e. its second preceding letter and its second next letter.

We have, $\begin{matrix} A & N & D \\ +2 & -2 & +2 \\ C & LP & F \end{matrix}$

Similarly, $\begin{matrix} B & U & T \\ +2 & -2 & +2 \\ D & SW & V \end{matrix}$

56. (c) We have, $\begin{matrix} & +6 & & & & & \\ & +5 & & & & & \\ & +4 & & & & & \\ & +3 & & & & & \\ D & E & P & E & N & D & \\ & +1 & & & & & \\ & +2 & & & & & \end{matrix}$

Similarly, $\begin{matrix} & +6 & & & & & \\ & +5 & & & & & \\ & +4 & & & & & \\ & +3 & & & & & \\ T & R & A & V & E & L & \\ & +1 & & & & & \\ & +2 & & & & & \end{matrix}$

57. (c) We have, $\begin{matrix} S & T & R & A & I & G & H & T \\ \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \\ T & S & A & R & G & I & T & H \end{matrix}$

Similarly, $\begin{matrix} T & H & U & R & S & D & A & Y \\ \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \\ H & T & R & U & D & S & Y & A \end{matrix}$

58. (c) Each of the letter at the even positions are replaced by its opposite (the letter which occupies the same position when the alphabetical series is written in reverse order). While the rest of the letters are coded according to the following pattern:

We have

$\begin{matrix} P & E & R & M & I & T \\ +6 & -6 & +6 & -6 & +6 & -6 \\ V & V & L & N & O & G \end{matrix}$

Therefore,

$\begin{matrix} I & N & E & R & T & I & A \\ +6 & -6 & +6 & -6 & +6 & -6 & +6 \\ O & M & Y & I & Z & R & U \end{matrix}$

59. (d) We have,

$\begin{matrix} M & A & R & G & I & N \\ +1 & +1 & +1 & +1 & +1 & +1 \\ S & B & N & O & J & H \end{matrix}$

Similarly,

$\begin{matrix} P & R & A & Y & E & R \\ +1 & +1 & +1 & +1 & +1 & +1 \\ B & S & Q & S & F & Z \end{matrix}$

60. (c) CZGPXTBV

$\begin{matrix} W & A & R & D & R & O & B & E \\ +2 & -3 & +4 & -5 & +6 & -7 & +8 & -9 \\ Y & X & V & Y & X & H & J & V \end{matrix}$

Therefore, $\begin{matrix} A & C & C & U & R & A & T & E \\ +2 & -3 & +4 & -5 & +6 & -7 & +8 & -9 \\ C & Z & G & P & X & T & B & V \end{matrix}$

61. (d) We have, $\begin{matrix} H & A & M & M & E & R \\ +1 & +2 & +3 & +4 & +5 & +6 \\ I & C & P & Q & J & X \end{matrix}$

Therefore, $\begin{matrix} W & R & E & N & C & H \\ +1 & +2 & +3 & +4 & +5 & +6 \\ X & T & H & R & H & N \end{matrix}$

62. (d) We have, $\begin{matrix} T & E & A & C & H & I & N & G \\ -1 & -1 & +1 & +1 & -1 & -1 & +1 & +1 \\ S & D & B & D & G & H & O & H \end{matrix}$

Similarly,

$\begin{matrix} B & O & O & K & W & O & R & M \\ -1 & -1 & +1 & +1 & -1 & -1 & +1 & +1 \\ A & N & P & L & V & N & S & N \end{matrix}$

63. (a) We have, $\begin{matrix} S & T & R & O & K & E & F & L & P & S & U & T \\ & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \\ & & +1 & & +1 & & +1 & & +1 & & +1 & & +1 \end{matrix}$

Similarly, $\begin{matrix} B & R & I & G & H & T & U & I & H & J & S & C \\ & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \\ & & +1 & & +1 & & +1 & & +1 & & +1 & & +1 \end{matrix}$

64. (a) We have,

$\begin{matrix} L & S & J & X & V & C \\ +1 & +2 & +3 & +4 & +5 & +6 \\ M & U & M & B & A & I \end{matrix}$

Similarly,

$\begin{matrix} C & C & I & D & D \\ +1 & +2 & +3 & +4 & +5 \\ D & E & L & H & I \end{matrix}$

65. (a) We have,

$\begin{matrix} E & M & P & H & A & S & I & S \\ +1 & -1 & +1 & -1 & +1 & -1 & +1 & -1 \\ N & D & I & O & B & R & J & R \end{matrix}$

Similarly,

$\begin{matrix} C & R & E & A & T & U & R & E \\ +1 & -1 & +1 & -1 & +1 & -1 & +1 & -1 \\ S & B & B & D & U & T & S & D \end{matrix}$

Hence, SBBBDUTSD is the correct answer.

66. (b) If

Similarly,

$\begin{matrix} M & O & H & A & N & C & O & U & N & T \\ -2 & -2 & -2 & -2 & -2 & -2 & -2 & -2 & -2 & -2 \\ K & M & F & Y & L & A & M & S & L & R \end{matrix}$

67. (d) $\begin{matrix} D & I & A & G & R & A & M \\ \downarrow -3 & \downarrow -3 & \downarrow -3 & \downarrow -3 & \downarrow -3 & \downarrow -3 & \downarrow -3 \\ A & F & X & D & O & X & J \end{matrix}$
 Similarly, $\begin{matrix} P & I & C & T & U & R & E \\ \downarrow -3 & \downarrow -3 & \downarrow -3 & \downarrow -3 & \downarrow -3 & \downarrow -3 & \downarrow -3 \\ M & F & Z & Q & R & O & B \end{matrix}$

68. (b) $\begin{matrix} I & N & D & I & A \\ \downarrow +3 & \downarrow +3 & \downarrow +3 & \downarrow +3 & \downarrow +3 \\ L & Q & G & L & D \end{matrix}$
 Similarly, $\begin{matrix} J & A & P & A & N \\ \downarrow +3 & \downarrow +3 & \downarrow +3 & \downarrow +3 & \downarrow +3 \\ M & D & S & D & Q \end{matrix}$

69. (d) $\begin{matrix} A & B & S & O & L & U & T & E \\ \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \rightarrow \text{ESBLOTUA} \end{matrix}$
 Similarly, $\begin{matrix} C & A & L & E & N & D & A & R \\ \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \rightarrow \text{RLANEADC} \end{matrix}$

70. (d) We have, $\begin{matrix} G & O & P & A & L \\ \downarrow +6 & \downarrow -6 & \downarrow +6 & \downarrow -6 & \downarrow +6 \\ M & I & V & U & R \end{matrix}$
 Similarly, $\begin{matrix} R & A & D & H & A \\ \downarrow +6 & \downarrow -6 & \downarrow +6 & \downarrow -6 & \downarrow +6 \\ X & U & J & B & G \end{matrix}$

71. (b) $\begin{matrix} H & O & U & S & E \\ \downarrow -2 & \downarrow +2 & \downarrow -2 & \downarrow +2 & \downarrow -2 \\ F & Q & S & U & C \end{matrix}$
 Similarly, $\begin{matrix} C & H & A & I & R \\ \downarrow -2 & \downarrow +2 & \downarrow -2 & \downarrow +2 & \downarrow -2 \\ A & J & Y & K & P \end{matrix}$

72. (a) $\begin{matrix} A & P & P & R & O & A & C & H \\ \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \rightarrow \text{CHOAPRAP} \end{matrix}$
 Similarly, $\begin{matrix} R & E & S & T & R & I & C & T \\ \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \rightarrow \text{CTRISTRE} \end{matrix}$

73. (c) $\begin{matrix} F & R & I & E & N & D \\ \downarrow +2 & \downarrow +3 & \downarrow +4 & \downarrow +5 & \downarrow +6 & \downarrow +7 \\ H & U & M & J & T & K \end{matrix}$
 Similarly, $\begin{matrix} C & A & N & D & L & E \\ \downarrow +2 & \downarrow +3 & \downarrow +4 & \downarrow +5 & \downarrow +6 & \downarrow +7 \\ E & D & R & I & R & L \end{matrix}$

74. (b) $\begin{matrix} G & I & V & E \\ \rightarrow & & & \rightarrow \text{VIEG} \\ IV & II & I & III \\ O & V & E & R \\ \rightarrow & & & \rightarrow \text{EVRO} \\ IV & II & I & III \end{matrix}$

Similarly, $\begin{matrix} D & I & S & K \\ \rightarrow & & & \rightarrow \text{SIKD} \\ IV & II & I & III \end{matrix}$

75. (c) $\begin{matrix} M & O & U & S & E \\ \downarrow +3 & \downarrow +3 & \downarrow +0 & \downarrow -2 & \downarrow -2 \\ P & R & U & Q & C \end{matrix}$

Similarly, $\begin{matrix} S & H & I & F & T \\ \downarrow +3 & \downarrow +3 & \downarrow +0 & \downarrow -2 & \downarrow -2 \\ V & K & I & D & R \end{matrix}$

76. (c) $\begin{matrix} D & E & P & U & T & A & D & E & P & U \\ \text{III} & \text{II} & \text{IV} & \text{I} & \rightarrow \text{ONTADEPUTI} \end{matrix}$

Similarly, $\begin{matrix} D & E & R & I & V & A & T & I & O & N \\ \text{III} & \text{II} & \text{IV} & \text{I} & \rightarrow \text{ONVADERITI} \end{matrix}$

77. (d) $\begin{matrix} G & O & N & E \\ \downarrow +2 & \downarrow -3 & \downarrow +2 & \downarrow -3 \\ I & L & P & B \end{matrix}$
 Similarly, $\begin{matrix} C & R & I & B \\ \downarrow +2 & \downarrow -3 & \downarrow +2 & \downarrow -3 \\ E & O & K & Y \end{matrix}$

78. (c) $\begin{matrix} G & O & O & D & N & E & S & S \\ \downarrow +1 & \downarrow -1 & \downarrow +1 & \downarrow -1 & \downarrow +1 & \downarrow -1 & \downarrow +1 & \downarrow -1 \\ H & N & P & C & O & D & T & R \end{matrix}$

Similarly, $\begin{matrix} G & R & E & A & T & N & E & S & S \\ \downarrow +1 & \downarrow -1 & \downarrow +1 & \downarrow -1 & \downarrow +1 & \downarrow -1 & \downarrow +1 & \downarrow -1 & \downarrow +1 \\ H & Q & F & Z & U & M & F & R & T \end{matrix}$

79. (d) $\begin{matrix} G & A & R & N & I & S & H \\ \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \rightarrow \text{RGAINHS} \end{matrix}$
 Therefore, $\begin{matrix} G & E & N & I & O & U & S \\ \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \rightarrow \text{NGEOISU} \end{matrix}$

80. (b) $\begin{matrix} M & O & B & I & L & E \\ \downarrow +13 & \downarrow +12 & \downarrow +11 & \downarrow +10 & \downarrow +9 & \downarrow +8 \\ Z & A & M & S & U & M \end{matrix}$
 Therefore, $\begin{matrix} T & U & M & O & R \\ \downarrow +13 & \downarrow +12 & \downarrow +11 & \downarrow +10 & \downarrow +9 \\ G & G & X & Y & A \end{matrix}$

81. (b) $\begin{matrix} H & Y & D & R & O & G & E & N \\ \downarrow +2 & \downarrow +4 & \downarrow +6 & \downarrow +8 & \downarrow +10 & \downarrow +12 & \downarrow +14 & \downarrow +16 \\ J & C & J & Z & Y & S & S & D \end{matrix}$
 Therefore, $\begin{matrix} A & N & T & I & M & O & N & Y \\ \downarrow +2 & \downarrow +4 & \downarrow +6 & \downarrow +8 & \downarrow +10 & \downarrow +12 & \downarrow +14 & \downarrow +16 \\ C & R & Z & Q & W & A & B & O \end{matrix}$

82. (d) We have, $\begin{matrix} B & R & O & W & S & E \\ \downarrow +2 & \downarrow +2 & \downarrow +2 & \downarrow +2 & \downarrow +2 & \downarrow +2 \\ D & T & Q & Y & U & G \end{matrix}$



After reversing the codes, we get 'GUYQTD'.

Therefore, $\begin{array}{ccccccc} A & M & A & L & G & A & M \\ \downarrow +2 & \downarrow +2 & \downarrow +2 & \downarrow +2 & \downarrow +2 & \downarrow +2 & \downarrow +2 \\ C & O & C & N & I & C & O \end{array}$

After reversing the codes we get 'OCINCO'.

83. (a) All the letters of the word 'SMART' is written in ascending order to get the code 'AMRST'.

Similarly, the word 'DESIGN' can be written as 'DEGINS'.

84. (a) We have, $\begin{array}{cccccc} B & U & R & M & U & D \\ \downarrow +16 & \downarrow +16 & \downarrow +16 & \downarrow +16 & \downarrow +16 & \downarrow +16 \\ R & K & H & C & K & T \end{array}$

Hence, $\begin{array}{ccccc} A & N & G & L & E \\ \downarrow +16 & \downarrow +16 & \downarrow +16 & \downarrow +16 & \downarrow +16 \\ Q & D & W & B & U \end{array}$

85. (d) The opposite letters of the word 'APRICOT' is written from right to left.

$\begin{array}{cccccc} T & O & C & I & R & P & A \\ \uparrow & \uparrow & \uparrow & \uparrow & \uparrow & \uparrow & \uparrow \\ G & L & X & R & I & K & Z \end{array}$

Similarly, the word Orange can be written as 'VTMZIL'.

$\begin{array}{cccccc} E & G & N & A & R & O \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ V & T & M & Z & I & L \end{array}$

86. (a) The logic is: Subtract 3 from consonants and add 8, 10, 12 and so on to the vowels.

$\begin{array}{ccccc} P & A & G & E & R \\ \downarrow -3 & \downarrow +8 & \downarrow -3 & \downarrow +10 & \downarrow -3 \\ M & I & D & O & O \end{array}$

Similarly, $\begin{array}{ccccc} A & N & G & E & L \\ \downarrow +8 & \downarrow -3 & \downarrow -3 & \downarrow +10 & \downarrow -3 \\ I & K & D & O & I \end{array}$

Hence, IKDOI is the correct answer.

87. (c) We have, $\begin{array}{ccccc} J & O & N & A & I & L \\ \downarrow -1 & \downarrow +3 & \downarrow -1 & \downarrow +3 & \downarrow -1 & \downarrow +3 \\ I & R & M & D & H & O \end{array}$

Therefore, $\begin{array}{ccccc} P & L & M & U & T & G \\ \downarrow -1 & \downarrow +3 & \downarrow -1 & \downarrow +3 & \downarrow -1 & \downarrow +3 \\ O & O & L & X & S & J \end{array}$

Hence, the code is 'OOLXSJ'.

88. (d) The logic is: Add 1 to the consonants and 4 and 6 to vowels alternatively.

$\begin{array}{ccccccccc} s & a & l & u & t & e & & i & u & a & m & e & t \\ & & & & & & +4 & & & & & & \\ & & & & & & +1 & & & & & & \\ & & & & & & +6 & & & & & & \\ & & & & & & +1 & & & & & & \\ & & & & & & +4 & & & & & & \\ & & & & & & +1 & & & & & & \end{array}$

Similarly, $\begin{array}{ccccccccc} m & a & n & g & o & & u & h & o & e & n \\ & & & & & +6 & & & & & \\ & & & & & +1 & & & & & \\ & & & & & +1 & & & & & \\ & & & & & +4 & & & & & \\ & & & & & +1 & & & & & \end{array}$

Hence, uhoen is the correct answer.

89. (a) We have, $\begin{array}{ccccc} M & A & R & I & N & E \\ \downarrow +4 & \downarrow +4 & \downarrow +4 & \downarrow +4 & \downarrow +4 & \downarrow +4 \\ Q & E & V & M & R & I \end{array}$

After reversing the code from right to left, we get IRMVEQ.

Similarly, $\begin{array}{ccccc} B & E & A & U & T & Y \\ \downarrow +4 & \downarrow +4 & \downarrow +4 & \downarrow +4 & \downarrow +4 & \downarrow +4 \\ F & I & E & Y & X & C \end{array}$

Hence, the code for 'BEAUTY' is 'CXYEIF'.

90. (c) We have, 'CATHODE' - 'X5GS2W4'
The code for vowels A = 5, E = 4, I = 3, O = 2, U = 1.

$\begin{array}{cccccc} C & A & T & H & O & D & E \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ X & 5 & G & S & 2 & W & 4 \end{array}$

Therefore, $\begin{array}{cccccc} R & E & L & A & T & I & O & N \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ I & 4 & O & 5 & G & 3 & 2 & M \end{array}$

91. (a) We have, $\begin{array}{ccccc} T & O & R & C & H \\ \downarrow +1 & \downarrow -1 & \downarrow +1 & \downarrow +1 & \downarrow +1 \\ U & N & P & S & D & I \end{array}$

Similarly, $\begin{array}{ccccc} B & E & S & T \\ \downarrow +1 & \downarrow -1 & \downarrow +1 & \downarrow +1 \\ C & D & F & T & U \end{array}$

Hence, $\begin{array}{ccccc} M & A & R & K & S \\ \downarrow +1 & \downarrow -1 & \downarrow +1 & \downarrow +1 & \downarrow +1 \\ N & Z & B & S & L & T \end{array}$

92. (a) We have, $\begin{array}{cccccc} P & L & A & C & A & R & D \\ \downarrow +4 & \downarrow +4 & \downarrow +4 & \downarrow -4 & \downarrow +4 & \downarrow +4 & \downarrow +4 \\ T & P & E & Y & E & V & H \end{array}$

Therefore, $\begin{matrix} M & O & N & S & T & E & R \\ +4 & +4 & +4 & -4 & +4 & +4 & +4 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ Q & S & R & O & X & I & V \end{matrix}$

93. (c) We have, $\begin{matrix} O & B & E & S & I & T & Y \\ & \swarrow & \searrow & \swarrow & \searrow & \swarrow & \searrow \\ E & B & O & H & Y & T & I \end{matrix}$
 Similarly, $\begin{matrix} F & I & X & T & U & R & E \\ & \swarrow & \searrow & \swarrow & \searrow & \swarrow & \searrow \\ X & I & F & G & E & R & U \end{matrix}$

Hence, XIFGERU is the correct answer.

94. (b) We have, $\begin{matrix} P & L & U & M \\ \swarrow \text{Opposite} \downarrow +1 & \swarrow \text{Opposite} \downarrow +1 & \swarrow \text{Opposite} \downarrow +1 & \swarrow \text{Opposite} \downarrow +1 \\ K & Q & O & M & F & V & N \end{matrix}$
 Similarly, $\begin{matrix} B & I & G \\ \swarrow \text{Opposite} \downarrow +1 & \swarrow \text{Opposite} \downarrow +1 & \swarrow \text{Opposite} \downarrow +1 \\ Y & C & R & J & T & H \end{matrix}$

Hence, YCRJTH is the correct answer.

95. (a)

Letter	C	H	I	C	A	N	E	R	Y
Code	D	N	O	D	T	H	V	K	S

Similarly,

Letter	C	R	A	N	E
Code	D	K	T	H	V

Hence, DKTHV is the correct answer.

96. (c) The letters of the word 'OXBRIDGE' are written in ascending order from left to right according to the English alphabet.
 Hence, the word 'MOUTHFUL' is written as 'FHLMOTUU'.

97. (b) We have, $\begin{matrix} B & A & C & H & E & L & O & R \\ -1 & +1 & -1 & +1 & -1 & +1 & -1 & +1 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ A & B & B & I & D & M & N & S \end{matrix}$

After reversing the codes from right to left, we get the code for 'BACHELOR' \rightarrow SNMDIBBA

Similarly,

Letter	C	O	H	E	S	I	O	N
Code	B	P	G	F	R	J	N	O

Hence, the code for 'COHESION' \rightarrow ONJRFGPB.

98. (b) We have, $\begin{matrix} M & A & C & H & I & N & E \\ \curvearrowright & & & & & & \\ & \curvearrowright & & & & & \\ & & \curvearrowright & & & & \\ & & & \curvearrowright & & & \\ & & & & \curvearrowright & & \\ & & & & & \curvearrowright & \\ & & & & & & \curvearrowright \end{matrix} \rightarrow \text{CAMHENI}$
 Therefore, $\begin{matrix} M & O & N & S & T & E & R \\ \curvearrowright & & & & & & \\ & \curvearrowright & & & & & \\ & & \curvearrowright & & & & \\ & & & \curvearrowright & & & \\ & & & & \curvearrowright & & \\ & & & & & \curvearrowright & \\ & & & & & & \curvearrowright \end{matrix} \rightarrow \text{NOMSRET}$

99. (d) The code for vowels A = 1, E = 2, J = 3, O = 4, U = 5.

We have,

Letter	H	O	N	E	Y
Code	-1	-1	-1	-1	-1
Letter	G	4	M	2	X

Similarly,

Letter	S	T	A	T	U	E
Code	-1	-1	-1	-1	-1	-1
Letter	R	S	1	S	5	2

Hence, the code for STATUE is RS1S52.

100. (b) The letters of the word are first written in alphabetical order. Then each letter is replaced by another letter of the English alphabetical series, according to the pattern given below.

SILVER \rightarrow EILRSV or WISDOM \rightarrow DIMOSW

Letter	E	I	L	R	S	V
Code	+5	-5	+5	-5	+5	-5
Letter	J	D	Q	M	X	Q

Similarly, KENSTAR \rightarrow AEKNRST

Letter	A	E	K	N	R	S	T
Code	+5	-5	+5	-5	+5	-5	+5
Letter	F	Z	P	I	W	N	Y

101. (b) We have,

Similarly,

Letter	P	R	O	F	A	N	E
Code	opp.	-3	opp.	-3	opp.	-3	opp.
Letter	K	O	L	C	Z	K	V

102. (d) By observing the position of the common letter (H) and the common code (€), we can say that each letter coded as a unique symbol.

Letters	R	O	M	H	E	I	G	T
Codes	α	×	@	€	÷	β	©	*

From the above table, we can say that, TIGER will be written as: *β©÷α.

103. (c) $\begin{matrix} P & E & P & P & E & R & A & I & M \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ @ & \# & @ & @ & \# & \uparrow & \wedge & ? & * \end{matrix}$
 $\begin{matrix} P & A & M & P & E & R \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ @ & \wedge & * & @ & \# & \uparrow \end{matrix}$

104. (b) $\begin{matrix} W & I & N & G & T & H & E & N \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ * & £ & ? & = & @ & \$ & © & ? \end{matrix}$
 $\begin{matrix} N & I & T & E \\ \downarrow & \downarrow & \downarrow & \downarrow \\ ? & £ & @ & © \end{matrix}$

105. (d) $\begin{matrix} R & E & D & A & D & A & R & E \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ \% & \# & @ & \Delta & @ & \Delta & \% & \# \end{matrix}$

106. (a) $\begin{matrix} 1 & 9 & 8 & 6 & 2 & 3 & 4 & 5 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ \wedge & \theta & \Delta & > & + & \times & - & \uparrow \\ \Delta & > & - & \times & + & \uparrow & & \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 8 & 6 & 4 & 3 & 2 & 5 & & \end{matrix}$

107. (d) $\alpha \rightarrow A, \delta \rightarrow R, \gamma \rightarrow G, \chi \rightarrow U, \varepsilon \rightarrow E, \sigma \rightarrow S, \phi \rightarrow O, \lambda \rightarrow L, \pi \rightarrow V, \varepsilon \rightarrow E$

$\pi \rightarrow V, \gamma \rightarrow G, \varepsilon \rightarrow E, \sigma \rightarrow S, \delta \rightarrow R, \lambda \rightarrow L$

108. (c) $P \rightarrow \#, A \rightarrow \%, C \rightarrow \phi, E \rightarrow @$

109. (d) $P \rightarrow ?, E \rightarrow @, N \rightarrow ', C \rightarrow =, I \rightarrow ;, L \rightarrow 7, P \rightarrow ?, A \rightarrow 9, P \rightarrow ?, E \rightarrow @, R \rightarrow 5$

Therefore, $C \rightarrow =, L \rightarrow 7, I \rightarrow ;, P \rightarrow ?$

110. (b) $\neq \rightarrow 5, \square \rightarrow 8, \uparrow \rightarrow 6, \times \rightarrow 3, \rightarrow 7$

111. (c) $\phi \rightarrow C, \alpha \rightarrow A, \delta \rightarrow R, \eta \rightarrow S, \psi \rightarrow I, \kappa \rightarrow T$
 $\sigma \rightarrow W, i \rightarrow E, \gamma \rightarrow L, \gamma \rightarrow L, \mu \rightarrow M, \alpha \rightarrow A, \beta \rightarrow P$
 $\phi \rightarrow C, \alpha \rightarrow A, \gamma \rightarrow L, \mu \rightarrow M$

112. (c)	Words	red	white	blue	green	orange
	Codes	white	blue	green	orange	pink

Now, colour of grass is green which is coded as 'orange'.

So, the colour of grass is orange.

113. (a)	Words	pen	paper	laptop	eraser
	Codes	paper	laptop	eraser	bottle

Now, we write on paper which is coded as laptop.

So, the correct answer is laptop.

114. (c)	Words	Cat	Dog	Goat	Horse	Lion
	Codes	Dog	Goat	Horse	Lion	Hen

Now, Lion is not a pet animal and Lion is coded as Hen.

So, Hen is the correct answer.

115. (b)	Words	orange	butter	soap	ink	honey
	Codes	butter	soap	ink	honey	orange

As for washing clothes 'soap' is used and in the coded language 'soap' is called 'ink'.

Hence, 'ink' is used for washing clothes.

116. (a) According to question 'Red' means 'white' and colour of milk is white but in question white represents Red.

117. (c)	BRING	WATER	JA	PA
	WATER	IS COLD	TE	JA
			JA	BO

Since WATER is coded as JA; BRING is coded as PA.

118. (a)

Codes	Phrases
Sue Re Nik	she is brave
Pi Sor Re Nik	she is always smiling
Sor Re Zhi	is always cheerful

Step 1: 'Re' is common in all three codes and 'is' is common in all three phrases. Re \equiv is.

Step 2: 'Nik' is common in first two codes and 'she' is common in first two phrases. Nik \equiv she.

Step 3: 'Sor' is common in last two codes and 'always' is common in last two phrases. Sor \equiv always.

Step 4: From second row, we have: Pi \equiv smiling.

119. (a)

Row	Codes	Phrases
I	PIC VIC NIC	winter is cold
II	TO NIC RE	summer is hot
III	RE TOO PA	nights are hot

Step 1: From I and III : NIC \equiv is

Step 2: From II and III : RE \equiv hot

Step 3: TO \equiv Summer (from II row).

120. (a)

Row	Codes	Phrases
I	2 5 3	books are old
II	5 4 6	man is old
III	3 7 8	buy good books

Step 1: From I and III : 3 \equiv books

Step 2: From I and II : 5 \equiv old

Step 3: 2 \equiv are (from Row I)

121. (a)

Row	Codes	Phrases
I	4 8 1	sky is blue
II	2 4 6	sea is deep
III	6 9 8	sea looks blue

Step 1: From I and III : 8 \equiv blue.

122. (b)

Row	Codes	Phrases
I	1 2 3	hot filtered coffee
II	3 5 6	very hot day
III	5 8 9	day and night

Step 1: From II and III : 5 = day

Step 2: From I and II : 3 = hot.

Step 3: 6 = very (from Row II)

123. (c)

Codes	Phrases
(ski) rps tri	(nice) Sunday morning
teh sti rps	every Tuesday morning
(ski) ptr qlm	(nice) market place

Step 1: 'ski' is common in first and last code and 'nice' is common in first and last phrase. ski = nice.

Step 2: 'rps' is common in first two codes and 'morning' is common in first two phrases. rps = morning.

Step 3: From first row, we have: tri = Sunday.

124. (d)

Codes	Phrases
ad mi (ja) no	easy path (to) win
ku (ja) ig ad	the path (to) heaven
(be) ku zo mi	win (of) the tomorrow
(be) li ya (ja)	(to) tell (of) night

Step 1: 'ja' is common in first two and last code and 'to' is common in first two and last phrases. ja = to

Step 2: 'be' is common in last two codes and 'of' is common in last two phrases. be = of.

Step 3: From last row, we have: li ya = tell night.

Therefore, definite code of 'tell' cannot be determined.

125. (b)

Codes	Phrases
(ki) (la) fa so	colors of the (sky)
ro (ki)	rainbow colors
(la) (pe) jo	(sky) high (rocket)
(pe) so ne	the (rocket) world

Step 1: 'ki' is common in first two codes and 'colors' is common in first two phrases. ki = colors

Step 2: 'la' is common in first and third codes and 'sky' is common in first and third phrases. la = sky

Step 3: 'pe' is common in last two codes and 'rocket' is common in last two phrases. pe = rocket.

Step 4: From first and third row, we have: colors sky high = ki la jo

126. (a)

Row	Codes	Phrases
I	aa be (rs)	(go) went gone
II	ub (rs) wa	(you) (go) home
III	wa de	(you) want
IV	lo aa	went do

Step 1: From II and III: wa = you.

127. (c) We have,

'how are you' is '639'

...(i)

'are you fine today' is '6453'

...(ii)

'stay fine' is '58'.

...(iii)

Solving (i), (ii) and (iii)

Words	Codes
how	9
are/you	3/6
today	4
stay	8
fine	5

Hence, the code for 'today' in this system is '4'.

128. (c) We have,

'Read this book' is '689'

...(i)

'This book is useful' is '9675'

...(ii)

'Useful book is good' is '5479'

...(iii)

Solving (i), (ii) and (iii)

Words	Codes
read	8
this	6
book	9
is/useful	5/7
good	4

Hence, the code for 'This book is good' in this system is either '6945' or '6974'.

129. (c) As the written code is,

'R S T, D E F, M N O, C D E, L M N, N O P, S T U, G H I, D E F, Q R S, R S T, N O P, N O P, M N O'.

The code on the received letter is,

L M N, N O P, S T U, G H I, D E F, Q R S, H I J, R S T, H I J, K L M, K L M.

Hence, the received message is 'Mother is ill.'

130. (b) Condition II is applied- The code for '2394587' is '€\$K@ZÖ€'.

131. (d) Condition III is applied- The code for '3721639' is '#Ř€&A\$#'.

132. (c) Condition III is applied- The code for 'PEOPLE' is '77&@X@'.

133. (b) Condition II is applied- The code for 'ITALICA' is '♥α5X4#♥'.



2

CHAPTER

ALPHABET TEST

QUESTIONS

TYPE 1. Word Formation

DIRECTIONS (1–10): In each of the following questions, a word has been given, followed by four other words, one of which cannot be formed by using the letters of the given word. Find that word.

1. EFFLORESCENT
(a) CREST (b) FOREST
(c) ROLER (d) COFFEE
2. AUTOBIOGRAPHY
(a) TROOP (b) BRIGHT
(c) GRAPHIC (d) TROPHY
3. CHRONOLOGICAL
(a) CALL (b) LOGIC
(c) CALLICO (d) ANALOGY
4. PRONOUNCEMENT
(a) MOUNT (b) CEMENT
(c) PAVEMENT (d) NOUN
5. SPECULATION
(a) SPECIAL (b) TOPIC
(c) SECULAR (d) CAUTION
6. EXAMINATION
(a) NATION (b) EXAM
(c) MENTION (d) AMBITION
7. COURAGEOUS
(a) COURSE (b) GRACE
(c) SECURE (d) ARGUE
8. PREDICAMENT
(a) CEMENT (b) DEMENTIA
(c) PREDICT (d) PRIMER
9. MEASUREMENT
(a) MASTER (b) EASTERN
(c) SUMMIT (d) MEAN
10. LEGIBILITY
(a) BILL (b) ABILITY
(c) BIG (d) LEG

DIRECTIONS (11–20): In each of the following questions, choose one word which can be formed from the letters of the given word.

11. MEASUREMENT
(a) SUMMIT (b) ASSURE

- (c) MASTER (d) MANTLE
12. COMMUNICATION
(a) COUNTRY (b) UNIFICATION
(c) AMMUNITION (d) MONITOR
13. REPUTATION
(a) RETIRE (b) TUTOR
(c) PONDER (d) REQUIRE
14. ULTRANATIONALISM
(a) ULTRAMODERN (b) ULTRAMONTANE
(c) ULTRAIST (d) ULULATE
15. EXAMINATION
(a) ANIMAL (b) ANIMATION
(c) NATIONAL (d) EXAMINER
16. TRADITIONAL
(a) ANIMAL (b) DIRTY
(c) NATION (d) RADIO
17. CONTROVERSY
(a) STORY (b) YOURS
(c) RIVER (d) OTHER
18. CORRESPONDING
(a) REPENT (b) RESPONSE
(c) CORRECT (d) DISCERN
19. IMMEDIATELY
(a) DIALECT (b) LIMITED
(c) DIAMETER (d) DICTATE
20. FUNDAMENTAL
(a) TAME (b) FUNDS
(c) DETRIMENTAL (d) DRUM
21. How many words with or without meaning can be formed with the letters of the word 'MANGO' using each letter exactly once?
(a) 240 (b) 120 (c) 130 (d) None of these
22. If it is possible to make only one meaningful word with the Third, Seventh, Eighth and Tenth letter of the word COMPATIBILITY, which of the following would be the last letter of that word? If no such word can be made, give 'X' as your answer and if more than one such word can be formed, give your answer as 'Y'.
(a) B (b) I (c) Y (d) X
23. How many meaningful three letter English words can be formed with the letters AER, using each letter only once in each word?
(a) 1 (b) 2 (c) 3 (d) None of these



24. How many meaningful English words can be made with the letters VLEI using each letter only once in each word?
(a) 1 (b) 2 (c) 3 (d) None of these
25. How many meaningful English words can be formed with the letters ADIC using each letter once in each word?
(a) 1 (b) 2 (c) 3 (d) None of these

TYPE 2. Pair Formation

26. How many such pairs of letters are there in the word ENGLISH, each of which has as many letters between its two letters as there are between them in the English alphabet?
(a) 1 (b) 2 (c) 3 (d) More than three
27. How many such pairs of letters are there in the word SENDING, each of which has as many letters between its two letters as there are between them in the English alphabet?
(a) 1 (b) 2 (c) 3 (d) More than three
28. How many such pairs of letters are there in the word CHANNEL, each of which has as many letters between its two letters as there are between them in the English alphabet?
(a) 1 (b) 2 (c) 3 (d) More than three
29. How many such pairs of letters are there in the word OVERWHELM each of which has as many letters between its two letters as there are between them in the English alphabet?
(a) 1 (b) 2 (c) 3 (d) More than three
30. How many such pairs of letters are there in the word COMPUTER, each of which has as many letters between its two letters as there are between them in the English alphabet?
(a) 1 (b) 2 (c) 3 (d) More than three
31. How many such pairs of letters are there in the word HORIZONTAL, each of which has as many letters between its two letters as there are between them in the English alphabet?
(a) 1 (b) 2 (c) 3 (d) More than three
32. How many such pairs of letters are there in the word DUPLICATE, each of which has as many letters between its two letters as there are between them in the English alphabet?
(a) 1 (b) 2 (c) 3 (d) More than three
33. How many such pairs of letters are there in the word PERISHED, each of which has as many letters between its two letters as there are between them in the English alphabet?
(a) 1 (b) 2 (c) 3 (d) More than three
34. How many such pairs of letters are there in the word STREAMING each of which has as many letters between its two letters as there are between them in the English alphabet?
(a) 1 (b) 2 (c) 3 (d) More than three

35. How many such pairs of letters are there in the word DAREDEVIL, each of which has as many letters between its two letters as there are between them in the English alphabet?
(a) 1 (b) 2 (c) 3 (d) More than three

TYPE 3. Positions of Letters in a Word

36. In english alphabet which letter will be 8th to the left of the 25th letter from left end?
(a) P (b) Q (c) R (d) S
37. In english alphabet which letter will be 6th to the left of the 17th letter from right end?
(a) B (b) C (c) D (d) E
38. In english alphabet, which letter will be exactly between 8th letter from left and 3rd letter from right?
(a) N (b) O (c) P (d) Q
39. If first three letters of the word 'COMPREHENSION' are reversed and then last three letters are added and then remaining letters reversed and added, then which letter will be exactly in the middle?
[CGPSC 2017]
(a) N (b) S (c) E (d) None of these
40. Which of the following words has its letters in an alphabetical order?
[UP Police 2019]
(a) Shade (b) Heart (c) Billow (d) Charge

TYPE 4. Position of Digits in Number

41. Unscramble the following letters to frame a meaningful word. Then find out the correct numerical position of the letters.

O	T	Y	S	R	H	I
1	2	3	4	5	6	7

- (a) 6742153 (b) 6241375
(c) 6452173 (d) 6347125
42. If the digits in the number 86435192 are arranged in ascending order, what will be the difference between the digits which are second from the right and fourth from the left in the new arrangement?
(a) 1 (b) 2 (c) 3 (d) 4
43. Position of how many digits in the number 9824753 will remain unchanged if the digits within the number are written in ascending order from left to right?
(a) One (b) Two (c) Three (d) None
44. If all the digits in the number '62748593' are written in ascending order from left to right, then which of the following digit is 5th from the left end?
(a) 4 (b) 7 (c) 5 (d) 6
45. Position of first and tenth digits in the number '8526297143' are interchanged. Similarly, the position of the second and ninth digits are interchanged and so on. Which of the following will be the 7th digit from right end after the rearrangement?
(a) 1 (b) 7 (c) 9 (d) None of these

TYPE 5. Dictionary Order

DIRECTIONS (46–50): In each of the following questions arrange the given words as per order in the dictionary.

46. 1. Scarf 2. Scene
3. Shell 4. Survey
5. Stream
(a) 1, 2, 4, 5, 3 (b) 2, 4, 5, 1, 3
(c) 3, 1, 2, 5, 4 (d) 1, 2, 3, 5, 4
47. 1. Resign 2. Repair
3. Residue 4. Research
5. Rescue
(a) 4 5 3 1 2 (b) 2 5 4 3 1
(c) 2 5 4 1 3 (d) 5 4 3 1 2
48. 1. Ambitious 2. Ambiguous
3. Ambiguity 4. Animation
5. Animal
(a) 3, 2, 4, 1, 5 (b) 3, 2, 5, 4, 1
(c) 3, 2, 1, 5, 4 (d) 3, 2, 4, 5, 1
49. (i) Concession (ii) Conception
(iii) Conciliator (iv) Conceive
(v) Concerned
(a) (iv), (v), (iii), (ii), (i) (b) (iv), (ii), (v), (iii), (i)
(c) (iv), (ii), (v), (i), (iii) (d) (iv), (iii), (v), (ii), (i)
50. (i) Inhabit (ii) Ingenious
(iii) Inherit (iv) Influence
(v) Infatuation
(a) (i), (ii), (iii), (iv), (v) (b) (v), (iv), (i), (ii), (iii)
(c) (iv), (v), (ii), (i), (iii) (d) (v), (iv), (ii), (i), (iii)
51. Which of the following words appears first in a dictionary?
(a) Improve (b) Impress
(c) Imprint (d) Impugn
52. Which of the following words appear at 2nd last position in a dictionary?
(a) Walts (b) Wally
(c) Wallow (d) Wallop
53. Arrange the following words in the order in which they appear in an English dictionary. [SSC CPO 2019]
1. Heist 2. Height
3. Heart 4. Hackle
5. Higher
(a) 4, 3, 2, 1, 5 (b) 5, 4, 3, 1, 2
(c) 4, 2, 1, 3, 5 (d) 3, 5, 4, 1, 2
54. Select the option that represents the correct order of the given words as they would appear in an English dictionary. [SSC CPO 2020]
1. Flexible 2. Flower
3. Flooring 4. Flood
5. Floater
(a) 3, 5, 4, 2, 1 (b) 1, 5, 4, 3, 2
(c) 2, 5, 4, 3, 1 (d) 1, 5, 3, 4, 2

55. Arrange the following words in the order in which they appear in an English dictionary. [SSC CPO 2019]

1. General 2. Gender
3. Gasket 4. Genial
5. Gather

- (a) 4, 3, 2, 1, 5 (b) 3, 5, 2, 4, 1
(c) 5, 3, 2, 1, 4 (d) 3, 5, 2, 1, 4

56. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary. [SSC GD Constable 2021]

1. Delicious 2. Deliberate
3. Delinquent 4. Delirium
5. Delicacy

- (a) 2, 5, 3, 4, 1 (b) 2, 5, 1, 4, 3
(c) 2, 5, 1, 3, 4 (d) 3, 5, 1, 4, 2

57. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary. [SSC GD Constable 2021]

1. Poverty 2. Pretension
3. Perturb 4. Pendant
5. Pollution

- (a) 3, 5, 2, 1, 4 (b) 4, 3, 5, 1, 2
(c) 4, 5, 3, 1, 2 (d) 3, 4, 2, 1, 5

58. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary. [SSC GD Constable 2021]

1. Freeze 2. Freedom
3. Fryer 4. Fraud
5. Fringe

- (a) 5, 2, 1, 6, 4, 3 (b) 5, 1, 2, 6, 4, 3
(c) 5, 2, 1, 6, 3, 4 (d) 5, 6, 2, 1, 4, 3

DIRECTIONS (59–62): In each of the following questions arrange the given words as per order in the dictionary.

59. 1. Sorting 2. Solitary [SSC CGL 2021]
3. Solution 4. Sophisticate
5. Solvent

- (a) 2, 3, 5, 4, 1 (b) 2, 3, 1, 4, 5
(c) 2, 4, 1, 3, 5 (d) 2, 5, 3, 4, 1

60. 1. Success 2. Surreal [SSC CGL 2021]
3. Succumb 4. Suction
5. Surrogate

- (a) 1, 3, 4, 6, 2, 5 (b) 1, 3, 4, 6, 5, 2
(c) 1, 3, 6, 4, 2, 5 (d) 1, 4, 3, 6, 2, 5

61. 1. Rightly 2. Rigidly [SSC CGL 2020]
3. Righteous 4. Rigour
5. Rights

- (a) 3, 5, 1, 4, 2 (b) 3, 1, 5, 4, 2
(c) 3, 1, 5, 2, 4 (d) 1, 3, 5, 2, 4

62. 1. Gemlike 2. Geminate [SSC CGL 2020]
3. Gemmier 4. Geminal
5. Gemini

- (a) 4, 2, 5, 1, 3 (b) 4, 3, 2, 1, 5
(c) 3, 5, 4, 1, 2 (d) 4, 5, 2, 1, 3

63. Arrange the following words as per order in the dictionary and choose the one that comes first.
 1. Temple 2. Tenant
 3. Terminate 4. Temperature
 (a) Temple (b) Tenant
 (c) Terminate (d) Temperature
64. Arrange the following words as per the English dictionary and find the last word.
 (a) Lean (b) Leave
 (c) Less (d) Leaf
65. If the given words are arranged according to English dictionary, then which word will be in third place?
 (a) Know (b) Knack
 (c) Knit (d) Knob
66. If the words are organized in reverse order of what they appear in dictionary, then which word will come in the third place?
 (a) Odium (b) Ordeum
 (c) Oculist (d) Odious
67. Which of the following words appear first in a dictionary?
 (a) Improve (b) Impress
 (c) Imprint (d) Impugn

SOLUTIONS

1. (c) The word 'ROLER' cannot be formed using the letters of the word 'EFFLORESCENT' as 2 'R's' are not present.
 E F F L O R E S C E N T → CREST
 E F F L O R E S C E N T → FOREST
E F F L O R E S C E N T → COFFEE
2. (c) The letter 'C' is not present in the given word, therefore the word 'GRAPHIC' cannot be formed using the letters of the word 'AUTOBIOGRAPHY'
 A U T O B I O G R A P H Y → TROOP
 A U T O B I O G R A P H Y → BRIGHT
 A U T O B I O G R A P H Y → TROPHY
3. (d) The letter 'Y' and two 'A's' are not present in the given word, therefore the word 'ANALOGY' cannot be formed using the letters of the word 'CHRONOLOGICAL'.
 C H R O N O L O G I C A L → CALL
 C H R O N O L O G I C A L → LOGIC
C H R O N O L O G I C A L → CALICO
4. (c) The letter 'A' and 'V' are not present in the given word, therefore the word 'PAVEMENT' cannot be formed using the letters of the word 'PRONOUNCEMENT'.
 P R O N O U N C E M E N T → MOUNT
 P R O N O U N C E M E N T → CEMENT
 P R O N O U N C E M E N T → NOUN
5. (c) The letter 'R' is not present in the given word, therefore the word 'SECULAR' cannot be formed using the letters of the word 'SPECULATION'.
S P E C U L A T I O N → SPECIAL
 S P E C U L A T I O N → TOPIC
 S P E C U L A T I O N → CAUTION
6. (d) The letter 'B' is not present in the given word, therefore the word 'AMBITION' cannot be formed using the letters of the word 'EXAMINATION'.
 E X A M I N A T I O N → NATION
E X A M I N A T I O N → EXAM
E X A M I N A T I O N → MENTION
7. (c) Only one 'E' is present in the given word, therefore the word 'SECURE' cannot be formed using the letters of the word 'COURAGEOUS'.
C O U R A G E O U S → COURSE
C O U R A G E O U S → GRACE
 C O U R A G E O U S → ARGUE
8. (d) Only one 'R' is present in the given word, therefore the word 'PRIMER' cannot be formed using the letters of the word 'PRIDICAMENT'.
 P R E D I C A M E N T → CEMENT
 P R E D I C A M E N T → DEMENTIA
P R E D I C A M E N T → PREDICT
9. (c) The letter 'I' is not present in the given word, therefore the word 'SUMMIT' cannot be formed using the letters of the word 'MEASUREMENT'.
M E A S U R E M E N T → MASTER
 M E A S U R E M E N T → EASTERN
M E A S U R E M E N T → MEAN
10. (b) The letter 'A' is not present in the given word, therefore the word 'ABILITY' cannot be formed using the letters of the word 'LEGIBILITY'.
L E G I B I L I T Y → BILL
 L E G I B I L I T Y → BIG
L E G I B I L I T Y → LEG
11. (c)
M E A S U R E M E N T → MASTER
 S U M M I T → 'I' absent in given word.
 A S S U R E → Only one 'S' present in given word
 M A N T L E → 'L' absent in given word

12. (c) C O M M U N I C A T I O N → AMMUNITION
 C O U N T R Y → 'Y' absent in given word.
 U N I F I C A T I O N → 'F' absent in given word.
 M O N I T O R → 'R' absent in given word.

13. (b) R E P U T A T I O N → TUTOR
 R E T I R E → Two 'R's absent in the given word.
 P O N D E R → 'D' absent in the given word.
 R E Q U I R E → 'Q' absent in the given word.

14. (c) U L T R A N A T I O N A L I S M → ULTRAIST
 U L T R A M O N T A N E → 'E' absent in the given word.
 U L T R A M O D E R N → 'E' absent in the given word.
 U L U L A T E → Only one 'U' present in the given word.

15. (b) E X A M I N A T I O N → ANIMATON
 A N I M A L → 'L' absent in the given word.
 N A T I O N A L → 'L' absent in the given word.
 E X A M I N E R → 'R' absent in the given word.

16. (d) T R A D I T I O N A L → RADIO
 A N I M A L → 'M' absent in the given word.
 D I R T Y → 'Y' absent in the given word.
 N A T I O N → Only one 'N' present in the given word.

17. (a) C O N T R O V E R S Y → STORY
 Y O U R S → 'U' absent in the given word.
 R I V E R → 'I' absent in the given word.
 O T H E R → 'H' absent in the given word.

18. (d) C O R R E S P O N D I N G → DISCREN
 R E P E N T → 'T' absent in the given word.
 R E S P O N S E → Only one 'S' present in the given word.
 C O R R E C T → Only one 'C' present in the given word.

19. (b) The only word formed by using the letters of the given word 'IMMEDIATELY' is 'LIMITED'.

I M M E D I A T E L Y → LIMITED

20. (a) 'TAME' is the only word formed by using the letters of the given word 'FUNDAMENTAL'.

F U N D A M E N T A L → TAME

21. (b) The word 'MANGO' has 5 letters and all these letters are different.

Total number of words (with or without meaning) that can be formed using all these 5 letters using each letter exactly once.

Number of arrangements of 5 letters taken all at a time = 5!
 $= 5 \times 4 \times 3 \times 2 \times 1 = 120$

22. (a)

C	O	M	P	A	T	I	B	I	L	I	T	Y
1	2	3	4	5	6	7	8	9	10	11	12	13

Words are M, I, B, L

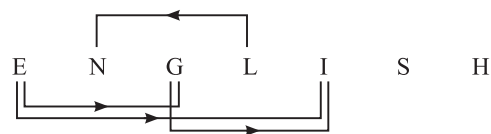
Meaningful Word → LIM B

23. (b) Two meaningful words can be made: ARE, EAR.

24. (d) Four meaningful words can be made: VEIL, VILE, EVIL, LIVE, which is not given in options.

25. (a) Meaningful word is ACID.

26. (d)



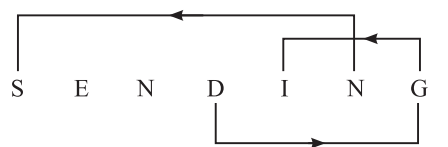
(i) E _ G

(ii) G _ I

(iii) E _ _ I

(iv) L _ N

27. (c)



(i) D _ _ G

(ii) N _ _ _ S

(iii) G _ I

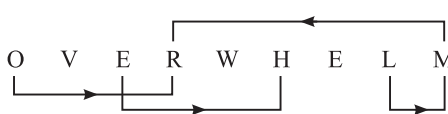
28. (b)



(i) L _ N

(ii) A _ C

29. (d)



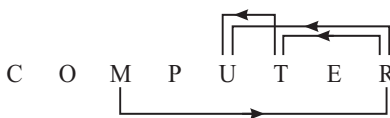
(i) O _ _ R

(ii) L M

(iii) E _ _ H

(iv) M _ _ _ R

30. (d)



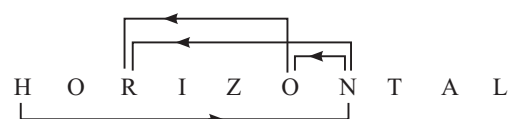
(i) M _ _ _ R

(ii) R _ _ U

(iii) R _ T

(iv) T U

31. (d)



There are four such pairs:

(i) H _ _ _ _ N

(ii) NO

(iii) N _ _ _ R

(iv) O _ _ R

32. (a)



(i) E _ _ _ I

33. (b)
-
- (i) P _ R (ii) DE

34. (c)
-
- (i) S T (ii) N _ _ _ T (iii) G _ I

35. (d)
-
- (i) D _ _ _ _ L (ii) A _ _ D
(iii) A _ _ E (iv) R _ _ V
(v) E _ _ I (vi) DE
(vii) L _ _ _ R (viii) V _ _ _ A
(ix) DE

There are nine such pairs.

36. (b) 8th to the left of 25th letter from left end = $25 - 8 = 17$ th from left
Hence, Q is the answer.
37. (c) 6th to left of 17th letter from right = $17 + 6 = 23$ rd from right
Now, 23rd from right = $27 - 23 = 4$ th from left
Hence, D is the answer.
38. (c) 3rd letter from right = $27 - 3 = 24$ th from left
Now, mid letter = $\frac{8 + 24}{2} = \frac{32}{2} = 16$ th from left
Hence, P is the answer.
39. (b) Given word: 'COMPREHENSION'
After Rearrangement: 'MOCIONSNEHERP'.
Hence, after the rearrangement letter 'S' is exactly in the middle of the word formed.
40. (c) The word 'Billow' has its letters in an alphabetical order.
41. (a) Only the arrangement of option (a) forms the meaningful word as follows.

6	7	4	2	1	5	3
↓	↓	↓	↓	↓	↓	↓
H	I	S	T	O	R	Y

42. (d) Number formed after rearrangement of digits is 12345689
Digit which is second from the right = 8
Digit which is fourth from the left = 4
Required Difference = $8 - 4 = 4$.
43. (a) Given number - '9824753'
After rearrangement - '2345789'
Hence, the position of '7' in the number remains unchanged.
44. (d) Given number: '62748593'.
After rearrangement: '23456789'.
Hence, 5th digit from the left end is '6'.

45. (b) Given number: '8526297143'
After rearrangement: '3417926258'
Hence, the position of no digit remains unchanged.
46. (d) The arrangement of the words in dictionary order will be as follows:
Scarf → Scene → Shell → Stream → Survey
(1) → (2) → (3) → (5) → (4)
47. (b) The arrangement of the words in dictionary order will be as follows:
Repair → Rescue → Research → Residue → Resign
(2) → (5) → (4) → (3) → (1)
48. (c) The arrangement of the words in dictionary order will be as follows:
Ambiguity → Ambiguous → Ambitious → Animal → Animation
(3) → (2) → (1) → (5) → (4)
49. (c) The arrangement of the words in dictionary order will be as follows:
Conceive → Conception → Concerned → Concession → Conciliator
(iv) → (ii) → (v) → (i) → (iii)
50. (d) The arrangement of the words in dictionary order will be as follows:
Infatuation → Influence → Ingenious → Inhabit → Inherit
(v) → (iv) → (ii) → (i) → (iii)
51. (b) The arrangement of the words in a dictionary in an increasing order will be as follows:
Impress → Imprint → Improve → Impugn.
The word 'Impress' would appear first in the dictionary.
52. (b) The arrangement of the words in dictionary order will be as follows:
Wallop → Wallow → Wally → Walts
Hence, the word 'Wally' would appear at second last position in the dictionary.
53. (a) The arrangement of the words in a dictionary in increasing order will be as follows:
Hackle → Heart → Height → Heist → Higher
(4) → (3) → (2) → (1) → (5)
Hence, the correct order is '4, 3, 2, 1, 5'.
54. (b) The arrangement of the words in a dictionary in increasing order will be as follows:
Flexible → Floater → Flood → Flooring → Flower
(1) → (5) → (4) → (3) → (2)
Hence, the correct order is '1, 5, 4, 3, 2'.
55. (d)
Gasket → Gather → Gender → General → Genial
(3) → (5) → (2) → (1) → (4)
56. (c) The order of words in the dictionary will be as follows:
Deliberate → Delicacy → Delicious → Delinquent → Delirium
(2) → (5) → (1) → (3) → (4)
57. (b) The order of words in the dictionary will be as follows:
Pendant → Perturb → Pollution → Poverty → Pretension
(4) → (3) → (5) → (1) → (2)



58. (a) The arrangement of the words in a dictionary order will be as follows:

Fraud → Freedom → Freeze → Fringe → Frozen → Fryer
(5) → (2) → (1) → (6) → (4) → (3)

59. (a) The order of words in the dictionary will be as follows:

Solitary → Solution → Solvent → Sophisticate → Sorting

60. (a) The order of the words in the dictionary will be as follows:

Success → Succumb → Suction → Surprise → Surreal → Surrogate

61. (c) The order of the words in the dictionary will be as follows:

Righteous → Rightly → Rights → Rigidly → Rigour

62. (a) The meaningful order must be as follows:

Geminal → Geminat → Gemini → Gemlike → Gemmier

63. (d) The arrangement of the words in a dictionary in increasing order will be as follows:

Temperature → Temple → Tenant → Terminate.

The word 'Temperature' will come first in the sequence.

64. (c) The arrangement of the words in a dictionary in increasing order will be as follows:

Leaf → Lean → Leave → Less.

The word 'Less' will come last in the sequence.

65. (d) The arrangement of the words in a dictionary in increasing order will be as follows:

knack → knit → knob → know.

The word 'knob' will come at third place in the sequence.

66. (d) The arrangement of the words in a dictionary in an increasing order will be as follows:

Oculist → Odious → Odium → Ordeum.

In reverse order Ordeum → Odium → Odious → Oculist.

In reverse order, the word 'Odious' will come at third place.

67. (b) The arrangement of the words in a dictionary in an increasing order will be as follows:

Impress → Imprint → Improve → Impugn.

The word 'Impress' would appear first in the dictionary.



3 CHAPTER

ARRANGEMENT OF WORDS IN LOGICAL ORDER

QUESTIONS

DIRECTIONS (1–47): In each of the following questions, arrange the given words in a meaningful sequence and then choose the most appropriate sequence, from amongst the alternatives provided below each question.

1. 1. Hexagon 2. Nonagon [SSC CGL 2020]
3. Pentagon 4. Heptagon
5. Octagon
(a) 3-1-4-5-2 (b) 1-4-5-2-3
(c) 1-3-4-5-2 (d) 4-3-1-2-5
2. 1. Writing 2. Distributing
3. Publishing 4. Printing [SSC CGL 2018]
5. Editing
(a) 1, 2, 3, 4, 5 (b) 2, 4, 3, 1, 5
(c) 2, 3, 4, 5, 1 (d) 1, 5, 4, 3, 2
3. 1. Probation 2. Promotion [SSC CGL 2018]
3. Job 4. Interview
5. Confirmation
(a) 5, 4, 2, 1, 3 (b) 4, 1, 2, 5, 3
(c) 5, 1, 4, 2, 3 (d) 4, 3, 1, 5, 2
4. 1. Key 2. Door
3. Lock 4. Room
(a) 1, 2, 3, 4 (b) 1, 2, 4, 3
(c) 1, 3, 2, 4 (d) 4, 2, 1, 3
5. 1. Printer 2. Seller
3. Writer 4. Editor
5. Publisher
(a) 2, 3, 4, 1, 5 (b) 2, 4, 3, 5, 1
(c) 3, 4, 1, 5, 2 (d) 3, 4, 2, 1, 5
6. 1. Selection 2. Interview
3. Probation 4. Appointment
5. Advertisement
(a) 5, 1, 3, 2, 4 (b) 5, 2, 1, 4, 3
(c) 5, 3, 2, 1, 4 (d) 5, 4, 2, 3, 1
7. 1. Rivulet 2. River
3. Tributary 4. Ocean
5. Sea 6. Rain
(a) 613254 (b) 631254
(c) 653142 (d) 621354

8. 1. Epilogue 2. Chapter
3. Index 4. Prologue
5. Cover
(a) 1, 5, 2, 4, 3 (b) 1, 4, 3, 2, 5
(c) 3, 4, 2, 1, 5 (d) 5, 4, 3, 2, 1
9. 1. Frog 2. Eagle
3. Grasshopper 4. Snake
5. Grass
(a) 2, 1, 4, 5, 3 (b) 3, 1, 4, 2, 5
(c) 3, 4, 1, 5, 2 (d) 5, 3, 1, 4, 2
10. 1. Child 2. Profession
3. Marriage 4. Infant
5. Education
(a) 1, 3, 4, 2, 5 (b) 2, 1, 4, 3, 5
(c) 4, 1, 5, 2, 3 (d) 5, 4, 1, 3, 2
11. 1. Mega 2. Kilo
3. Tera 4. Giga
(a) 1, 2, 3, 4 (b) 1, 3, 2, 4
(c) 2, 1, 4, 3 (d) 2, 4, 3, 1
12. 1. Silicon chips 2. Transistors
3. Vacuum tube 4. Integrated circuits
(a) 3, 2, 4, 1 (b) 3, 4, 1, 2
(c) 4, 1, 3, 2 (d) 4, 2, 3, 1
13. 1. Stone 2. Sand
3. Rock 4. Boulder
5. Hill
(a) 1, 4, 2, 3, 5 (b) 2, 1, 3, 4, 5
(c) 5, 3, 2, 1, 4 (d) 5, 4, 2, 1, 3
14. 1. Weaving 2. Cotton
3. Cloth 4. Thread
(a) 4, 2, 1, 3 (b) 3, 1, 4, 2
(c) 2, 4, 3, 1 (d) 2, 4, 1, 3
15. 1. Substance 2. Atom
3. Molecule 4. Proton
(a) 1, 4, 2, 3 (b) 1, 3, 4, 2
(c) 4, 2, 3, 1 (d) 4, 1, 3, 2
16. 1. Orange 2. Indigo
3. Red 4. Blue
5. Green 6. Yellow
7. Violet
(a) 7, 2, 6, 4, 5, 1, 3 (b) 7, 2, 6, 4, 1, 5, 3
(c) 7, 2, 4, 6, 5, 1, 3 (d) 7, 2, 4, 5, 6, 1, 3



- | | | | |
|---|--|--|--|
| 17. 1. Ghee
3. Curd
5. Butter
(a) 3, 2, 5, 4, 1
(c) 4, 2, 5, 3, 1 | 2. Milk
4. Cow
(b) 4, 2, 3, 5, 1
(d) 5, 1, 2, 4, 3 | 28. 1. Sentence
3. Chapter
5. Paragraph
(a) 1, 3, 2, 4, 5
(c) 3, 5, 1, 4, 2 | 2. Word
4. Phrase
(b) 2, 3, 5, 4, 1
(d) 4, 3, 1, 2, 5 |
| 18. 1. Standing
3. Walking
5. Running
(a) 2, 1, 3, 4, 5
(c) 2, 4, 1, 5, 3 | 2. Crawling
4. Sitting
(b) 2, 1, 4, 3, 5
(d) 4, 2, 1, 3, 5 | 29. 1. Major
3. Colonel
5. Lt. General
(a) 4, 1, 5, 3, 2
(c) 5, 4, 3, 1, 2 | 2. Captain
4. Brigadier
(b) 4, 5, 1, 2, 3
(d) 5, 1, 4, 2, 3 |
| 19. 1. House
3. Bungalow
(a) 4, 1, 3, 2
(c) 2, 3, 1, 4 | 2. Palace
4. Hut
(b) 3, 2, 1, 4
(d) 2, 1, 3, 4 | 30. 1. Lungs
3. Windpipe
(a) 1, 2, 3, 4
(c) 2, 3, 1, 4 | 2. Nostrils
4. Blood
(b) 1, 3, 4, 2
(d) 4, 3, 2, 1 |
| 20. 1. Type
3. Open
5. Close
(a) 3, 5, 4, 2, 1
(c) 3, 2, 1, 4, 5 | 2. Print
4. Save
(b) 3, 4, 1, 2, 5
(d) 3, 1, 4, 2, 5 | 31. 1. Golden
3. Platinum
(a) 1, 2, 3, 4
(c) 3, 4, 2, 1 | 2. Silver
4. Diamond
(b) 2, 1, 4, 3
(d) 4, 1, 2, 3 |
| 21. 1. Apartment
3. Street
5. Complex
(a) 1, 4, 5, 3, 2
(c) 2, 1, 3, 4, 5 | 2. Town
4. Building
(b) 1, 5, 4, 3, 2
(d) 4, 5, 3, 2, 1 | 32. 1. Rain
3. Water
5. Cloud
(a) 1, 3, 2, 4, 5
(c) 3, 2, 5, 4, 1 | 2. Vaporisation
4. Condensation
(b) 2, 3, 5, 4, 1
(d) 5, 3, 4, 1, 2 |
| 22. 1. Infant
3. Adult
5. Child
(a) 1, 5, 4, 3, 2
(c) 3, 4, 2, 1, 5 | 2. Old
4. Adolescent
(b) 2, 3, 4, 5, 1
(d) 5, 4, 3, 2, 1 | 33. 1. Stomach
3. Knee
5. Waist
(a) 3, 5, 1, 2, 6, 4
(c) 2, 5, 3, 4, 6, 1 | 2. Feet
4. Neck
6. Chest
(b) 2, 3, 5, 1, 6, 4
(d) 2, 4, 5, 6, 3, 1 |
| 23. 1. Pupa
3. Moth
(a) 1, 2, 3, 4
(c) 4, 1, 2, 3 | 2. Larva
4. Eggs
(b) 3, 4, 1, 2
(d) 4, 2, 1, 3 | 34. 1. Absorption
3. Nutrition
(a) 3, 1, 2, 4
(c) 3, 4, 2, 1 | 2. Digestion
4. Excretion
(b) 2, 1, 3, 4
(d) 3, 2, 1, 4 |
| 24. 1. Diagnosis
3. Sick
5. Recovery
(a) 1, 2, 3, 5, 4
(c) 3, 2, 1, 4, 5 | 2. Doctor
4. Treatment
(b) 2, 1, 3, 4, 5
(d) 4, 5, 1, 3, 2 | 35. 1. Elephant
3. Mosquito
5. Whale
(a) 2, 5, 1, 4, 3
(c) 1, 3, 5, 4, 2 | 2. Cat
4. Tiger
(b) 5, 3, 1, 2, 4
(d) 3, 2, 4, 1, 5 |
| 25. 1. S. Radhakrishnan
3. Giani Zail Singh
5. A.P.J. Abdul Kalam
(a) 1, 2, 4, 3, 5
(c) 2, 1, 3, 4, 5 | 2. Rajendra Prasad
4. V.V. Giri
(b) 1, 4, 2, 3, 5
(d) 2, 1, 4, 5, 3 | 36. 1. Brahmaputra
3. Chilika
(a) 1, 4, 3, 2
(c) 3, 1, 4, 2 | 2. Atlantic
4. Bay of Bengal
(b) 2, 4, 3, 1
(d) 3, 4, 2, 1 |
| 26. 1. Plastering
3. Foundation
5. Ceiling
(a) 3, 4, 5, 1, 2
(c) 3, 5, 4, 2, 1 | 2. Painting
4. Walls
(b) 4, 5, 3, 1, 2
(d) 4, 5, 3, 2, 1 | 37. (i) Plant
(iii) Fruit
(a) (iv), (ii), (iii), (i)
(c) (iv), (i), (iii), (ii) | (ii) Seed
(iv) Seedling
(b) (ii), (iii), (i), (iv)
(d) (ii), (iv), (i), (iii) |
| 27. 1. Grandfather
3. Father
5. Grandson
(a) 4, 5, 2, 1, 3
(c) 5, 4, 1, 3, 2 | 2. Brother
4. Son
(b) 5, 1, 3, 2, 4
(d) 5, 4, 2, 3, 1 | 38. 1. Earth
3. Venus
5. Mercury
(a) 5, 3, 1, 2, 4
(c) 5, 3, 1, 4, 2 | 2. Jupiter
4. Mars
(b) 5, 3, 4, 1, 2
(d) 5, 3, 2, 4, 1 |



39. 1. Pages 2. Book rack
3. Library 4. Books
5. Catalogue
(a) 2, 5, 4, 3, 1 (b) 1, 5, 4, 3, 2
(c) 1, 4, 2, 5, 3 (d) 1, 2, 4, 5, 3
40. 1. Implementation 2. Conceptual Modelling
3. Requirements Analysis 4. Logical Modelling
5. Physical Model
6. Schema Refinement
(a) 3, 2, 1, 4, 6, 5 (b) 3, 2, 4, 1, 6, 5
(c) 1, 3, 2, 6, 5, 4 (d) 3, 2, 5, 4, 6, 1
41. (i) Destination (ii) Booking
(iii) Boarding (iv) Travel
(v) Planning
(a) (iv), (iii), (i), (ii), (v) (b) (v), (ii), (iii), (iv), (i)
(c) (i), (ii), (iii), (iv), (v) (d) (iii), (iv), (v), (i), (ii)
42. (i) Family (ii) Community
(iii) Member (iv) Locality
(v) Country
(a) (iii), (i), (iv), (ii), (v) (b) (iii), (i), (ii), (iv), (v)
(c) (iii), (i), (ii), (v), (iv) (d) (iii), (i), (iv), (v), (ii)
43. (i) Income (ii) Fame
(iii) Education (iv) Employment
(a) (i), (ii), (iii), (iv) (b) (iii), (iv), (i), (ii)
(c) (iii), (iv), (ii), (i) (d) (iv), (iii), (ii), (i)
44. (i) Study (ii) Job
(iii) Examination (iv) Earn
(v) Appointment
(a) (i), (iii), (v), (ii), (iv) (b) (i), (ii), (iii), (iv), (v)
(c) (i), (iii), (ii), (v), (iv) (d) (i), (iii), (v), (iv), (ii)
45. (i) Electricity (ii) Dam
(iii) Lights (iv) River
(v) Power House
(a) (iv), (ii), (i), (iii), (v) (b) (iv), (ii), (v), (iii), (i)
(c) (iv), (ii), (iii), (i), (v) (d) (iv), (ii), (v), (i), (iii)
46. (i) Birth (ii) Death
(iii) Funeral (iv) Marriage
(v) Education
(a) (i), (iii), (iv), (v), (ii) (b) (iv), (v), (iii), (i), (ii)
(c) (i), (v), (iv), (ii), (iii) (d) (ii), (iii), (iv), (v), (i)
47. (i) Accident (ii) Judge
(iii) Doctor (iv) Lawyer
(v) Police
(a) (i), (iii), (iv), (ii), (v) (b) (i), (iii), (v), (iv), (ii)
(c) (i), (ii), (iii), (iv), (v) (d) (i), (ii), (v), (iv), (iii)

Pentagon → Hexagon → Heptagon → Octagon → Nonagon
(3) (1) (4) (5) (2)

2. (d) These are the stages of publishing
Writing → Editing → Printing → Publishing → Distributing
(1) (5) (4) (3) (2)
3. (d) These are the steps in the staffing process.
Interview → Job → Probation → Confirmation → Promotion
(4) (3) (1) (5) (2)
4. (c) Key → Lock → Door → Room
(1) (3) (2) (4)

Logic: We use the Key (1) to open the Lock (3). Then, we open the Door (2) and enter the Room (4).

6. (c) Writer → Editor → Printer → Publisher → Seller
(3) (4) (1) (5) (2)

Logic: Sequence in which a book is published and sold: First the Writer (3) writes the book. Then, it goes to the Editor(4) for review and editing. Then, it goes to the Printer(1) for printing.

Then, it goes to the Publisher (5) who sends it to the seller (2) for sale in the market.

6. (b) Advertisement → Interview → Selection →
(5) (2) (1)
Appointment → Probation
(4) (3)

Logic: Sequence in which employment is sought: A candidate looks at an Advertisement (5) for Job. He then goes for an Interview (2). He undergoes Selection (1) and once selected, he gets an Appointment (4). Once appointed, he is asked to join on Probation(3).

7. (a) Rain → Rivulet → Tributary → River → Sea → Ocean
(6) (1) (3) (2) (5) (4)

Logic: Sequence in which rain water reaches the ocean

[Rivulet: A small stream of water]

8. (d) Cover → Prologue → Index → Chapter → Epilogue
(5) (4) (3) (2) (1)

Logic: Sequence of the various components of a book.

(i) Prologue: Preface (an introduction which gives the scope of the body).

(ii) Index: list of contents.

(iii) Epilogue: a section at the end of the book that gives a conclusion to what was discussed in the book.

9. (d) Grass → Grasshopper → Frog → Snake → Eagle
(5) (3) (1) (4) (2)

Logic: Sequence in which organisms form a part of a food chain.

10. (c) Infant → Child → Education → Profession → Marriage
(4) (1) (5) (2) (3)

Logic: Sequence of changes that take place during the life span of a human being.

11. (c) Kilo → Mega → Giga → Tera
(2) (1) (4) (3)

Logic: Sequence of the memory size of a computer or a device (given in bytes)

Kilo = 10^3

Mega = 10^6

Giga = 10^9

Tera = 10^{12}

SOLUTIONS

1. (a) The given sequence represents various polygons in increasing order of the number of sides.