MENTAL ABILITY

&

COMPUTER SCIENCE

WORK BOOK

VERBAL REASONING

CHAPTER – 1

NUMBER SERIES

Direction (1 – 30): In the following questions, a series of numbers is given with a particular logic. Find the number which can continue the series with same logic.

1.   2, 7, 9, 16, _____   [**B**]

        (A) 24   (B) 25   (C) 27   (D) 29

2.   54, 47, 40, 33, _____   [**C**]

        (A) 24   (B) 25   (C) 26   (D) 28

3.   5, 12, 18, 23, _____   [**A**]

        (A) 27   (B) 24   (C) 25   (D) 29

4.   4, 12, 48, 240, _____   [**A**]

        (A) 1440   (B) 1480   (C) 1360   (D) None of these

5.   3, 7, 10, 17, 27, _____   [**D**]

        (A) 30   (B) 54   (C) 37   (D) 44

6.   3, 6, 12, 21, 33, _____   [**A**]

     (A) 48   (B) 45   (C) 43   (D) 51

7.   7, 14, 28, 56, _____   [**B**]

     (A) 102   (B) 112   (C) 84   (D) 122

8.   3, 15, 75, 375, _____   [**B**]

     (A) 1860   (B) 1875   (C) 1975   (D) 1775

9.   1, 2, 4, 6, 16, 18, 64, 54, _____, _____   [**A**]

     (A) 256, 162   (B) 250, 150   (C) 225, 136   (D) 220, 130

10.   7203, 1029, 147, 21, 3, _____   [**C**]

     (A) 0   (B) 1/7   (C) 3/7   (D) 7

11.   7, 15, 31, 63, 127, _____   [**D**]

     (A) 254   (B) 265   (C) 253   (D) 255

12.   1, 3, 3, 6, 7, 9, _____, 12, 21   [**D**]

     (A) 10   (B) 11   (C) 12   (D) 13

13.   4, 32, 128, _____   [**D**]

     (A) 128   (B) 144   (C) 192   (D) 256

14.   98, 72, 14, _____   [**D**]

     (A) 9   (B) 8   (C) 6   (D) 4

15.   5, 7, 10, 15, 22, _____   [**C**]

     (A) 31   (B) 32   (C) 33   (D) 34

16.   10, 19, 40, 77, 158, _____   [**A**]

     (A) 311   (B) 307   (C) 301   (D) 299

17.   2, 3, 5, 8, 13, 21, _____   [**D**]

     (A) 29   (B) 30   (C) 32   (D) 34

18.   0, 2, 3, 5, 8, 10, 15, 17, 24, 26, _____   [**A**]

     (A) 35   (B) 32   (C) 30   (D) 28

19. 1317, 1923, 2931, _____   [**B**]

    (A) 3335   (B) 3741   (C) 3941   (D) 3337

20. 5, 25, 61, 113, 181, _____   [**C**]

    (A) 266   (B) 250   (C) 265   (D) 300

21. 9, 15, 23, 33, _____   [**D**]

    (A) 44   (B) 36   (C) 38   (D) 45

22. 12, 8, 14, 6, 16, _____   [**D**]

    (A) 18   (B) 32   (C) 5   (D) 4

23. 9, 6, 16, 10, 30, 18, _____, 34   [**A**]

    (A) 36   (B) 60   (C) 58   (D) 60

24. 68, 81, 96, _____, 132   [**D**]

    (A) 105   (B) 110   (C) 130   (D) 113

25. 111, 115, 119, 123, _____   [**C**]

    (A) 129   (B) 128   (C) 127   (D) 125

26. 7, 14, 32, 60, 134, _____   [**D**]

    (A) 169   (B) 176   (C) 182   (D) 186

27. 263, 3155, 5357, 77711, 1114313, 1322117, _____   [**D**]

    (A) 1732119   (B) 1732819   (C) 1742451   (D) 1732319

28. 1, 5, 20, 107, 760, _____   [**B**]

    (A) 8360   (B) 8373   (C) 8375   (D) 8379

29. 2, 2, 5, 13, 28, _____   [**D**]

    (A) 49   (B) 50   (C) 51   (D) 52

30. 2, 7, 27, 107, 427, _____   [**B**]

    (A) 1262   (B) 1707   (C) 4027   (D) 4227

CHAPTER – 2

LETTER SERIES

Direction (1 – 10): In the following questions, a series of letters/letter group are given with a particular logic. Find the letter / letter group which can continue the series with same logic.

1. AZ, BY, DW, GT, _____   [**A**]

   (A) KP   (B) KQ   (C) JQ   (D) JP

2. BH, DK, FN, HQ, _____   [**C**]

   (A) IS   (B) IT   (C) JT   (D) JS

3. SHEL TERS, SHEL TER, HEL TER, HEL TE, EL TE, ELT, _____   [**B**]

   (A) EL   (B) LT   (C) ET   (D) ELT

4. CX, EU, HS, JP, MN, _____   [**B**]

   (A) PL   (B) OK   (C) PK   (D) OL

5. HIJ, IJK, JKL, KLM, _____   [**B**]

   (A) LMO   (B) LMN   (C) MNO   (D) MNO

6. Z, W, T, Q, N, _____   [**C**]

   (A) M   (B) L   (C) K   (D) J

7. Q, S, U, W, _____   [**B**]

   (A) X   (B) Y   (C) Z   (D) A

8. AHO, BIP, CJQ, _____   [**A**]

   (A) DKR   (B) DLR   (C) EKR   (D) DKS

9. AZYB, CXVE, FURI, _____   [**C**]

   (A) KQPL   (B) JRNM   (C) JQMN   (D) ISPM

10. U, O, I, E, _____   [**A**]

    (A) A   (B) B   (C) C   (D) Z

Direction (11 – 15): A pyramid of letters is given below. Study the pyramid and select the correct alternative to fill in the missing term.

					A					
				N	M	B				
			Y	X	O	L	C			
		H	G	Z	W	P	K	D		
	O	N	I	F	A	V	Q	J	E	
T	S	P	M	J	E	B	U	R	I	F
W	V	U	R	Q	L	K	D	C	T	S	H	G

11. HNPRQ, GIMQL, ZFJLK, _____, PVBDC _____ [**B**]

    (A) QLKDC   (B) WAEKD   (C) WPVBD   (D) IFAVQ

12. FHSIE, ISTRJ, RTCUQ, UCDBV, _____ [**C**]

    (A) JLKDC   (B) JQVA   (C) BDKEA   (D) BDCTS

13. TGIM, LOXY, ZFJL, _____ [**D**]

    (A) CUQK   (B) JQVA   (C) PWZG   (D) KPWZ

14. GYXOW, ZXOLP, FZWPV, _____ [**A**]

    (A) AWPKQ   (B) PVQIE   (C) KQUCT   (D) EBURI

15. AMONB, YGIHZ, _____ [**C**]

    (A) LPVBD   (B) FAVQJ   (C) OSUTP   (D) LPVQJ

Direction (16 – 25): In each of the following letter series, some of the letters are missing which are given in that order as one of the alternative below it. Choose the correct alternative:

16. ____abb __ __bb___a___bbab__ba [**B**]

    (A) bababa   (B) bbabbb   (C) ababaa   (D) aaaabb

17. b__ccacca__ba__bbc___bc___a [**A**]

    (A) baabc   (B) abaaa   (C) acbca   (D) bacab

18. ___acca___ccca____acccc___aaa [**B**]

    (A) acca   (B) caaa   (C) ccaa   (D) caac

19.   ___bc__ca___aba____c__ca   [**A**]

(A) abcbb   (B) bbbcc   (C) bacba   (D) abbcc

20.   ___lm___kal___ckalmc___   [**D**]

(A) almk   (B) alck   (C) akcl   (D) acmk

21.   a__b c a b _ _ _ b b c   [**A**]

(A) bbca   (B) abab   (C) bcbc   (D) cabc

22.   lmn _nopn _ pqr _ p _ rs _   [**B**]

(A) noprt   (B) mooqt   (C) nooqt   (D) ostsr

23.   bc _ b _ c _ b _ ccb   [**A**]

(A) cbcb   (B) bbcb   (C) cbbc   (D) bcbc

24.   a_c d a _ d b a _ b c a _ c d   [**A**]

(A) bcdb   (B) adbc   (C) abcd   (D) dcba

25.   abca _ bcaab _ a _ bc _   [**C**]

(A) ccaa   (B) bbaa   (C) acaa   (D) abba

CHAPTER – 3

ALPHA NUMERIC SERIES

Direction (1 – 25): In the following questions, letters and numbers are arranged in a particular order with some underlying criterion. Study the pattern to find out the order and fill in the blanks from the given alternatives.

1.   AC2, FH7, KM12, _____   [**B**]

(A) OP17   (B) PR17   (C) PQ15   (D) PR16

2.   AD6, EH42, IL 110, _____   [**A**]

(A) MP210   (B) MP198   (C) PM200   (D) PQ202

3.   AB5, BC13, CD25, _____   [**C**]

(A) DE36   (B) DE14   (C) DE41   (D) ED41

4.   AZ7, ZA12, YB22, XC42, _____   [**A**]

(A) WD82   (B) WD80   (C) DW82   (D) DW80

5.   2E3, 5L7, 11X13, _____   [**B**]

(A) 17K19   (B) 17J19   (C) 15L17   (D) 15J17

6.   A3B, D9E, G15H, _____   [**A**]

(A) J21K   (B) K21J   (C) 119J   (D) 120J

7.   D2, H3, L5, P7, _____   [**C**]

(A) O11   (B) T10   (C) T11   (D) T12

8.   X8P, S7L, V12J, _____   [**C**]

(A) U3F   (B) A4E   (C) M6G   (D) Q8J

9.   J2Z, K4X, 17V,?, H16R, M22P   [**D**]

(A) I11T   (B) L11S   (C) I12T   (D) L11T

10. Z1A, X2D, V6G, T21J, R88M, P445P,?   [**A**]

(A) N2676S   (B) N2676T   (C) T2670N   (D) T2676N

11. B25C, E121F, H2891, K529L,?   [**C**]

(A) M1413N   (B) N1210O   (C) N841O   (D) N900P

12. B$_2$CD, _____, BCD$_4$, B$_5$CD, BC$_6$D   [**B**]

(A) B$_2$C$_2$D   (B) BC$_3$D   (C) B$_2$C$_3$D   (D) BCD$_7$

13. 2 3 B __ 6 __F G ___ 5 D ___ 8 ____H I   [**A**]

(A) C, 7, 4, E, 9   (B) D, 8, 6, C, 7   (C) E, 8, 7, D, 9   (D) W, 8, 7, I, 6

14. Z___25 Y B 23 X C ___ W ___ 19 ____ E 17   [**A**]

(A) A, 21, D, V   (B) A, 27, C, V   (C) X, 21, C, W   (D) X, 27, F, W

15. D___6 E G P _____ H J ____ 12 K M B 15 ___   [**D**]

(A) E, 7, J, L   (B) F, 8, M, K   (C) G, 9, I, M   (D) J, 9, V, N

16. BD8, FH 48, JL 120,?   [**B**]

(A) MN 24   (B) NP224   (C) NP 147   (D) NP343

17. A12K, B14L, C16M, D18N, ?   [**C**]

   (A) E5O   (B) A6B   (C) E20O   (D) E2O

18. CD9, EF25, GH49, ?, KL 121   [**C**]

   (A) IJ11   (B) LJ9   (C) IJ81   (D) JK25

19. R 324 R, S 361 S, T 400T, ?, V 484 V   [**A**]

   (A) U441U   (B) E 25E   (C) L 144 L   (D) C 9 C

20. FK11, LR15, SZ13, AI17,?   [**A**]

   (A) JS15   (B) UN15   (C) JK15   (D) DF 15

21. U2, B3, I5, P7, W11,?   [**A**]

   (A) D13   (B) F13   (C) Q12   (D) Z15

22. DEF, DEF$_2$, DE$_2$F$_2$, ____, D$_2$E$_2$F$_3$ [**D**]

   (A) DEF$_3$ (B) D$_3$EF$_3$ (C) D$_2$E$_3$F   (D) D$_2$E$_2$F$_2$

23. D8A, C10B, B12C, _____   [**B**]

   (A) A11B   (B) A14D   (C) A12C   (D) A14B

24. 16K, 25L, _____49N   [**A**]

   (A) 36M   (B) 30O   (C) 30M   (D) 32M

25. AYD25, BVF22, DRH18, ?, KGL7   [**B**]

   (A) FMI13   (B) GMJ13   (C) GLJ12   (D) HLK12

CHAPTER – 4

NUMBER ANALOGY

Direction (1 – 27): These questions are based on number analogy. The first pair of numbers has some relationship. You are required to find out the relationship and by the same analogy replace the "?" in the second pair.

1.   17 : 119 : : 13 : ?   [**A**]

     (A) 91   (B) 95   (C) 89   (D) 84

2.   675 : 18 : : 481 : ?   [**B**]

     (A) 9   (B) 13   (C) 15   (D) 17

3.   11 : 121 : : ? : 289   [**B**]

     (A) 16   (B) 17   (C) 18   (D) 19

4.   20 : 11 : : 102 : ?   [**B**]

     (A) 49   (B) 52   (C) 61   (D) 98

5.   8 : 32 : : 10 : ?   [**D**]

     (A) 42   (B) 44   (C) 45   (D) 50

6.   PD : 10 : : CI : ?   [**D**]

     (A) 12   (B) 10   (C) 08   (D) 06

7.   Y/E : 20 : : N/D : ?   [**D**]

     (A) 4   (B) 6   (C) 8   (D) 10

8.   HC : ? : : OK : 110/150   [**D**]

     (A) 10/40   (B) 20/80   (C) 30/60   (D) 30/80

9.   8: 81 : : 64 : ?   [**D**]

     (A) 126   (B) 140   (C) 525   (D) 625

10.   8 : 28 : : 27 : ?   [**D**]

     (A) 8   (B) 28   (C) 64   (D) 65

11. 6 : 18 : : 4 : ?   [**D**]

(A) 2   (B) 6   (C) 18   (D) 16

12. 121 : 12 : : 25 : ?   [**C**]

(A) 2   (B) 1   (C) 6   (D) 7

13. 42 : 20 : : 64 : ?   [**A**]

(A) 31   (B) 32   (C) 33   (D) 34

14. 7528 : 5306 : : 4673 : ?   [**B**]

(A) 2367   (B) 2451   (C) 2531   (D) None of these

15. 25 : 125 : : 36 : ?   [**C**]

(A) 189   (B) 206   (C) 216   (D) 318

16. 2 : 12 : : 3 : ?   [**A**]

(A) 36   (B) 45   (C) 81   (D) 116

17. 17 : 52 : : 1 : ?   [**B**]

(A) 3   (B) 4   (C) 5   (D) 51

18. 3 : 11 : : 7 : ?   [**D**]

(A) 22   (B) 29   (C) 18   (D) 51

19. 15 : 35 : : 63 : ?   [**B**]

(A) 30   (B) 99   (C) 77   (D) 100

20. 347 : 7 : : 738 : ?   [**B**]

(A) 18   (B) 9   (C) 20   (D) 11

21. 123 : 2 : : 345 : ?   [**B**]

(A) 4   (B) 6   (C) 8   (D) 10

22. 64 : 32 : : 84 : ?   [**A**]

(A) 60   (B) 68   (C) 70   (D) 80

23. 24 : 8 : : 48 : ?   [**A**]

(A) 24   (B) 25   (C) 46   (D) 72

24. 62 : 64 : : 53 : ?   [**B**]

    (A) 70   (B) 54   (C) 8   (D) 60

25. 23 : 125 : : 34 : ?   [**A**]

    (A) 343   (B) 216   (C) 162   (D) 600

26. 96 : 9 : : 72 : ?   [**B**]

    (A) 27   (B) 25   (C) 35   (D) 14

27. 24 : 416 : : 46 : ?   [**A**]

    (A) 1636   (B) 1625   (C) 3649   (D) 1216

Directions (28 – 30) : Choose the set of numbers from the four alternatives which is similar to the given set.

28. Given set : (6, 13, 22)   [**C**]

    (A) (16, 23, 30)   (B) (10, 16, 28)   (C) (11, 18, 27)   (D) (13, 19, 27)

29. Given set : (21, 38, 72)   [**A**]

    (A) (12, 16, 24)   (B) (21, 35, 41)   (C) (31, 51, 72)   (D) (21, 31, 45)

30. Given Set : (5, 24, 124)   [**C**]

    (A) (7, 50, 343)   (B) (5, 14, 124)   (C) (3, 8, 26)   (D) (4, 16, 63)

CHAPTER – 5

LETTER ANALOGY

Direction (1 – 25): These questions are based on letter analogy. The first pair of letters has some relationship. You are required to find out the relationship and by the same analogy replace the "?" in the second pair.

1.   YOU : QWA : : SIO : ?   [**C**]

    (A) VRS   (B) PKU   (C) KQU   (D) TZB

2.   RVLP : CGWA : : ? : EIYC   [**B**]

    (A) BFZW   (B) DHXB   (C) DFXZ   (D) FHMN

3.   GERM : MERG : : STAR : ?   [**C**]

    (A) TSRA   (B) RTSA   (C) RTAS   (D) TARS

4.   ROAST : PQYUR : : SLOPPY : ?   [**C**]

    (A) MRNAQN   (B) NRMNQA   (C) QNMRNA   (D) RANNMQ

5.   DGPGJ : MPQPS : : KNENQ : ?   [**A**]

    (A) TWFWZ   (B) RFUFX   (C) RXUXF   (D) TUFUX

6.   BYCX : DWEV : : FUGT : ?   [**D**]

    (A) HSIQ   (B) GRHQ   (C) IT JS   (D) HSIR

7.   ADGJ : KNQT : : ? : MPSV   [**D**]

    (A) CIEL   (B) DJGM   (C) CLFI   (D) CFIL

8.   HFEGD : MKJLI : : RPOQN : ?   [**A**]

    (A) WUTVS   (B) XVUWT   (C) WUTXS   (D) WVUTS

9.   PSVY : ORUX : : BEHK : ?   [**C**]

    (A) AFDJ   (B) ADEJ   (C) ADGJ   (D) DFAJ

10.   BSNL : LNSB : : ADMK : ?   [**A**]

    (A) KMDA   (B) DAKM   (C) MADK   (D) KADM

11. HOT : INU : : RED : ? [**D**]

(A) SDC (B) RDC (C) RFE (D) SDE

12. GATE : TZGV : : ROSE : ? [**B**]

(A) SLTV (B) ILHV (C) QLRV (D) SLVT

13. HASTE : 45793 : : STATE : ? [**D**]

(A) 79593 (B) 79343 (C) 79394 (D) 45723

14. QUEEN : NEEUQ : : STARK : ? [**C**]

(A) TUBSL (B) RSZQJ (C) KRATS (D) KRTAS

15. AXE : EYI : : AIM : ? [**B**]

(A) EON (B) MIA (C) AON (D) EIM

16. PASS : QBTT : : FAIL : ? [**B**]

(A) GJBM (B) GBJM (C) MBJG (D) MJBG

17. BLOCKED : YOLXPVW : : ? : OZFMXS [**D**]

(A) DEBATE (B) RESULT (C) LABOR (D) LAUNCH

18. CEDH : HDEC : : ? : PNRV [**A**]

(A) VRNP (B) RNPV (C) NRVP (D) VNRP

19. DFHJ : LNPR : : TVXZ : ? [**C**]

(A) DBFH (B) DBHF (C) BDFH (D) FDBH

20. ACEG : ? : : BDFH : KMOQ [**C**]

(A) NLPR (B) LMNO (C) JLNP (D) JNLO

21. EGIK is related to WUSQ in the same way as DFHJ is related to... [**D**]

(A) BDFH (B) ECGI (C) SQOM (D) XVTR

22. DWH is related to WDS in the same way as FUL is related to ... [**A**]

(A) UFO (B) OFU (C) FOU (D) ELV

23. As COUNSEL is to BITIRAK, so also GUIDANCE is to.... [**B**]

(A) EQHYZKBB (B) FOHYZJBB (C) FPHZZKAB (D) HOHYBJBA

24. CFED is related to PSQR in the same way as JMKL is related to... [**C**]

(A) YXZW   (B) YVZX   (C) WZWZ   (D) UVXZ

25. USPL is to KMPT as LJGC is to ..... [**A**]

(A) BDGK   (B) CEHL   (C) GHIJ   (D) QSUW

CHAPTER – 6

WORD ANALOGY

Direction (1 – 25) : There is a certain relationship between two given words on one side of :: and, one word is given on another side of :: while another word is to be found from the given alternatives, having the same relation with the word as the given pair.

1. Heart : Blood :: Lung :? [**B**]

(A) Air   (B) Oxygen   (C) Chest   (D) Respiration

2. Doctor : Diagnosis :: Judge : ? [**D**]

(A) Court   (B) Punishment   (C) Lawyer   (D) Judgement

3. Mount Everest : Nepal :: Nanga Parbat :? [**C**]

(A) Pakistan   (B) China   (C) India   (D) Nepal

4. Bouquet : Flowers :: Sentence :? [**B**]

(A) Construction   (B) Words   (C) Letters   (D) Paragraph

5. Man : Shout :: Crow : ? [**A**]

(A) Caw   (B) Chirp   (C) Mutter   (D) Mob

6. Circle : Circumference : : Square? [**D**]

(A) Volume   (B) Area   (C) Diagonal   (D) Perimeter

7. Bank : Money :: Transport :? [**A**]

(A) Goods   (B) Road   (C) Traffic   (D) Money

8. Cells : Tissues :: Atoms :? [**B**]

(A) Elements   (B) Molecules   (C) Electrons   (D) Organs

9.   China : Beijing :: Pakistan : ?   [**A**]

(A) Islamabad   (B) Karachi   (C) Baghdad   (D) Teheran

10.   Reading : Knowledge :: Work :?   [**A**]

(A) Experience   (B) Engagement   (C) Employment   (D) Money

11.   Needle : Clock ::Wheel : ?   [**C**]

(A) Walk   (B) Road   (C) Vehicle   (D) Driving

12.   Lock : Key :: Needle :?   [**C**]

(A) Cloth   (B) Tailor   (C) Thread   (D) Button

13.   Rich : Poor :: Night :?   [**C**]

(A) Moon   (B) Sun   (C) Dark   (D) Day

14.   Car : Petrol :: Television :?   [**C**]

(A) Antenna   (B) Entertainment   (C) Electricity   (D) Transmission

15.   Eye : Blink :: Heart : ?   [**B**]

(A) To Walk   (B) Beat   (C) To Pump air   (D) Shiver

16.   Cunning : Fox :: Fool :?   [**A**]

(A) Ass   (B) Horse   (C) Cat   (D) Rabbit

17.   Circus : Entertainment :: Temple : ?   [**C**]

(A) Devotion   (B) Donation   (C) Worship   (D) Deity

18.   Face : Expression :: Hand :?   [**B**]

(A) Leg   (B) Gesture   (C) Speak   (D) Work

19.   Satyajit Ray : Films :: Picasso :?   [**D**]

(A) Poetry   (B) Drama   (C) Business   (D) Painting

20.   Gravity : Pull :: Magnetism :?   [**B**]

(A) Strength   (B) Attraction   (C) Push   (D) Bond

21.   Street : Lane :: Road :?   [**B**]

(A) Avenue   (B) Highway   (C) Footpath   (D) Junction

22. Monotony : Variety :: Crudeness :? [**A**]

(A) Refinement   (B) Raw   (C) Sobriety   (D) Simplicity

23. Horse : Gallop :: Duck :? [**B**]

(A) Strut   (B) Waddle   (C) Prowl   (D) Trot

24. Denigrate : Devalue :: Upgrade :? [**D**]

(A) Revalue   (B) Praise   (C) Demote   (D) Promote

25. Roster : Duty :: Inventory :? [**D**]

(A) Furnace   (B) Exports   (C) Goods   (D) Produce

Direction (26 – 30): Select the pair that has the same relationship as the original pair of words.

26. Darkness : Lamp [**B**]

(A) Fatigue : Exercise   (B) Thirst : Water   (C) Medicine : Illness   (D) Study : Class room

27. Energy :Joule [**C**]

(A) Axe : Grind   (B) Ammeter : Current   (C) Power : Ampere   (D) Resistance : Ohm

28. Bird : Wings [**C**]

(A) Whale : Water   (B) Dog : Lungs   (C) Car : Wheel   (D) Pen : Paper

CHAPTER – 7

CLASSIFICATION

Part – A : Word Classification

Direction (1-20): In each of these questions for words are given, out of which three are alike in some manner and one is different. Choose the odd one out of them.

1.	(A) Addition	(B) Subtraction	(C) Multiplication	(D) Fraction	[**D**]
2.	(A) Session	(B) Month	(C) Week	(D) Fortnight	[**D**]
3.	(A) Bangalore	(B) Calcutta	(C) Puri	(D) Mumbai	[**A**]
4.	(A) Mother	(B) Brother	(C) Sister	(D) Daughter	[**D**]
5.	(A) Drama	(B) Story	(C) Poem	(D) Novel	[**A**]
6.	(A) Uncle	(B) Niece	(C) Cousin	(D) Nephew	[**A**]
7.	(A) Green	(B) Violet	(C) Brown	(D) Orange	[**D**]
8.	(A) Rectangle	(B) Trapezium	(C) Square	(D) Circle	[**D**]
9.	(A) Mars	(B) Jupiter	(C) Saturn	(D) Sun	[**D**]
10.	(A) Teeth	(B) Tongue	(C) Chin	(D) Gum	[**C**]
11.	(A) blue	(B) green	(C) indigo	(D) black	[**C**]
12.	(A) Root	(B) Fruit	(C) Water	(D) flower	[**C**]
13.	(A) Spinach	(B) potato	(C) radish	(D) carrot	[**A**]
14.	(A) thyroid	(B) pancreas	(C) heart	(D) adrenal	[**C**]
15.	(A) snake	(B) chameleon	(C) lizard	(D) whale	[**D**]
16.	(A) Aluminium	(B) silver	(C) mercury	(D) gold	[**C**]
17.	(A) ice	(B) dust	(C) water vapour	(D) water	[**B**]
18.	(A) nail	(B) hair	(C) teeth	(D) skin	[**C**]
19.	(A) trees	(B) shrubs	(C) garden	(D) climbers	[**C**]
20.	(A) eye	(B) ear	(C) nose	(D) lips	[**B**]

Part – B : Number Classification

Direction (21 – 35): In each of these questions four numbers are given, out of which three are alike in some manner and one is different. Choose the odd one out of them.

21.	(A) 1345	(B) 5675	(C) 3675	(D) 4678	[**D**]
22.	(A) 34-43	(B) 12-21	(C) 39-93	(D) 24-48	[**D**]
23.	(A) 1234	(B) 2648	(C) 4567	(D) 4272	[**C**]
24.	(A) 132	(B) 564	(C) 960	(D) 125	[**D**]
25.	(A) 54	(B) 6	(C) 12	(D) 20	[**D**]
26.	(A) 51234	(B) 73456	(C) 84567	(D) 12345	[**D**]
28.	(A) 3/13	(B) 3/7	(C) 7/9	(D) 7/11	[**C**]
30.	(A) $3+\sqrt{4}$	(B) $8+\sqrt{9}$	(C) $9+\sqrt{11}$	(D) $15+\sqrt{16}$	[**C**]
33.	(A) 9 - 3	(B) ½ - 1/8	(C) 1/3 – 1/12	(D) 24 - 6	[**A**]
34.	(A) 15 - 46	(B) 12 - 37	(C) 9 – 28	(D) 8 - 33	[**D**]

Part-C : Alphabet Classification

Direction (36 – 41): In each of these questions four letter groups are given, out of which three are alike in some manner and one is different. Choose the odd one out of them.

36.	(A) EWZA	(B) OSLS	(C) GFKD	(D) VSPM	[**B**]
37.	(A) FJOU	(B) EINT	(C) JNRX	(D) ADHM	[**C**]
38.	(A) AEGC	(B) HLNJ	(C) OSVQ	(D) VZBX	[**C**]
39.	(A) CEAR	(B) WEAR	(C) TEAR	(D) DEAR	[**A**]
40.	(A) abbc	(B) pqqr	(C) hiij	(D) wyyz	[**D**]
41.	(A) BCDE	(B) PQRS	(C) WXYZ	(D) STUW	[**D**]

Direction (42-47): In each of these questions five letter groups are given, out of which four are alike in some manner and one is different. Choose the odd one out of them.

42.	(A) PRT	(B) MOQ	(C) GEC	(D) TVX	(E) SUW	[**D**]
43.	(A) BEH	(B) CFI	(C) DGJ	(D) EHL	(E) FIL	[**E**]
44.	(A) VWY	(B) QRT	(C) LMO	(D) JKL	(E) DEG	[**E**]

45.	(A) EBA	(B) XUT	(C) TQP	(D) JFE	(E) YVU	[**E**]
46.	(A) BHE	(B) DJG	(C) SYV	(D) JPM	(E) PUS	[**E**]
47.	(A) JOT	(B) OUT	(C) FED	(D) DIN	(E) DOG	[**B**]

Direction (48-50): In each of these questions four letter groups are given, out of which three are alike in some manner and one is different. Choose the odd one out of them.

48.	(A) xXYA	(B) iIMP	(C) hHIK	(D) bBCE	[**B**]
49.	(A) EFGIK	(B) CDFIM	(C) BCEHL	(D) ABDGK	[**A**]
50.	(A) XZCG	(B) OQTX	(C) IMNQ	(D) EGJN	[**C**]

CHAPTER – 8

CODING AND DECODING

Direction (1 to 5): If in English alphabet A is coded as 1, B is coded as 2 and so on, how are the following letters coded in that language?

1.   GOOD   [**A**]

   (A) 715154   (B) 741515   (C) 151574   (D) 415157

2.   CAT   [**B**]

   (A) 2013   (B) 3120   (C) 3201   (D) 3102

3.   FCI   [**A**]

(A) 639   (B) 936   (C) 369   (D) 963

4.   PENCIL   [**A**]

(A) 165143912   (B) 514163912   (C) 514391612   (D) 165141293

5.   MATHS   [**D**]

(A) 13120897   (B) 31120198   (C) 13201198   (D) 13120819

6.   If MAN = 13114, BOY = 21525, then MAT = ...   [**C**]

(A) 13201   (B) 20131   (C) 13120   (D) None of these

7.   If E = 5, PEN = 35 then PAGE =?   [**C**]

(A) 27   (B) 28   (C) 29   (D) 36

8.   If E = 5 and HOTEL = 12, how will you code LAMB?   [**A**]

(A) 7   (B) 10   (C) 26   (D) 28

9.   If WORK is coded as 4 – 12 – 9- 16, then how will you code WOMAN?   [**A**]

(A) 4 – 12 – 14 – 26 - 13   (B) 4 – 26 – 14 – 13 - 12   (C) 23 – 12 – 26 – 14 – 13

(D) 23 – 15 – 13 – 1 – 14   (E) None of these

10.   If ACNE can be coded as 3, 7, 29, 11 then BOIL will be coded as   [**D**]

(A) 5, 29, 19, 27   (B) 5, 29, 19, 25   (C) 5, 31, 21, 25   (D) 5, 31, 19, 25

11.   If O = 16, FOR = 42, then what is FRONT equal to?   [**D**]

(A) 61   (B) 65   (C) 73   (D) 78

12.   If ZEBRA can be written as 2652181, how can COBRA be written?   [**B**]

(A) 302181   (B) 3152181   (C) 31822151   (D) 1182153

13.   If 'rain' is 'water', 'water' is 'road', 'road' is 'cloud', 'cloud' is 'sky', 'sky' is 'sea' and 'sea' is 'path', where do aeroplanes fly?   [**B**]

(A) Road   (B) Sea   (C) Cloud   (D) Water   (E) None of these

14.   If 'water' is called 'food', 'food' is called 'tree', 'tree' is called 'sky', 'sky' is called 'wall', on which of the following grows a fruit?   [**C**]

(A) Water   (B) Food   (C) Sky   (D) Tree   (E) Wall

15.   If 'dust' is called 'air', 'air' is called 'fire', 'fire' is called 'water', 'water' is called 'colour', 'colour' is called 'rain' and 'rain' is called 'dust', then where do fish live?   [**C**]

(A) Fire   (B) Water   (C) Colour   (D) Dust

16. If 'train' is called 'bus', 'bus' is called 'tractor', 'tractor' is called 'car', 'car' is called 'scooter', 'scooter' is called 'bicycle', 'bicycle' is called 'moped', which is used to plough a field? [**D**]

(A) Train   (B) Bus   (C) Tractor   (D) Car   (E) Moped

17. If 'lead' is called 'stick', 'stick' is called 'nib', 'nib' is called 'needle', 'needle' is called 'rope' and 'rope' is called 'thread', what will be fitted in a pen to write with it? [**C**]

(A) Stick   (B) Lead   (C) Needle   (D) Nib   (E) Thread

18. In a certain code language, 'dom pul ta' means 'bring hot food', 'pul tir sop' means 'food is good' and 'tak da sop' means 'good bright boy'. Which of the following does means 'hot' in that language? [**D**]

(A) dom   (B) pul   (C) ta   (D) Cannot be determined   (E) None of these

19. In a certain code language, 'po ki top ma' means, 'Usha is playing cards', 'kop ja ki ma' means 'Asha is playing tennis', 'ki top sop ho' means 'they are playing football' and 'po sur kop' means 'cards and tennis'. Which word in that language means 'Asha'? [**A**]

(A) ja   (B) ma   (C) kop   (D) top   (E) ki

20. If 'cinto baoli tsi nzro' means 'her village is Sarurpur', 'mhi cinto keepi tsi oind' means 'her first love is literature' and 'oind geit tsi cinto pki' means 'literature collection is her hobby', which word mean 'literature'? [**C**]

(A) cinto   (B) baoli   (C) oind   (D) geit

Direction (21 – 22): In a certain code language,

(A) 'pit dar na' means 'you are good'.

(B) 'dar tok pa' means 'good and bad'.

(C) 'tim na tok' means 'they are bad'.

21. In that language, which word stands for 'they'? [**C**]

(A) na   (B) tok   (C) tim   (D) pit   (E) None of these

22. To find the answer to the above question, which of the given statements can be dispensed with?
(A) Only A   (B) Only B   (C) A or B   (D) B and C (E) None of these   [**E**]

Direction (23 – 50): The following questions are based on coding and decoding. Choose the right answer and write the option indicating it in the brackets provided.

23. In a certain code language, CREATIVE is written as BDSBFUJS. How is TRIANGLE written in that code? **[E]**

    (A) BHSSFKHM (B) BHSSMHHF (C) BSHSFHKM (D) BSSHFMKH (E) None of these

24. In a certain code, SPIDER is written as PSDIRE. How is COMMON written in the same code?

    (A) OCOMMO (B) OCMMNO (C) OCMOMN (D) OCMMON **[D]**

25. In a certain code, STOVE is written as FNBLK. How would VOTES be written in that code?

    (A) FLKBN (B) LBNKF (C) LKNBF (D) LNBKF **[B]**

26. If BOARD is coded as EQBNC, then CLIMB will be coded as **[D]**

    (A) CLJKD (B) DKJLF (C) DNHMB (D) FNJRO

27. In a certain code, CLOUD is written as GTRKF. How is SIGHT written in that code? **[D]**

    (A) UGHHT (B) UHJFW (C) WFJGV (D) WGJHV

28. If in a certain language, BROUGHT is coded as SGFVAQN, which word would be coded as SUPREME? **[B]**

    (A) DLDSTVQ (B) DLDSRTO (C) FNFSRTO (D) RTOSDLD

29. In a code language, SOLID is written as WPSLPIMFHA. What does the code-word ATEXXQIBVO refer to? **[A]**

    (A) WATER (B) WAGER (C) EAGER (D) WAFER

30. If in a certain code, SWITCH is written as TVJSDG, which word would be written as CQFZE?
    (A) BARED (B) BRAED (C) BREAD (D) BRADE **[C]**

31. If in a certain language, REMORE is coded as ROTEME, which word would be coded as PNIICC? **[B]**

    (A) NPIICC (B) PICCIN (C) PINCIC (D) PICNIC (E) PIC1NC

32. If FULFNHW is the code for CRICKET, then EULGH is the code for which word. **[B]**

    (A) PRIDE (B) BRIDE (C) BLADE (D) BLIND (E) None of these

33. If MINERAL is written as QRSTUVW and SOUND is written as ABCSD, then how will READER be written in the same code? **[A]**

(A) SBFEFS (B) UTVDTU (C) TUDVUT (D) QDZCDQ

34. In a code language, STARK is written as LBFMG and MOBILE is written as TNRSPJ. How is BLAME written in that code?   **[A]**

 (A) TSFRJ   (B) RPFTJ   (C) NJFTP   (D) TSFGJ

35. If CONCEPT is written as unmulqr and FRIEND is written as ysglmt, then how is PREDICT written in that code?   **[C]**

 (A) usygmnl (B) slmgtur (C) qsltgur (D) qgmnltr

36. If in a code language, ORGANISATION is written as CBDWLQJWYQCL and OPERATION is written as CXFBWYQCL, then how is SEPARATION coded?   **[B]**

 (A) EJXEBEYQCL (B) JFQYWBCXQL (C) JFXWBWYQCL (D) QCLYWBFXJE

37. If the word PORTER can be coded as MBNZQN, how can REPORT be written? **[B]**

 (A) NQMNBZ (B) NQMBNZ (C) NBQMNZ (D) NQBMNZ

38. If in a certain language, POPULAR is coded as QPAVMBS, which word would be coded as GBNPVT?   **[C]**

 (A) FARMER (B) FAMOUS (C) FRAMES (D) FARMES (E) FAMOTH

39. In a certain code, REFERIGERATOR is coded as ROTAREGIRFER. Which word would be coded as NOITINUMMA?   **[C]**

 (A) ANMOMIUTNI (B) AMNTOMUIIN (C) AMMUNITION (D) NMMUNITIOA

40. If in a certain language, SHIFT is coded as RFFBO, which word would be coded as LKUMB?

 (A) MMXQG (B) MLVNC (C) KJVLA (D) MJVLC (E) KJTLA **[D]**

41. In a certain code, DECEMBER is written as ERMBCEDE. Which word will be written as ERMBVENO in that code?   **[C]**

 (A) AUGUST (B) SEPTEMBER (C) OCTOBER (D) NOVEMBER

42. If R is replaced by N, D is replaced by T, I by U, O by I, E by R, T by O, U by D, N by C and C by E, then how will be word INTRODUCE be written?   **[B]**

 (A) UCONIDTER (B) UCONITDER (C) UCONTIDER (D) UCOINTDER (E) None of these

43. In a certain code, FIRE is written as QHOE and MOVE as ZMWE. Following the same rule of coding, what should be the code for the word OVER?   **[D]**

 (A) MWED (B) MWEO (C) MWOE (D) MWZO

44. If in a certain code language UTENSIL is written as WVGPUKN then which word would be coded as DMSFXG? [**D**]

(A) BKQEVE   (B) BKQDWE   (C) BKQDWF   (D) BKQDVE

45. If in a certain code language SIGHT is coded as FVTUG, then how is REVEAL coded in that language? [**D**]

(A) YNRIRE   (B) DQHGMX   (C) FSJSOZ   (D) ERIRNY

46. In a certain TRUTH is coded as SUQSTVSUGI. How is FALSE coded in that language? [**B**]

(A) EGZBKMRDE (B) EGZKMRTDF (C) EGZBKMRTDF   (D) FGZBKNRTDF

47. In certain code, BOXER is written as AQWGQ. How VISIT is written in that code?   [**B**]

(A) UKRKU   (B) UKRKS   (C) WKRKU   (D) WKRKS

48. If in a certain code FAVOUR is written EBUPTS, then how is DANGER coded in that language? [**B**]

(A) CBFFDS   (B) CBMHDS   (C) EBFHDS   (D) EBHHFS

49. In a certain code language, RUSTICATE is written as QTTUIDBSD. How would STATISTIC be written in that code? [**D**]

(A) RSBUJTUHB   (B) RSBUITUHB   (C) RSBUIRSJD   (D) TUBUITUMB

50. If NARGRUED is the code for GRANDEUR, which word is coded as SERPEVRE?   [**D**]

(A) PERSEVER   (B) PRESEVER   (C) PREVERSE   (D) PRESERVE

CHAPTER – 9

LOGICAL VENN DIAGRAMS

Direction (1-6): These questions are based on the following diagrams. After studying the diagrams carefully, choose the correct figure indicating relation between the given groups.
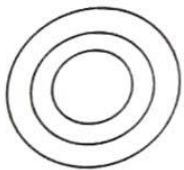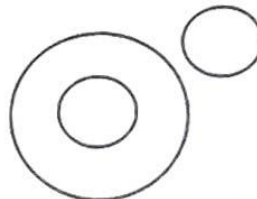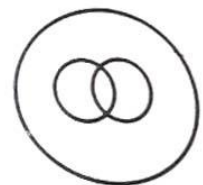

1.   Fruits, Mango, Milk   [**C**]

2. Seconds, Minutes, Hours [**A**]

3. Elephant, Lion, animals [**D**]

4. Tree, Shrubs, plants [**A**]

5. Human Beings, Teachers, woman [**D**]

6. Games, Hockey, Cricket [**B**]

Direction (7 – 11): With the help of the given diagram, answer the following questions by making the right choice from the given alternatives.
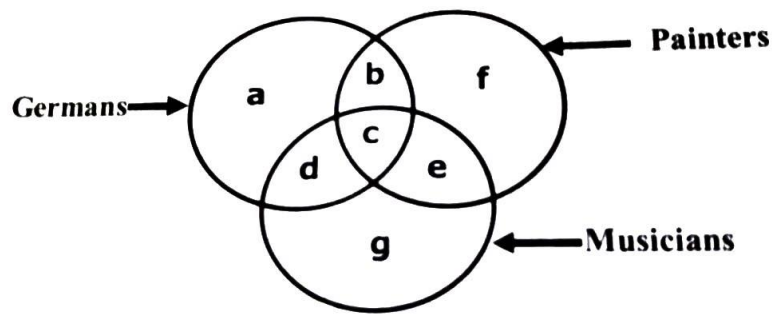
7. Which letter represents painters who are neither Germans nor musicians? [**C**]

   (A) a   (B) b   (C) f   (D) e

8. Which letter represents Germans who are painters but not musicians? [**A**]

   (A) b   (B) f   (C) a   (D) d

9. Which letter represents Germans who are painters as well as Musicians? [**B**]

   (A) d   (B) c   (C) b   (D) e

10. Which letter represents Musicians who are neither Germans nor painters? [**D**]

    (A) d   (B) c   (C) e   (D) g

11. Which letter represents painters who are Musicians but not Germans? [**D**]

    (A) f   (B) b   (C) a   (D) e

Direction (12 to 16): With the help or the given diagram, answer the following questions by making the right choice from the given alternatives.
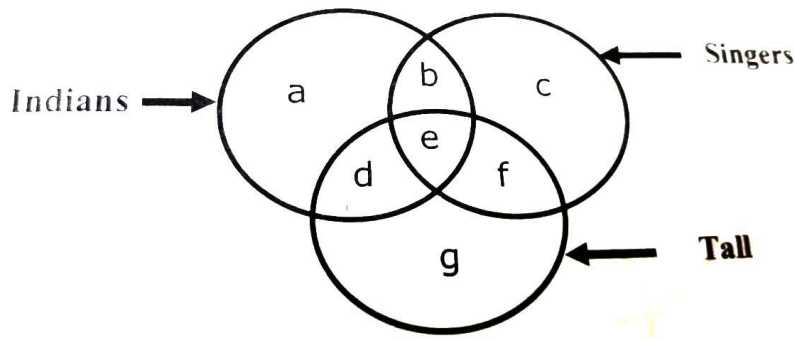
12. Which letter represents Indians who are neither singers nor tall? [**A**]

    (A) a   (B) e   (C) c   (D) g

13. Which letter represents Indians who are tall but not singers? [**A**]

    (A) b   (B) d   (C) f   (D) e

14. Which letter represents Indians who are tall but not singers? [**B**]

    (A) b   (B) d   (C) f   (D) e

15. Which letters represent Indians who are tall? [**B**]

    (A) d, e, b   (B) d, e   (C) d   (D) e

16. Which letter represents tall Indians who are signers? [**D**]

    (A) a   (B) c   (C) g   (D) e

Direction (17-22): These questions are based on the following diagrams. After studying the diagrams carefully, choose the correct figure indicating relation between the given groups.
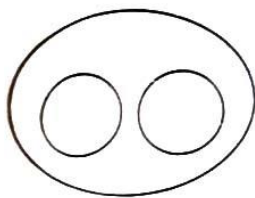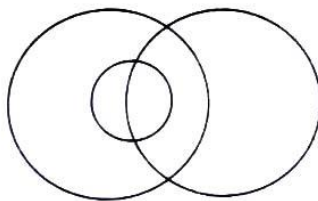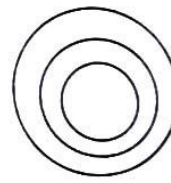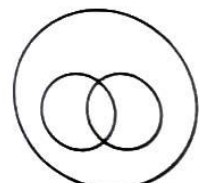
17. Females, Mothers, Doctors [**B**]

18. Family, Brothers, Sister [**D**]

19. Musicians, Violinists, Instrumentalist [**C**]

20. Tomato, Cucumber, Vegetables [**A**]

21.   Hours, Minutes, Seconds   [**C**]

22.   Teachers, Human Beings, Graduates   [**D**]

Direction (23 to 27): With the help of the given diagram, answer the following questions by making the right choice from the given alternatives
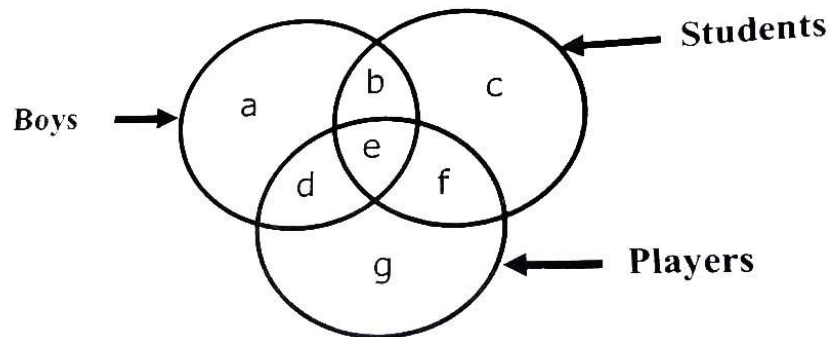
23.   Which letter represents boys who are neither students nor players?   [**C**]

       (A) c   (B) b   (C) a   (D) d

24.   Which letter represents boys who are both students and players?   [**B**]

       (A) a   (B) e   (C) g   (D) f

25.   Which letter represents students who are boys but not players?   [**C**]

       (A) e   (B) c   (C) b   (D) a

26.   Which letter represents players who are boys but not students?   [**A**]

       (A) d   (B) b   (C) c   (D) e

27.   Which letter represents students who are neither boys nor players?   [**D**]

       (A) b   (B) a   (C) d   (D) c

Direction (28-30): These questions are based on the following diagrams. After studying the diagrams carefully, answer the questions by identifying the correct alternative.

(A) (B) (C) (D)
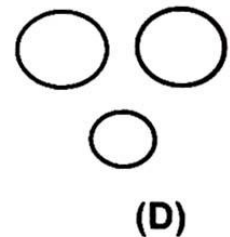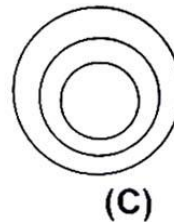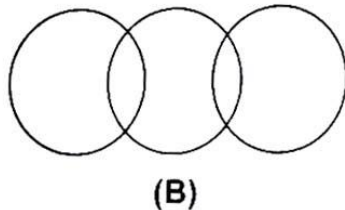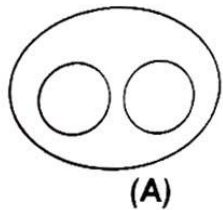
28.	Square, Rhombus, Quadrilateral	[**A**]
29.	Students, Indian, American	[**B**]
30.	Paper, Rock, Scissors	[**D**]

Directions (31-35): Given below is a venn diagram showing number of students playing three different games.
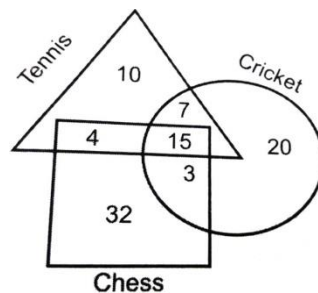
31. How many students play exactly two games?　　　　　　　　　　[**C**]

　　(A) 20　　　　　　(B) 14　　　　　　(C) 15　　　　　　(D) 20

32. How many students do not play chess?　　　　　　　　　　　　[**A**]

　　(A) 20　　　　　　(B) 27　　　　　　(C) 37　　　　　　(D) 40

33. How many students play at least two games?　　　　　　　　　[**B**]

　　(A) 14　　　　　　(B) 15　　　　　　(C) 29　　　　　　(D) 30

34. How many students play cricket and Tennis but not Chess?　　　[**A**]

　　(A) 7　　　　　　(B) 22　　　　　　(C) 30　　　　　　(D) None of these

35. How many students play all the three games?　　　　　　　　　[**C**]

　　(A) 3　　　　　　(B) 4　　　　　　(C) 7　　　　　　(D) 15

CHAPTER – 10

DICTIONARY TEST

Direction (1 – 5): Arrange the given words in alphabetical order. Which word comes first in the dictionary order?

1.   (A) jocobite   (B) jacobean   (C) jackdaw   (D) jam   [C]

2.   (A) joystick   (B) journey   (C) jug   (D) junket   [B]

3.   (A) kerosene   (B) kindergarten   (C) kilogram   (D) kidnap   [A]

4.   (A) lank   (B) landing   (C) laser   (D) large   [B]

5.   (A) laymen   (B) leave   (C) leather   (D) learn   [A]

Direction (6 – 10): Arrange the given words in alphabetical order. Which word comes second in the dictionary order.

6.   (A) locomotive   (B) lock   (C) loan   (D) live   [C]

7.   (A) merry   (B) messiah   (C) merciful   (D) men   [C]

8.   (A) misericord   (B) misprint   (C) missal   (D) mitigate   [B]

9.   (A) monk   (B) meld   (C) monoxide   (D) mole   [D]

10. (A) mouth   (B) mouse   (C) mount   (D) mostly   [C]

Direction (11 – 15): Arrange the given words in alphabetical order. Which word comes third the dictionary order.

11. (A) enzyme   (B) epicure   (C) enthuse   (D) entertain   [D]

12. (A) faceless   (B) fable   (C) facecloth   (D) facial   [A]

13. (A) furlong   (B) furrier   (C) further   (D) fuss   [D]

14. (A) glider   (B) gloat   (C) global   (D) glide   [B]

15. (A) improve   (B) impractical   (C) inability   (D) impolite   [D]

Direction (16 – 20): Arrange the given words in alphabetical order. Which word comes last in the dictionary order.

16.   (A) amend   (B) amber   (C) amateurish   (D) ample   [D]

17.   (A) bemoan   (B) belong   (C) benediction   (D) bend   [C]

18.   (A) castanets   (B) caterpillar   (C) cataract   (D) cassock   [B]

19.   (A) crawl   (B) crescendo   (C) creel   (D) crazy   [B]

20.   (A) din   (B) dim   (C) direct   (D) dioxide   [C]

Direction (21 – 25): Identify the correct order in which the four words given in each question appear in a dictionary.

21.   (1) Staple   (2) Squirrel   (3) Strange   (4) Suggest   [A]

        (A) 2, 1, 3, 4   (B) 2, 3, 1, 4   (C) 2, 4, 1, 3   (D) 4, 3, 1, 2

22.   (1) Apathy   (2) Appear   (3) Appointment   (4) Applause   [D]

        (A) 1, 3, 2, 4   (B) 1, 2, 3, 4   (C) 1, 3, 4, 2   (D) 1, 2, 4, 3

23.   (1) Calculator   (2) Calcium   (3) Calligraphy   (4) Calendar   [A]

        (A) 2, 1, 4, 3   (B) 2, 1, 3, 4   (C) 2, 3, 1, 4   (D) 2, 3, 4, 1

24.   (1) Feather   (2) Father   (3) Feast   (4) Fear   [C]

        (A) 2, 4, 1, 3   (B) 2, 1, 3, 4   (C) 2, 4, 3, 1   (D) 2, 1, 4, 3

25.   (1) Rotate   (2) Roll   (3) Round   (4) Rose   [B]

        (A) 2, 4, 3, 1   (B) 2, 4, 1 3   (C) 2, 1, 3, 4   (D) 2, 3, 4, 1

CHAPTER – 11

BASIC ARITHMETIC

Direction (1 – 16): These questions are based on simple arithmetic operations. Choose the right answer.

1.   (75 x 7) + 13 =?   [D]

(A) 525   (B) 528   (C) 535   (D) 538

2. $(13-5)^2 - 7^2 = ?$ [**A**]

(A) 15   (B) 25   (C) 16   (D) 57

3. $\sqrt{81} + x^2 = 58$, x = ?   [**B**]

(A) 6   (B) 7   (C) 7.5   (D) 9

4.   7113 - _____ = 891   [**C**]

(A) 922   (B) 6322   (C) 6222   (D) None of these

5. $643 - (49 + 177) = ?$ [**D**]

(A) 419   (B) 515   (C) 513   (D) 417   (E) 771

6.   3.2 x 7.31 = ?   [**C**]

(A) 23.920   (B) 233.924   (C) 23.392   (D) 24.392

7.   2346 ÷ 23 = ?   [**B**]

(A) 12   (B) 102   (C) 112   (D) 11

8.   75% of 200 = ?   [**C**]

(A) 175   (B) 125   (C) 150   (D) 90

9.   406 x 5 + 3 = ?   [**A**]

(A) 2030   (B) 2034   (C) 2033   (D) 2031

10. $(13-9)^3 = ?$ [**D**]

(A) 49   (B) 28   (C) 27   (D) 64

11. $\sqrt{256} + \sqrt{x} = 20$, $\sqrt{x} = ?$ [**C**]

(A) 10   (B) 16   (C) 4   (D) 6

12.   50505 − 5005 + 505 - 5   [**C**]

(A) 55000   (B) 45005   (C) 46000   (D) 50005

13.   1% of 1 + 2% of 2 + 3% of 3 =   [**B**]

(A) 6% of 6   (B) 7% of 2   (C) 7% of 3   (D) 7% of 6

14. $60006 + 6006 + 606 + 66 + 6 =$ [**A**]

(A) 66690   (B) 6690   (C) 65390   (D) 64690

15. $6374 -$ _____ $= 3217 + 2155$ [**B**]

(A) 100   (B) 1002   (C) 210   (D) 2100

16. $(1^3 + 2^3 + 3^3) - (1^2 + 2^2 + 3^2) + (1 + 2 + 3) =$ [**A**]

(A) 28   (B) 14   (C) 26   (D) 30

17. If + means - , - means x, ÷means + and x means ÷, then 24 x 6 -2 + 5 ÷ 7 =?   [**C**]

(A) 5   (B) 22   (C) 10   (D) 52

18. If x means ÷, - means x, ÷ means + and + means -, then 5 – 18 + 6 ÷ 32 x 8 =?   [**D**]

(A) -1   (B) 2   (C) 4   (D) 88

19. If x means +, + means ÷, - means x and ÷ means -, then 120 – 7 + 15 ÷ 5 x 2 =?   [**C**]

(A) 1   (B) 11   (C) 53   (D) 44

20. If '+' means 'divided by', '-' means 'add', 'x' means 'minus' and '/' means 'multiplied by', what will be the value of the following expression?   [**A**]

(A) Infinite   (B) 0   (C) 118   (D) 219

21. If + stands for x, - for ÷, x for – and ÷ for +, find the value of 26 + 74 – 4 x 5 ÷ 2.   [**C**]

(A) 220   (B) 376   (C) 478   (D) 488

22. If 'when' means 'x', 'you' means '÷' 'come' means '-' and 'will' means '+', then what will be the value of "8 when 12 will 16 you 2 come 10"?   [**B**]

(A) 45   (B) 94   (C) 96   (D) 112   (E) None of these

23. If '-' stands for 'division', '+' for 'multiplication', '+' for 'subtraction' and 'x' for 'addition', then which one of the following equations is correct?   [**A**]

(A) 4 x 5 + 9 – 3 ÷ 4 = 15   (B) 4 x 5 x 9 + 3 ÷ 4 = 1

(C) 4 – 5 ÷ 9 x 3 – 4 = 17   (D) 4 ÷ 5 + 9 – 3 + 4 = 18

24. If '+' stands for 'division', '÷' stands for 'multiplication', 'x' stands for 'subtraction' and '-' stands for 'addition', which one of the following is correct?   [**D**]

(A) 18 ÷ 6 x 7 + 5 – 2 = 22   (B) 18 x 6 + 7 ÷ 5 – 2 = 16

(C) $18 \div 6 - 7 + 5 \times 2 = 20$ (D) $18 + 6 \div 7 \times 5 - 2 = 18$

26. If → stands for 'addition', ← stands for 'subtraction', ↑ stands for 'division', ↓ stands for 'multiplication', ↗ stands for 'equal to', then which of the following alternatives is correct?[**D**]

(A) $7 \leftarrow 43 \uparrow 6 \downarrow 1 \nearrow 4$ (B) $3 \downarrow 6 \downarrow 2 \rightarrow 3 \leftarrow 6 \nearrow 5$

(C) $5 \rightarrow 7 \leftarrow 3 \uparrow 2 \nearrow 4$ (D) $2 \downarrow 5 \leftarrow 6 \rightarrow 2 \nearrow 6$

27. Statements : $M \leq V$; $P < R$; $P = M$; $S > T$; $R < T$

Conclusions:

I. $S > M$
II. $V = P$
III. $P < V$
IV. $T < P$ [**A**]

(A) Only I is true   (B) Only II is true   (C) None is true   (D) Either II or III and I are true

28. Statements: $B < P$; $P \leq S$; $S = M$; $M \geq F$; $Q \geq M$; $M < O$

Conclusion:

I. $P \leq F$
II. $B < Q$
III. $Q \geq M$
IV. $F < O$ [**D**]

(A) Only I, II and III are true (B) Only II is true (C) None is true (D) Only II, III and IV are true

CHAPTER – 12

BLOOD RELATIONS

1. Pointing to a man, a woman said, "His mother is the only daughter of my mother". How is the woman related to the man?   [**C**]

(A) Mother   (B) Daughter   (C) Sister   (D) Grandmother   (E) None of these

2. If X is the brother of the son of Y's son, how is X related to Y?   [**C**]

(A) Son   (B) Brother   (C) Cousin   (D) Grandson   (E) Uncle

3. Pointing towards Hasini, Nikhil said, "I am the only son of her mother's son." How is Hasini related to Nikhil?   [**B**]

(A) Aunt   (B) Niece   (C) Mother   (D) Cousin

4. Vamsi has a brother Sunil, Vamsi is the son of Ram. Bimal is Ram's father. In terms of relationship, what is Sunil to Bimal? [**D**]

(A) Son (B) Grandson (C) Brother (D) Grandfather

5. Introducing Krupa, Harika said, "She is the only daughter of my father's only daughter." How is Harika related to Krupa? [**E**]

(A) Aunt (B) Niece (C) Cousin (D) Data inadequate (E) None of these

6. How is my father's father in law's only daughter related to my sister? [**C**]

(A) Cousin (B) Mother (C) Aunt (D) None of these

7. Pointing to a photograph, a man said, "I have no brother or sister but that man's father is my father's son." Whose photograph was it? [**B**]

(A) His own (B) His Son (C) His Father (D) His Grandfather

8. Pointing towards a person in a photograph, Anjali said, "He is the only son of the father of my sister's brother." How is that person related to Anjali? [**C**]

(A) Anjali Father (B) Anjali Mother (C) Anjali Brother (D) Maternal Uncle

9. A told B, "Yesterday I met the only brother of the daughter of my grandmother". Whom did A meet? [**A**]

(A) Father (B) Cousin (C) Brother (D) Son

10. Pointing to a photograph, Amrit said, "She is the daughter of my grandfather's only son." How is Amrit related to the girl in the photograph? [**C**]

(A) Cousin (B) Mother (C) Sister (D) Grand Mother

11. Looking at the portrait of a man, Varun said, "His mother is the wife of my father's son. I have no brothers or sisters." At whose portrait was Varun looking? [**A**]

(A) His child (B) His grandson (C) His Father (D) His nephew

12. Pointing to a girl in photograph. Arun said, "Her mother's brother is the only son of my mothers' father." How is the girl's mother related to Arun? [**A**]

(A) Aunt or Mother (B) Cousin (C) sister (D) Grand Mother

13. Pointing to a gentleman, Deepak said, "His only brother is the father of my daughter's father." How is gentleman related to Deepak? [**C**]

(A) Brother (B) Father (C) Uncle (D) Grand Father

14. If Shiva says, "Raj's mother is the only daughter of my mother". How is Shiva related to Raj?
    (A) Brother   (B) Father   (C) Maternal Uncle (D) Cousin   [**C**]

15. Pointing to a photograph, a woman says, "This man's son's sister is my mother-in-law." How is the woman's husband related to the man in the photograph?   [**A**]

    (A) Grandson   (B) Son   (C) Son-in-law   (D) Cousin

16. Pointing to a man in photograph, a woman said, "His brother's father is the only son of my grandfather." How is the woman related to the man in the photograph?   [**A**]

    (A) Sister   (B) Daughter   (C) Wife   (D) Cousin

17. A man pointing to a photograph says, "The lady in the photograph is my nephew's maternal grandmother." How is the lady in the photograph related to the man's sister who has no other sister?   [**B**]

    (A) Mother-in-law   (B) Mother   (C) Sister-in-law   (D) Cousin

18. If Neena says, "Anita's father Raman is the only son of my father-in-law Mahipal". Then how is Bindu, who is the sister of Anita, related to Mahipal?   [**A**]

    (A) Granddaughter   (B) Daughter   (C) Sister   (D) None of these

19. Pointing to Sahil, Neeru says, "I am the daughter of the only son of his grandfather." How Neeru is related to Sahil?   [**A**]

    (A) Sister   (B) Daughter   (C) Mother   (D) Cousin

20. Pointing to a gentleman, Shalini said, "His only brother is the father of my son's father." How is the gentleman related to Shalini?   [**C**]

    (A) Brother   (B) Father   (C) Uncle   (D) Grand Father

21. A's father is B's son-in-law, C, A's sister, is the daughter of P. How is P related to B   [**D**]

    (A) Brother   (B) Father   (C) Grand Father   (D) can't be determined

22. A is the son of B. C, B's sister has a son D and a daughter E. F is the maternal uncle of D. How is E related to F?   [**B**]

    (A) Sister   (B) Niece   (C) Mother   (D) Cousin

23. Daya has a brother Anil; Daya is the son of Chandra. Bimal is Chandra's father. What is Anil to Bimal?   [**C**]

    (A) Brother   (B) Son   (C) Grandson   (D) Cousin

24. A girl introduced a boy as the son of the daughter of the father of her uncle. The boy is girl's [**A**]

(A) Brother	(B) Son	(C) Uncle	(D) Son in law

25. When Anuj saw Manish, he recalled, "He is the son of the father of my daughter." How is Mainsh related to Anuj? [**A**]

(A) Son	(B) Nephew	(C) Uncle	(D) Brother

CHAPTER – 13

DIRECTION SENSE TEST

1. Raghu travelled 3 km southwards, then turned right and travelled 5 km. Then again turned right and travelled 7 km. In which direction was he travelling last? [**C**]

(A) East	(B) West	(C) North	(D) South

2. Arjun walked 30 m towards East, took a right turn and walked 40 m. Then he took a left turn and walked 30 m. In which direction is he now from the starting point? [**B**]

(A) South	(B) North-East	(C) East	(D) South-East

3. Anil wants to go the university. He starts from his house which is in the East and comes to a crossing. The road to his left ends in a theatre, straight ahead is the hospital. In which direction is the University? [**A**]

(A) East	(B) West	(C) North	(D) South

4. A dog runs 20 m towards East and turns Right, runs 10 m and turns to right, runs 9 m and again turns to left runs 5 m and then turns to left, runs 12 m and finally turns to left and runs to left, runs 5 m and then turns to left, runs 12 m and finally turns to left and runs 6 m. Now which direction dog is facing? [**C**]

(A) East	(B) West	(C) North	(D) South

5. If South-East becomes North, North-East becomes West and so on, what will west become? [**B**]

(A) East	(B) North-West	(C) North	(D) South-East

6. Y is in the East of X, which is in the North of Z. If P is in the South of Z, then in which direction of Y, is P? [**A**]

(A) North	(B) South	(C) South-East	(D) None of these

7. Ram walks northwards. After a while, he turns to his right and a little further to his left. Finally, after walking a distance of 1 km, he turns to his left again. In which direction is he moving now?

(A) North	(B) South	(C) East	(D) West	[**A**]

8. At 3.00 PM hours hand of the horizontal clock showing North direction. What is the direction shown by hours hand at 6.00 am. [**D**]

(A) East   (B) West   (C) North   (D) South

9. A man walks 30 m towards South. Then, turning to his right, he walks 30 m. Then turning to his left, he walks 20 m. Again, he turns to his left and walks 30 m. How far is he from his initial position? [**E**]

(A) 20 m   (B) 3 m   (C) 60 m   (D) 80 m   (E) 50 m

10. Raj walked 25 m towards South. Then he turned to his left and walked 20 m. He then turned to his left and walked 25 m. He again turned to his right and walked 15 m. At what distance is he from the starting point and in which direction? [**A**]

(A) 35 m East   (B) 35 m North   (C) 40 m East   (D) 60 m East   (E) None of these

11. Starting from a point P, Sachin walked 20 m towards South. He turned left and walked 30 m. He then turned left and walked 20 m. He again turned left and walked 40 m and reached a point Q. How far and in which direction is the point Q from the point P? [**C**]

(A) 20 m West   (B) 10 m East   (C) 10 m West   (D) 10 m North   (E) None of these

12. A man walks 1 km towards East and then he turns to South and walks 5 km. Again he turns to East and walks 2 km, after this he turns to North and walks 9 km. Now how far is he from his starting point? [**C**]

(A) 3 km   (B) 4 km   (C) 5 km   (D) 7 km

13. One day, Raviraj left home and cycled 20 Km southwards, turned right and cycled 10 km and turned right and cycled 20 Km and turned left and cycled 20 Km and turned left and cycled 20 Km. How many kilometres will he have to cycle to reach his home straight? [**C**]

(A) $50\sqrt{2}$ Km   (B) $30\sqrt{2}$ Km   (C) $10\sqrt{3}$ Km   (D) $60\sqrt{3}$ Km

14. A man walks 6 km to the east and then turn to the south 2 km. Again he turns to the east and walks 2 km. Next he turns northwards and walks 8 km. How far is he now from his starting point? [**B**]

(A) 18 Km   (B) 10 Km   (C) 16 Km   (D) 12 Km

15. A villager went to meet his uncle in another village situated 5 km away in the North-East direction of his own village. From there he came to meet his father-in-law living in a village situated 4 km in the south of his uncle's village. How far away and in what direction is he now?
(A) 4 km in the East (B) 3 km in the East (C) 4 km in the West   (D)   3 km in the North   [**B**]

16. Dhanunjay walks 10 m to towards the South, Turning to the left; he walks 20 m and then moves to his right. After moving a distance of 20 m, he turns to the right and walks 20m. Finally, he turns to the right and moves a distance of 10 m. How far and in which direction is he from the starting point? **[D]**

    (A) 20 m North   (B) 20 m South   (C) 10 m North   (D) 10 m South

17. Dharma walks 10 km toward North. From there, he walks 6 km towards South. Then, he walks 3 km towards East. How far and in which direction is he with reference to his starting point? **[C]**

    (A) 2 km South-East (B) 5 km South-East   (C) 5 km North-East (D) 5 km West

18. A man leaves for his office from his house. He walks towards East. After moving a distance of 20 m, he turns South and walks 10 m. Then he walks 35 m towards the West and further 5 m towards the North. He then turns towards East and walks 15 m. What is the straight distance between his initial and final positions? **[B]**

    (A) 0 m   (B) 5m   (C) 10m   (D) None of these

19. Murari walked 40 m towards North, took a left turn and walked 20 m. He again took a left turn and walked for 40 m. How far and in which direction is he from the starting point? **[C]**

    (A) 20 m North   (B) 20 m South   (C) 20 m West   (D) 20 m East

20. Nishitha walks 14 m towards west, then turns to her right and walks 14 m and then turns to her left and walks 10 m. Again turning to her left she walks 14 m. What is the shortest distance between her starting point and the present position? **[B]**

    (A) 14   (B) 24   (C) 34   (D) 44

21. Vinay walks a distance of 3 km towards North, then he turns to his left and walks for 2km. He again turns left and walks for 3 km. At this point he turns to his left and walks for 3km. How many km is he from the starting point? **[A]**

    (A) 1 Km   (B) 2 Km   (C) 3 Km   (D) 4 Km

22. One morning Varun and Vishal were talking to each other face to face at a crossing. If Vishal's shadow was exactly to the left of Varun, which direction was Varun facing? **[C]**

    (A) East   (B) West   (C) North   (D) South

Direction (23-25): Each of the following questions is based on the following information:

1. A # B means B is at 1 m to the right of A.
2. A $ B means B is at 1 m to the North of A
3. A * B means B is at 1 m to the left if A.

4. A @ B means B is at 1 m to the south of A.

5. In each question first person from the left is facing North.

23.   According to X @ B * P, P is in which direction with respect to X?   [**D**]

    (A) South   (B) North-East   (C) North   (D) South-West

24.   According to M # N $ T, T is in which direction with respect to M?   [**B**]

    (A) South-East   (B) North-East   (C) North-West   (D) South-West

25.   According to P # R $ A * U. In which direction is U with respect to P?   [**C**]

    (A) East   (B) West   (C) North   (D) South

CHAPTER – 14

MISSING CHARACTER

Direction (1-25): Find the missing number in the given structure using the logic involved in the other hint structures.

CHAPTER – 15

CALENDAR

Direction (1-25): Read the question carefully and choose the correct answer.

1. Which among the following is a leap year? [**C**]

    (A) 2600   (B) 2700   (C) 2800   (D) 3000

2. Which among the following is a leap year? [**C**]

    (A) 2245   (B) 5702   (C) 1582   (D) 1604

3. The no. of odd days in 382 days? [**D**]

    (A) 1   (B) 2   (C) 3   (D) 4

4. The no. of odd days in 343 days? [**B**]

    (A) 1   (B) 0   (C) 3   (D) 4

5. The no. of odd days in 1000 days? [**A**]

    (A) 5   (B) 3   (C) 1   (D) 6

6. The last day of a century cannot be [**D**]

    (A) Monday   (B) Wednesday   (C) Tuesday   (D) Sunday

7. Today is Tuesday. After 61 days, it will be [**D**]

    (A) Sunday   (B) Monday   (C) Friday   (D) Saturday

8. How many days are there in x weeks x days? [**B**]

    (A) $7x^2$ (B) 8x   (C) 14x   (D) 7

9. Jan 1, 2007 was Monday. What day to the week lies on Jan 1, 2008? [**B**]

    (A) Monday   (B) Tuesday   (C) Saturday   (D) Friday

10. March 1, 2012 was Tuesday, What day of the week lies on March 1, 2013? [**A**]

    (A) Wednesday   (B) Thursday   (C) Friday   (D) Saturday

11. On what dates of June, 2001 did Wednesday fall? [**D**]

    (A) 1st, 8th, 15th, 22nd, 29th   (B) 2nd, 9th, 16th, 23rd, 30th

    (C) 6th, 13th, 20th, 27th   (D) 4th, 11th, 18th, 25th

12. On what dates of February, 2012 did Wednesday fall? [**D**]

(A) 1st, 8th, 15th, 22nd, 29th　　　　　　(B) 2nd, 9th, 16th, 23rd, 30th

(C) 6th, 13th, 20th, 27th　　　　　　(D) 4th, 11th, 18th, 25th

13.　What day of the week it was on July 2nd 2009?　　　　　　[**A**]

(A) Monday　　　　(B) Thursday　　(C) Friday　　　(D) Saturday

14.　What day of the week it will be on November 14th 2012?　　　[**B**]

(A) Wednesday　　　(B) Thursday　　(C) Friday　　　(D) Saturday

15.　What day of the week it is on August 15th 1947?　　　　[**B**]

(A) Thursday　　　(B) Friday　　　(C) Monday　　　(D) None

16.　If 25th May 2003 is Sunday, what day of the week will be 25th May 2004?　[**B**]

(A) Monday　　　(B) Tuesday　　(C) Saturday　　(D) Friday

17.　What day of the week it will be on January 18th 1991?　　　[**D**]

(A) Wednesday　　　(B) Thursday　　(C) Friday　　　(D) Saturday

18.　What day of the week it will be on June 12th 1989?　　　　[**B**]

(A) Wednesday　　　(B) Monday　　(C) Friday　　　(D) Saturday

19.　What day of the week it will be on August 14th 2014?　　　[**B**]

(A) Wednesday　　　(B) Thursday　　(C) Friday　　　(D) Saturday

20.　What day of the week it will be on November 14th 1889?　　　[**D**]

(A) Tuesday　　　(B) Thursday　　(C) Friday　　　(D) Saturday

21.　What day of the week it will be on October 2, 1869?　　　　[**D**]

(A) Tuesday　　　(B) Thursday　　(C) Friday　　　(D) Saturday

22.　The calendar for the year 2016 will be the same for the year:　　　[**C**]

(A) 1936　　　　(B) 2022　　　(C) 1988　　　(D) 2062

23.　What day of the week it will be on January 26th 1950?　　　[**B**]

(A) Wednesday　　　(B) Thursday　　(C) Friday　　　(D) Saturday

24.　The calendar for the year 2007 will be the same for the year:　　　[**D**]

(A) 2014　　　　(B) 2016　　　(C) 2017　　　(D) 2018

25. The calendar for the year 1995 will be the same for the year: [**A**]

(A) 2006   (B) 2005   (C) 2007   (D) 2008

CHAPTER – 16

SEATING ARRANGEMENT

Direction (1-3): Study the given information carefully and answer the following question. Eight men A, B, C, D, E, F, G and H are sitting around a circular table facing the Centre for having their lunch. G is not an immediate neighbour of C.A. is third to the right of C.E is second to the left of C.C. is second to the left of B.F. is second to the left of D.A. is second to the left of F.

1. Who is sitting to the immediate right of C?   [**D**]

(A) G   (B) F   (C) D   (D) H

2. What is the position of D with respect to H?   [**A**]

(A) Third to the left   (B) Second to the left   (C) Immediate next   (D) None

3. Which of the following is the first person sitting between the second and third person?
[**B**]

(A) ABG   (B) DCH   (C) CHB   (D) FED

Direction (4-8): Each of these questions is based on the information given below:

1. 8 persons E, F, G, H, I, J, K and L are seated around a square table – two on each side.

2. There are 3 ladies who are not seated next to each other.

3. J is between L and F.

4. G is between I and F.

5. H, a lady member is second to the left of J.

6. F, a male member is seated opposite to E, a lady member.

7. There is a lady member between F and I.

4. Who among the following is to the immediate left of F?   [**B**]

(A) I   (B) J   (C) G   (D) H

5. What is true about J and K?   [**D**]

(A) J is male, K is female   (B) J is female, K is male   (C) Both are female (D) Both are male

6. How many persons are seated between K and F?   [**C**]

(A) 1   (B) 2   (C) 3   (D) 4

7. Who among the following are three lady members?   [**C**]

(A) E, H and J   (B) E, F and G   (C) E, H and G   (D) C, H and J

8. Who among the following is seated between E and H?   [**B**]

(A) F   (B) K   (C) I   (D) Can't be determined

Direction (10-13): A, B, C, D, E, F and G are sitting in a row facing North:

1. F is to the immediate right of E.
2. E is 4th to the right of G.
3. C is the neighbour of B and D.
4. Person who is third to the left of D is at one of ends.

10. Who are to the left of C? [**C**]

(A) Only B   (B) G, B and D   (C) G and B   (D) D, E, F and A

11. Which of the following statement is not true? [**B**]

(A) E is to the immediate left of D   (B) A is at one of the ends

(C) G is to the immediate left of B   (D) F is second to the right of D

12. Who are the neighbours of B? [**C**]

(A) C and D   (B) C and G   (C) G and F   (D) C and E

13. What is the position of A? [**A**]

(A) Between E and D   (B) Extreme left   (C) Centre   (D) Extreme right

Direction (14 - 18): Each of these questions are based on the information given below:

1. A, B, C, D and E are five men sitting in a line facing to south – while M, N, O, P and Q are five ladies sitting in a second line parallel to the first line and are facing to North.
2. B who is just next to the left of D, is opposite to Q.
3. C and N are diagonally opposite to each other.
4. E is opposite to O who is just next right of M.
5. P who is just to the left of Q, is opposite to D.
6. M is at one end of the line.

14. Who is sitting third to the right of O? [**D**]

(A) Q   (B) N   (C) M   (D) Data inadequate

15. If B shifts to the place of E, E shifts to the place of Q, and Q shifts to the place of B, then who will be the second to the left of the person opposite to O? [**A**]

(A) Q   (B) P   (C) E   (D) D

16. Which of the following pair is diagonally opposite to each other? [**D**]

(A) EQ   (B) BO   (C) AN   (D) AM

17. If O and P, A and E and B and Q interchange their positions, then who will be the second person to the right of the person who is opposite to the person second of the right of P? [**B**]

(A) D   (B) A   (C) E   (D) O

18. In the original arrangement who is sitting just opposite to N? [**B**]

(A) B   (B) A   (C) C   (D) D

Direction (19 – 22): Six friends P, Q, R, S, T and U are sitting around the hexagonal table each at one corner and are facing the centre of the hexagonal. P is second to the left of U. Q is neighbour of R and S. T is second to the left of S.

19. Which one is sitting opposite to P?   [**D**]

     (A) R   (B) Q   (C) T   (D) S

20. Who is the fourth person to the left of Q?   [**A**]

     (A) P   (B) U   (C) R   (D) Data inadequate

21. Which of the following are the neighbours of P?   [**B**]

     (A) U and P   (B) T and R   (C) U and R   (D) Data inadequate

22. Which one is sitting opposite to T?   [**B**]

     (A) R   (B) Q   (C) Cannot be determined   (D) S

Direction (23 – 26) : In an Exhibition seven cars of different companies – Candillac, Ambassador, Flat, Maruti, Mercedes, Bedford and Forgo are standing facing to east in the following order:

1. Cadillac is next to right of Fargo.
2. Fargo is fourth to the right of Fiat.
3. Maruti car is between Ambassador and Bedford
4. Fiat which is third to the left of Ambassador is at one end

23. Which of the cars are on both the sides of Cadillac car?   [**C**]

     (A) Ambassador and Maruti   (B) Maruti and Fiat

     (C) Fargo and Mercedes   (D) Ambassador and Fargo

24. Which of the following statement is correct?   [**D**]

     (A) Maruti is next left of Ambassador

     (B) Bedford is next left of Fiat

     (C) Bedford is at one end

     (D) Fiat is next second to the right of Maruti

25.   Which one of the following statements is correct?   [**D**]

(A) Fargo car is in between Ambassador and Fiat.

(B) Cadillac is next left to Mercedes and Fiat

(C) Fargo is next right of Cadillac

(D) Maruti is fourth right of Mercedes.

26.   Which of the following groups of cars is to the right of Ambassador?   [**B**]

(A) Cadillac, Fargo and Maruti

(B) Mercedes, Cadillac and Fargo

(C) Maruti, Bedford and Fiat

(D) Bedford, Cadillac and Fargo

CHAPTER – 17

PUZZLE TEST

Direction (1 – 5): Read the following information carefully and answer the questions that follow:

(i)   Five friends P, Q, R, S and T travelled to five different cities of Chennai, Calcultta, Delhi, Bangalore and Hyderabad by five different modes of transportof Bus, Train, Aeroplane, Car and Boat from Mumbai.

(ii)   The person who travelled to Delhi did not travel by boat,

(iii) R went to Banglore by car and Q went to Calcutta by aeroplane.

(iv)   S travelled by boat whereas T travelled by train.

(v)   Mumbai is not connected by bus to Delhi and Chennai.

1.   Which of the following combinations of person and mode is not correct?   [**E**]

(A) P - Bus   (B) Q - Aeroplane   (C) R - Car   (D) S – Boat (E) T – Aeroplane

2.   Which of the following combinations is true for S?   [**C**]

(A) Delhi - Bus   (B) Chennai - Bus   (C) Chennai - Boat   (D) Data Inadequate

(E) None of These

3. Which of the following combinations of place and mode is not correct?   [**E**]

(A) Delhi - Bus   (B) Calcutta - Aeroplane   (C) Bangalore - Car   (D) Chennai – Boat

(E) Hyderabad – Bus

4. The person travelling to Delhi went by which of the following modes?   [**B**]

(A) Bus   (B) Train   (C) Aeroplane   (D) Car   (E) Boat

5. Who among the following travelled to Delhi?   [**E**]

(A) R   (B) S   (C) T   (D) Data Inadequate   (E) None of These

Direction (6 – 7): Read the following information carefully and answer the questions that follow:

(i) Kailash, Govind and Harinder are intelligent.
(ii) Kailash, Rajesh and Jitendra are hard-working.
(iii) Rajesh, Harinder and Jitendra are honest.
(iv) Kailash, Govind and Jitendra are ambitious.

6. Which of the following persons is neither hard-working nor ambitious?   [**C**]

(A) Kailash   (B) Govind   (C) Harinder   (D) Rajesh   (E) None of These

7. Which of the following persons is neither honest nor hard-working but is ambitious?   [**B**]

(A) Kailash   (B) Govind   (C) Rajesh   (D) Harinder   (E) None of These

Direction (8 – 12): Read the following information and answer the questions that follow:

(i) Seven students P, Q, R, S, T, U and V take a series of tests.
(ii) No two students get similar marks.
(iii) V always scores more than P.
(iv) P always scores more than Q.
(v) Each time either R scores the highest and T gets the least, or alternatively S scores the highest and U or Q scores the least.

8. If S is ranked sixth and Q is ranked fifth, which of the following can be true?   [**B**]

(A) V is ranked first of fourth   (B) R is ranked second or third

(C) P is ranked second or fifth   (D) U is ranked third or fourth.

(E) T is ranked fourth or fifth.

9.   If R gets most, V should be ranked not lower than: [**D**]

(A) second   (B) third   (C) fourth   (D) fifth   (E) Sixth

10.   If R is ranked second and Q is ranked fifth, which of the following must be true?   [**E**]

(A) S is ranked third   (B) T is ranked sixth   (C) P is ranked sixth

(D) V is ranked fourth   (E) U is ranked sixth.

11.   If S is ranked second, which of the following can be true?   [**D**]

(A) U gets more than V   (B) V gets more than S   (C) P gets more than R
(D) P gets more than V   (E) T gets more than Q

12.   If V is ranked fifth, which of the following must be true?   [**E**]

(A) S scores the highest   (B) R is ranked second   (C) T is ranked third.
(D) Q is ranked fourth   (E) U scores the least.

Direction (13 -17): Read the following information and answer the questions given below it:

Six plays – A, B, C, D, E and F are to be staged, one on each day from Monday to Saturday. The schedule of the plays is to be in accordance with the following:

(i)   A must be staged a day before E.
(ii)   C must not be staged on Tuesday
(iii)   B must be staged on the day following the day on which F is staged.
(iv)   D must be staged on Friday only and should not be immediately preceded by B.
(v)   E must not be staged on the last day of the schedule.

13.   Which of the following plays immediately follows B?   [**B**]

(A) A   (B) C   (C) D   (D) E   (E) F

14.   Which of the following plays is on Monday?   [**A**]

(A) E   (B) F   (C) C   (D) B   (E) A

15.   Play D is between which of the following pairs of plays?   [**C**]

(A) B and E   (B) E and F   (C) A and E   (D) C and E   (E) C and F

16.   Which of the following is the schedule of play, with the order of their staging from Monday? [**E**]

(A) E, A; B, F, D, C   (B) A, F, B, E, D, C

(C) A, F, B, C, D, E   (D) F, A, B, E, D, C   (E) None of these

17.   Play C cannot definitely be staged on which of the following days in addition to Tuesday? [**C**]

(A) Monday   (B) Wednesday   (C) Friday   (D) Thursday   (E) Saturday

Direction (18 – 21): Read the following information and answer the questions given below it:

(i)   Eight doctors P, Q, R, S, T, U, V and W visit a charitable dispensary every day except on a holiday i.e. Monday.
(ii)   Each doctor visits for one hour from Tuesday to Sunday except Saturday. The timings are 9 a.m. to 1 p.m. and 2 p.m. to 6 p.m.; 1 p.m. to 2 p.m. is lunch break.
(iii)   On Saturday, it is open only in the morning i.e. 9 a.m. to 1 p.m. and each doctor visits for only half an hour.
(iv)   No other doctor visits the dispensary before doctor Q and after doctor U.
(v)   Doctor W comes immediately after lunch break and is followed by R.
(vi)   S comes in the same order as P in the afternoon session.

18.   Doctor P visits in between which of the following pairs of doctors?   [**A**]

(A) S and V   (B) U and W   (C) R and W   (D) R and U (E) None of these

19.   At what time the visit of doctor R is over on Sunday?   [**E**]

(A) 1 p.m.   (B) 3 p.m.   (C) 4 p.m.   (D) 5 p.m.   (E) None of these

20.   At what time the visit of Doctor T would be over on Saturday?   [**B**]

(A) 10 a.m.   (B) 11 a.m.   (C) Either 10 a.m. or 11 a.m

(D) Data inadequate (E) None of these

21.   If the lunch break and subsequent visiting hours are reduced by 15 minutes, at what time Doctor U is expected to attend the dispensary?   [**A**]

(A) 3:15 p.m.   (B) 4 p.m.   (C) 4:15 p.m.   (D) 4:45 p.m.

Direction (22 – 25): Read the following information and answer the questions given below it:

A Sales representative plans to visit each of six companies M, N, P, Q, R and S exactly once during the course of one day. She is setting up her schedule for the day according to the following conditions:

(i)   She must visit M before N and R.
(ii)   She must visit N before Q.
(iii) The third company she visits must be P.

22.   Which of the following must be true of the sales representative's schedule?   [**C**]

(A) She visits M before Q.   (B) She visits N before R   (C) She visits P before M

(D) She visits P before S.   (E) She visits Q before R

23.   If the sales representative visits S first, which company must she visit second?   [**B**]

(A) M   (B) N   (C) P   (D) Q   (E) R

24.   The sales representative could visit any of the following Companies immediately after P except:

(A) S   (B) R   (C) Q   (D) N   (E) M   [**D**]

25.   If the sales representative visits Q immediately before R and immediately after S, she must visit Q: [**C**]

(A) First   (B) Second   (C) Fourth   (D) Fifth   (E) Sixth

CHAPTER – 18

NUMBER RANKING & TIME SEQUENCE

1.   In a row of trees, one tree is fifth from either end of the row. How many trees are there in the row?   [**B**]

(A) 8   (B) 9   (C) 10   (D) 11

2.   In a queue, Amrita is 10th from the front while Mukul is 25th from behind and Mamta is just in the middle of the two. If there are 50 persons in the queue, what position does Mamta occupy from the front?   [**C**]

(A) 20th (B) 19th (C) 18th (D) 17th

3.   Raman ranks sixteenth from the top and forty ninth from the bottom in a class. How many students are there in the class?   [**A**]

(A) 64   (B) 65   (C) 66   (D) Can't be determined   (E) None of These

4. Sanjeev ranks seventh from the top and twenty eight from the bottom in a class. How many students are there in the class? [**D**]

    (A) 37   (B) 36   (C) 35   (D) 34

5. If Ali finds that he is twelfth from the right in a line of boys and fourth from the left, how many boys should be added to the line such that there are 28 boys in the line? [**B**]

    (A) 12   (B) 13   (C) 14   (D) 20   (E) none of these

6. Manisha ranked sixteenth from the top and twenty ninth from the bottom among those who passed an examination. Six boys did not participate in the competition and five failed in it. How many boys were there in the class? [**D**]

    (A) 40   (B) 44   (C) 50   (D) 55   (E) 58

7. Some boys are sitting in a row. P is sitting fourteenth from the left and Q is seventh from the right. If there are four boys between P and Q, how many boys are there in the row? [**E**]

    (A) 25   (B) 23   (C) 21   (D) 19   (E) none of these

8. Aruna ranks twelfth in a class of forthy-six. What will be her rank from the last? [**A**]

    (A) 33   (B) 34   (C) 35   (D) 37   (E) None of these

9. Sohan and Sachin are ranked seventh and eleventh respectively from the top in a class of 31 students. What will be their respective ranks from the bottom in the class? [**A**]

    (A) 20th and 24th (B) 24th and 20th (C) 25th and 21st (D) 26th and 22nd (E) None of these

10. Ravi is 7 ranks ahead of Sumit in a class of 39. If Sumit's rank is seventeenth from the last. What is Ravi's rank from the start? [**C**]

    (A) 14th (B) 15th (C) 16th (D) 17th (E) 17th

11. In a class of 60. Where girls are twice that of boys, Kamal ranked seventeenth from the top. If there are 9 girls ahead of Kamal, how many boys are after him in rank? [**C**]

    (A) 3   (B) 7   (C) 12   (D) 23   (E) 32

12. In a row of ten boys, when Rohit was shifted by two places towards the left, he became seventh from the left and. What was his earlier position from the right end of the row? [**B**]

    (A) First   (B) Second   (C) Fourth   (D) Sixth

13. In a queue, Vijay is fourteenth from the front and Jack is seventeenth from the end, while Mary is in between Vijay and Jack. If Vijay be ahead of Jack and there be 48 persons in the queue, how many persons are there between Vijay and Mary? **[B]**

    (A) 8   (B) 7   (C) 6   (D) 5   (E) None of these

14. In a row of girls, Rita and Monika occupy the ninth place from the right end and tenth place from the left end, respectively. If they interchange their places, Rita and Mounika occupy seventeenth place from the right and eighteenth place from the left, respectively. How many girls are there in the row? **[B]**

    (A) 25   (B) 26   (C) 27   (D) Data inadequate   (E) None of these

15. In a row of girls. Shilpa is eighth from the left and Reena is seventeenth from the right. If they interchange their positions, Shilpa becomes fourteenth from the left. How many girls are there in the row? **[E]**

    (A) 25   (B) 27   (C) 29   (D) 32   (E) None of these

16. Kailash remembers that his brother Deepak's birthday falls after 20th May but before 28th May, while Geeta remembers that Deepak's birthday falls before 22nd May but after 12th May, On what date Deepak's birthday falls? **[B]**

    (A) 20th May   (B) 21st May   (C) 22nd May   (D) Cannot be determined

    (E) None of these

17. Sangeeta remembers that her father's birthday was certainly after eighth but before thirteenth of December. Her sister Natasha remembers that their father's birthday was definitely after ninth but before fourteenth of December. On which date of December was their father's birthday? **[D]**

    (A) 10th (B) 11th (C) 12th (D) Data inadequate   (E) None of these

18. Standing on a platform, Amit told Sunita that Aligarh was more than ten kilometres but less than fifteen kilometres from there. Sunita knew that it was more than twelve but less then fourteen kilometres from there. If both of them were correct, which of the following could be the distance of Aligarh from the platform? **[C]**

    (A) 11 Km   (B) 12 Km   (C) 13 Km   (D) 14 Km   (E) 15 Km

19. Ashish leaves his house at 20 minutes to seven in the morning, reaches Kunal's house in 25 minutes, they finish their breakfast in another 15 minutes and leave for their office which takes another 35 minutes. At what time do they leave Kunal's house to reach their office? **[B]**

    (A) 7.40 a.m.   (B) 7.20 a.m.   (C) 7.45 a.m.   (D) 8.15 a.m.   (E) 7.55 a.m.

20. Ajay left home for the bus stop 15 minutes earlier than usual. It takes 10 minutes to reach the stop. He reached the stop at 8.40 a.m. What time does he usually leave home for the bus stop **[B]**

(A) 8.30 a.m.   (B) 8.45 p.m.   (C) 8.55 a.m (D) Data inadequate (E) None of these

21. Which is the third number to the left of the number which is exactly in the middle of the following sequence of numbers?   **[B]**

1 2 3 4 5 6 7 8 9 2 4 6 8 9 7 5 3 1 9 8 7 6 5 4 3 2 1

(A) 3   (B) 4   (C) 5   (D) 6   (E) 7

22. How many 3's are there in the following sequence which are neither preceded by 6 nor immediately followed by 9?   **[B]**

9 3 6 6 3 9 5 9 3 7 8 9 1 6 3 9 6 3 9

(A) One   (B) Two   (C) Three   (D) Four   (E) None of these

23. Count each 7 which is not immediately preceded by 5 but is immediately followed by either 2 or 3. How many such 7's are there?   **[B]**

5 7 2 6 5 7 3 8 3 7 3 2 5 7 2 7 3 4 8 2 6 7 8

(A) One   (B) Two   (C) Three   (D) Four   (E) Five

24. How many 6's are there in the following series of numbers which are preceded by 7 but not immediately followed by 9?   **[D]**

6 7 9 5 6 9 7 6 8 7 8 6 9 4 6 7 7 6 9 5 7 6 3

(A) One   (B) Two   (C) Three   (D) Four   (E) Five

25. How many 7's are there in the following series which are not immediately followed by 3 but immediately proceeded by 8?   **[C]**

8 9 8 7 6 2 2 6 3 2 6 9 7 3 2 8 7 2 7 7 8 7 3 7 7 9 4

(A) 10   (B) 3   (C) 2   (D) 0   (E) None of these

26. Count each 1 in the following sequence of numbers that is immediately followed by 2, if 2 is not immediately followed by 3. How many such 1's are there?   **[B]**

1 2 1 3 4 5 1 2 3 5 2 1 2 6 1 4 5 1 1 2 4 1 2 3 2 1 7 5 2 1 2 5

(A) 2   (B) 4   (C) 5   (D)7   (E)9

27. How many 7's are there in the following series which are preceded by 6 which is not preceded by 8?   **[C]**

8 7 6 7 8 6 7 5 6 7 9 7 6 1 6 7 1 7 6 8 8 6 9 7 6 8 7

(A) One   (B) Two   (C) Three   (D) Nil   (E) None of these

28.   In the following list of numerals, how many 2's are followed by 1's but not preceded by 4? [**B**]

4 2 1 2 1 4 2 1 1 2 4 4 4 1 2 2 1 2 1 4 4 2 1 4 2 1 2 12 4 14 2 1 2 4 1 4 6

(A) 2   (B) 4   (C) 5   (D) 3

Direction (29-30): Study the number series given below and answer the questions that follow:

7 8 9 7 6 5 3 4 2 8 9 7 2 4 5 9 2 9 7 6 4 7

29.   How many 7's are preceded by 9 and followed by 6?   [**A**]

(A) 2   (B) 3   (C) 4   (D) 5   (E) None of these

30.   Which figures have equal frequency?   [**D**]

(A) 253   (B) 245   (C) 375   (D) 865   (E) None of these

CHAPTER – 19

CLOCKS

1.   At 3.40, the hour hand and the minute hand of a clock form an angle of   [**C**]

(A) 120^0 (B) 125^0 (C) 130^0 (D) 135^0

2.   The angle between the minute hand and the hour hand of a clock when the time is 8.30 is [**B**]

(A) 80^0 (B) 75^0 (C) 60^0 (D) 105^0

3.   The angle between the minute hand and the hour hand of a clock when the time is 4.20 is [**B**]

(A) 0^0 (B) 10^0 (C) 5^0 (D) 20^0

4.   At what angle the hands of a clock are inclined at 15 minutes past 5?   [**C**]

(A) $58^{1/2\,0}$ (B) 64^0 (C) $67^{1/2\,0}$ (D) $72^{1/2\,0}$

5.   The reflex angle between the hands of clock at 10:25 is   [**D**]

(A) 180^0 (B) $192^{1/2\,0}$ (C) 195^0 (D) $197^{1/2\,0}$

6. How many times do the hands of a clock coincide in a day? [**C**]

   (A) 20 (B) 21 (C) 22 (D) 24

7. How many times in a day, the hands of a clock are straight? [**A**]

   (A) 22 (B) 24 (C) 44 (D) 48

8. How many times are the hands of a clock at right angles in a day? [**C**]

   (A) 22 (B) 24 (C) 44 (D) 48

9. How many times in a day are the hands of a clock in straight line but opposite in direction? [**B**]
   (A) 20 (B) 22 (C) 24 (D) 48

10. A clock is started at noon. By 10 minutes past 5, the hour hand has turned through [**C**]

    (A) 145^0 (B) 150^0 (C) 155^0 (D) 160^0

CHAPTER – 20

SYLLOGISM

Directions (1-25): In each question below are given two statements followed by two conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

Give answer (A) if only conclusion I follows:

(B) if only conclusion II follows:

(C) if either I or II follows;

(D) if neither I nor II follows and

(E) if both I and II follow.

1. **Statements:** All planets are moons. [**D**]

   All moons are stars.

Conclusions: I. All moons are planets.

II. All planets are stars.

2. **Statements:** All men are dogs. [**C**]

All dogs are cats.

Conclusions: I. All men are cats.

II. All cats are men.

3. **Statements :** All tubes are handles. [**B**]

All cups are handles.

Conclusions : I. All cups are tubes.

II. Some handles are not cups.

4. **Statements :** All bags are cakes. [**A**]

All lamps are cakes.

Conclusions: I. Some lamps are bags.

II. No lamp is bag.

5. **Statements :** All flowers are stems. [**E**]

All stems are roots.

Conclusions: I. All roots are flowers.

II. All stems are flowers

6. **Statements :** All puppets are dolls. [**B**]

All dolls are toys.

Conclusions: I. Some toys are puppets.

II. All toys are puppets.

7. **Statements :** All apples are oranges. [**A**]

Some oranges are papayas.

Conclusions: I. Some apples are papayas.

II. Some papayas are apples.

8. **Statements:** Some players are singers.   [**C**]

    All singers are tall.

    Conclusions: I. Some players are tall.

    II. All players are tall.

9. **Statements :** All coins are crows.   [**E**]

    Some crows are pens.

    Conclusions: I. No pen is coin.

    II. Some coins are pens

10. **Statements:** All men are married.   [**B**]

    Some men are educated

    Conclusions: I. Some married are educated.

    II. Some educated are married.

11. **Statements :** All cars are tables.   [**D**]

    Some children are tables.

    Conclusions: I. Some cars are children.

    II. Some children are cars.

12. **Statements :** All windows are needles.   [**E**]

    Some trees are windows.

    Conclusions: I. Some trees are needles

    II. Some trees are not needles.

13. **Statements :** Some dogs bark.   [**A**]

    All dogs bite.

    Conclusions: I. Those dogs who do not bark, also bite.

    II. Those dogs who do not bark, not necessarily bite

14. **Statements :** Some fools are intelligent.   [**B**]

    Some intelligent are great.

Conclusions: I. Some fools are great.

II. All great are intelligent.

15. **Statements :** Some papers are files.   [**C**]

Some files are pens.

Conclusions: I. Some files are not pens.

II. Some pens are papers.

16. **Statements:** Some bottles are pencils.   [**E**]

Some pencils are glasses.

Conclusions: I. No glass is bottle.

II. Some bottles are glasses.

17. **Statements :** Some soldiers are famous.   [**D**]

Some soldiers are intelligent.

Conclusions: I. Some soldiers are either famous or intelligent.

II. Some soldiers are neither famous nor intelligent.

18. **Statements:** All boys are honest.   [**A**]

Sachin is honest.

Conclusions: I. Sachin is a boy.

II. All honest persons are boys.

19. **Statements:** Lawyers married only fair girls.   [**C**]

Shobha is very fair.

Conclusions: I. Shobha was married to a lawyer.

II. Shobha was not married to a lawyer.

20. **Statements:** Sohan is a good sportsman.   [**B**]

Sportsmen are healthy.

Conclusions: I. All healthy persons are sportsmen.

II. Sohan is healthy.

21. **Statements :** All students in my class are intelligent   [**A**]

Rohit is not intelligent.

Conclusions: I. Rohit is not a student of my class.

II. Rohit must work hard.

22. **Statements:** All hill stations have a sun-set point.   [**D**]

X is a hill station.

Conclusions: I. X has a sun-set point.

II. Places other than hill stations do not have sun-set points.

23. **Statements:** Some sticks are bolts.   [**C**]

Kite is a stick.

Conclusions: I. Some bolts are sticks.

II. Some kites are bolts.

24. **Statements:** Some men are educated.   [**A**]

Educated person prefer small families

Conclusions: I. All small families are educated.

II. Some men prefer small families.

25. **Statements:** Some nurses are nuns.   [**D**]

Madhu is a nun.

Conclusions: I. Some nuns are nurses.

II. Some nurses are not nuns.

CHAPTER – 21

DATA SUFFICIENCY

Directions :

1. Choose A, If only statement – I is sufficient to answer the question
2. Choose B, If only statement – II is sufficient to answer the question
3. Choose C, If either of the statement is requited to the answer the question

4. Choose D, If both statements are not sufficient to answer the question

5. Choose E, If both the statements are required to answer the question

1. What is Reena's rank in the class? [**D**]

   I. There are 26 students in the class.

   II. There are 9 students who have scored less than Reena.

2. Who is the father of M? [**C**]

   I. A and B are brothers.

   II. B's W if e is sister of M's wife.

3. What day is the fourteenth of a given month? [**A**]

   I. The last day of the month is a Wednesday.

   II. The third Saturday of the month was seventeenth

4. Among four friends A, B, C and D, who is the heaviest? [**B**]

   I. B is heavier than A, but lighter than D.

   II. C is lighter than B

5. It is 8.00 p.m., when can Hemant get next bus for Ramnagar from Dhanpur? [**A**]

   I. Buses for Ramnagar leave after every 30 minutes, till 10 p.m.

   II. Fifteen minutes ago, one bus has left for Ramnagar

6. What is the colour of the fresh grass? [**D**]

   I. Blue is called green, red is called orange, Orange is called yellow.

   II. Yellow is called white, white is called black, green is called brown and brown is called purple

7. When is Manohar's birthday this year? [**C**]

   I. It is between January 13 and 15, January 13 being Wednesday.

   II. It is not on Friday.

8. On which day the flat was purchased by Rohan in 1996? [**B**]

   I. Certainly before 18th December, 1996 but definitely not before 15th December, 1996.

   II. Certainly after 16th December, 1996 but not later than 19th December, 1996.

9. Is Arun taller than Sachin?   [**C**]

    I. Dinesh is of the same height as Arun and Sachin.

    II. Sachin is not shorter than Dinesh.

10. Buses are always punctual in city X. How long, at the most, will Mr. Roy have to wait for the bus?   [**D**]

    I. Mr. Roy has come to the bus stand at 9 A.M.

    II. There is a bus at 10 A.M. and possibly another bus even earlier.

11. The Chairman of a big company visits one department on Monday of every week except for the Monday of third week of every month. When did he visit the Purchase departments? [**B**]

    I. He visited Accounts department in the second week of September after having visited Purchase department on the earlier occasion.

    II. He had visited Purchase department immediately after visiting Stores department but before visiting Accounts department.

12. How is D related to A?   [**A**]

    I. B is the brother of A.

    II. B is D's son.

13. Gaurav ranks eighteenth in a class. What is his rank from the last?   [**B**]

    I. There are 47 students in the class.

    II. Jatin who ranks 10th in the same class, ranks 38th from the last.

14. How many brothers does Tarun have?   [**C**]

    I. Tarun's father has three children.

    II. Tarun has two sisters.

15. Vipin's and Javed's salaries are in the proportion of 4 : 3 respectively. What is Vipin's salary?

    I. Javed s salary in 75% that of Vipin's salary.   [**E**]

    II. Javed's Salary is Rs 4500.

16. A, B, C, D and E are sitting in a row. B is between A and E. Who among them is in the middle?

    I. A is left of B and right of D.   [**D**]

    II. C is at the right end.

17. How many gift boxes were sold on Monday? [**A**]

I. It was 10% more than the boxes sold on the earlier day i.e. Sunday.

II. Every third visitor to the shop purchased the box and 1500 visitors were there on Sunday.

18. In a code 'lee pee tin' means' always keep smiling'. What is the code for 'Smiling'? [**B**]

I. 'tin lut lee' means 'Always keep left'.

II. 'dee pee' means 'Rose smiling'.

19. How many visitors saw the exhibition yesterday? [**C**]

I. Each entry pass holder can take up to three persons with him/her

II. In all, 243 passes were sold yesterday.

20. Among five friends who is the tallest? [**D**]

I. D is taller than A and C.

II. B is shorter than E but taller than D.

CHAPTER – 22

CRYPTOGRAPHY

1. What would be the value of the code 'X' where $X + 3 = 4$ [**A**]

(A) 1   (B) 2   (C) 0   (D) 3

2. What would be the value of 'A' where $A + B = 3$ [**D**]

(A) 1   (B) 2   (C) 6   (D) either 1 or 2

3. Find out which number stands for AB in the following operation: [**D**]

$AB + 56 = 98$

(A) 12   (B) 22   (C) 48   (D) 42

4. 'MN' is the representation for? $26 \times MN = 312$ [**B**]

(A) 18   (B) 12   (C) 17   (D) 14

5. What does ABC stands for? $A\,B\,C + 3\,4\,A = 5\,7\,6$ [**A**]

(A) 234   (B) 736   (C) 108   (D) 546

Direction (6 – 12): In the following multiplication, each of the letters denote a different integer. Each letter stands for the same integer throughout where 'A' stands for '2' and 'E' stands for '6'.

(A B A x C A) = (D A D x E C E X) = E F G D

6.   What is the value of C?   [**B**]

      (A) 4   (B) 2   (C) 3   (D) 6

7.   What is the value of F?   [**B**]

      (A) 9   (B) 8   (C) 3   (D) 7

8.   What is the sum total of BAD?   [**A**]

      (A) 16   (B) 14   (C) 7   (D) 9

9.   Which of the following number stand for CAB?   [**C**]

      (A) 467   (B) 324   (C) 627   (D) 321

10.   Which of the following number stand for DEAF?   [**B**]

      (A) 6784   (B) 4627   (C) 3247   (D) 3216

11.   What is the value of B^2 x D^3 [**D**]

      (A) 16   (B) 64   (C) 8   (D) 256

12.   What is the final product?   [**B**]

      (A) 4624   (B) 6364   (C) 6784   (D) 4246