CHAPTER – 1
SERIES COMPLETION

Direction (1 to34): In each of the following questions, a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series.

1. 17,19,22,27,34,45, _____   [A]
   (A) 58   (B)57   (C)56   (D)59

2. 1,2,6,15,31,_____   [D]
   (A)47   (B)52   (C)55   (D)56

3. 7,28,49,70,91,112 …..   [C]
   (A)135   (B)134   (C)133   (D)130

4. 7,12,19,28,39,_____   [C]
   (A)49   (B)57   (C)52   (D)51

5. 3,7,15,27,43,63, ____   [B]
   (A)86   (B)87   (C)89   (D)90

6. 5,11,23,47,95,____   [A]
   (A)191   (B)161   (C)169   (D)190

7. 1,1,3,9,6,36,10,100,…..225   [A]
   (A)15   (B)16   (C)20   (D)25

8. 5,7,10,15,23, ……..   [C]
   (A)31   (B)32   (C)35   (D)34

9. 11,23,48,99,___, 409   [B]
   (A)200   (B)202   (C)201   (D)205

10. 0,6,24,60,….., 210   [D]
    (A)117   (B)119   (C)132   (D)120

11. 0,4,6,3,7,9,6, ……, 12   [B]
    (A)8   (B)10   (C)11   (D)14

13. 11,12,20,47, …….   [C]
    (A)91   (B)101   (C)111   (D)121

14. 5,6,10,19,35, ……..   [C]
    (A)45   (B)48   (C)60   (D)62

15. 10, 19, 40, 77, 158, ……..   [A]
    (A) 311   (B) 307   (C) 301   (D) 299

16. 2, 10, 26, 50, 82, ……..   [D]
    (A) 110   (B) 112   (C) 120   (D) 122

17.   8, 9, 11, 14, 18, 23, …..   [C]
       (A) 28   (B) 30   (C) 29   (D) 33

18.   8, 7, 11, 12, 14, 17, 17, 22, …….   [B]
       (A) 27   (B) 20   (C) 22   (D) 24

19.   3, 8, 13, 24, 41, ?   [A]
       (A) 70   (B) 75   (C) 80   (D) 85

20.   10, 11, 101, 111, 1011, ?   [E]
       (A) 1001   (B) 1101   (C) 1011   (D) 1111 (E) 1100

21.   27, 9, 3, 39, ?, 4, 2, 14   [D]
       (A) 14   (B) 34   (C) 64   (D) 8

22.   2, 12, 30, 56, 90, ……   [C]
       (A) 110   (B) 121   (C) 132   (D) 143

23.   2, 3, 5, 8, 13, 21, ……   [D]
       (A) 29   (B) 30   (C) 32   (D) 34

24.   0, 2, 3, 5, 8, 10, 15, 17, 24, 26, ……   [A]
       (A) 35   (B) 32   (C) 30   (D) 28

25.   10, 15, 30, 45, 90, ….   [D]
       (A) 100   (B) 110   (C) 125   (D) 135

26.   1, 1, 2, 3, 5, 8, 13, ?   [A]
       (A) 21   (B) 17   (C) 19   (D) 29

27.   0, 3, 8, 15, 24, 35, ?   [B]
       (A) 46   (B) 48   (C) 47   (D) 50

28.   79, 61, 44, 29, ?   [D]
       (A) 24   (B) 14   (C) 23   (D) 17

29.   60, 12, 24, 6, ? 2   [C]
       (A) 8   (B) 4   (C) 6   (D) 9

30.   1, 3, 9, 33, 153,?   [D]
       (A) 199   (B) 306   (C) 720   (D) 873

31.   840, 168, 42, 14, 7, -------.   [B]
       (A) 1   (B) 7   (C) 9   (D) 3

32.   1, 4, 2, 8, 6, 24, 22, 88, ….   [A]
       (A) 86   (B) 90   (C) 154   (D) 352

33.   225, 336, 447, 558, ….7710   [C]
       (A) 690   (B) 660   (C) 689   (D) 669

34. 28, 34, 45, 61, 72, …..   [A]
    (A) 78   (B) 83   (C) 88   (D) 80

35. Find a wrong number in the series: 8, 13, 21, 32, 47, 63, 83   [B]
    (A) 13   (B) 47   (C) 32   (D) 63

36. Find a wrong number in the series: 9, 19, 37, 75, 149, 297   [A]
    (A) 75   (B) 37   (C) 149   (D) 297

37. Find wrong number in the series: 7, 28, 63, 124, 215, 342, 511   [B]
    (A) 7   (B) 28   (C) 124   (D) 215

Directions: (38 – 43)In each of the following questions, various terms of an alphabet series are given with one or more terms missing show by (?) choose the missing term out of given alternatives.

38. ABX, EFT, IJP, MNL, …?...   [A]
    (A) QRG   (B) QRI   (C)QRS   (D) OQT

39. BDF, CFI, DHL, …?.   [C]
    (A) CJM   (B) EIM   (C) EJO   (D) EMI

40. JE, LH, OL, SQ, …?.   [B]
    (A) WV   (B) XW   (C) VW   (D) VX

41. Z, X, V, T, R, …?.., ?.....   [D]
    (A) O, K   (B) N, M   (C) K, S   (D) P, N

42. AZ, CX, FU, …? ..   [C]
    (A) IR   (B) IV   (C) JQ   (D) KP

43. A, CD, GHI, …?. UVWXY   [D]
    (A) LMNO   (B) MNOL   (C) NOPQ   (D) MNOP

Directions: (44 – 50) In each of the following questions, one term is wrong. Find out the wrong term.

44. 1, 5, 5, 9, 7, 11, 11, 15, 12, 17   [B]
    (A) 11   (B) 12   (C) 17   (D) 15

45. 2, 5, 10, 17, 26, 37, 50, 64   [D]
    (A) 17   (B) 26   (C) 37   (D) 64

46. 225, 196, 169, 144, 121, 80   [A]
    (A) 80   (B) 121   (C) 169   (D) 196

47. 24, 27, 31, 33, 36, 39   [C]
    (A) 24   (B) 27   (C) 31   (D) 23
48. 1, 3, 7, 15, 27, 63, 127   [C]
    (A) 7   (B) 15   (C) 27   (D) 63

49.   1, 3, 10, 21, 64, 129, 256, 777   [C]
       (A) 10   (B) 21   (C) 129   (D) 256

50.   5, 27, 61, 122, 213, 340, 509,   [A]
       (A) 27   (B) 61   (C) 122   (D) 509

Directions (51 -55): 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.

51.   aab – aa- bbb – aaa – bba   [B]
       (A) abba   (B) baab   (C) aaab   (D) abab

52.   bc – b – c – b – ccb   [A]
       (A) cbcb   (B) bbcb   (C) cbbc   (D) bcbc

53.   abca – bcaab – a – bc -   [C]
       (A) ccaa   (B) bbaa   (C) abac   (D) abba

54.   - - aba - - ba – ab   [B]
       (A) abbba   (B) abbab   (C) baabb   (D) bbaba

55.   c – bba – cab ac – ab – ac   [B]
       (A) abcbc   (B) acbcb   (C) babcc   (D) bcacb

Direction: (56-59): Choose the correct answer

56. ZA_5, Y_4B, XC_6, W_3D, _____   [D]
       (A) E_7V (B) V_2E (C) VE_5 (D) VE_7

57. P_5QR, P_4QS, P_3QT, _____ P_1QV [C]
       (A) PQW   (B) PQV_2 (C) P_2QU (D) PQ_3U

58.   DEF, DEF_2, DE_2F_2, _____ $D_2E_2F_3$ [D]
       (A) DEF_3 (B) D_3EF_3 (C) D_2E_3F (D) $D_2E_2F_2$

59. B_2CD, _____, BCD_4, B_5CD, BC_6D [B]
       (A) B_2C_2D (B) BC_3D (C) B_2C_3D (D) BCD_7

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CHAPTER -2
CODING AND DECODING

1. In a certain code MENTION is written as LNEITNO, How is PATTERN   [C]
written in that code?
(A) APTTREM   (B) PTAETNR   (C) OTAETNR   (D) OTAETRN

2. In a certain code FORGE is written as FPTJI, how is CULPRIT written   [C]
in that code?
(A) CSJNPGR   (B) CVMQSTU   (C) CVNSVNZ   (D) CXOSULW

3. If in a certain language CALCUTTA is coded as GEPGYXXE, which   [A]
word would be code as FSQFCE?
(A) BOMBYA   (B)BOMBAY   (C) BOMBYAB   (D) BOBAYM

4. If PAINT is coded a 74128 and EXCEL is coded as 93596, then what   [A]
is the code for ACCEPT?
(A) 455978   (B) 547978   (C) 554978   (D) 735961

5. If PALAM could be given to the code number 43, what code number can   [D]
be given to SANTACRUZ?
(A) 75   (B) 85   (C) 120   (D) 123

6. If rat is called dog, dog is called mongoose, mongoose is called lion,   [C]
lion is called snake, and snake is called an elephant, which is reared as pet?
(A) rat   (B) dog   (C) mongoose   (D) lion

7. If finger is called toe, toe is called foot, foot is called thumb, thumb is called   [B]
ankle, ankle is called palm and plam is called knee, which one finger has different name?
(A) thumb   (B) ankle   (C) knee   (D) plam

8. If 'stinrokti' stands for 'clouds pour down', 'nrobsimit' stands for 'down   [B]
he goes'and 'bsinrozpi' stands for 'died down he', which word would mean goes'?
(A) nro   (B) mit   (C) kti   (D) bsi

9. In a certain code language '3a, 2b, 7c' means 'Truth is Eternal'   [C]
7c, 9a, 8b, 3a' means 'Enmity is not Eternaland '9a, 4d, 2b, 8b,' means 'truth does not
Enmity'. Which of the following means 'Enmity' in that language?
(A) 9a   (B) 7c   (C) 8b   (D) 9a or 8b

10. If in a certain language CARROM is coded as BZQQNL, which word is   [A]
coded as HOUSE?
(A) IPVTF   (B) GNTRD   (C) INVRF   (D) GPTID

11. If in a certain language, NEOMAN is coded as OGRQFT, which word   [C]
is coded as ZKCLUP?
(A) YJBKTO   (B) XIAJSN   (C) YIZHPJ   (D) YIAQKJ

12. If a certain language, POPULAR is coded as QPQVMBS, which word   [B]
would be coded as GBNPVT?
(A) FAMOSU   (B) FAMOUS   (C) FASOUM   (D) FOSAUM

13. If in a certain language MACHINE is coded as LBBIHOD, which   [B]

would be coded as SLTMFNB?
(A) RSKLEMA   (B) TKULGMC   (C) RMSNEOA   (D) TMUNGOC

14.   If in a certain language A is coded as 1, B is coded as 2, and so on how   [A]
        is BIDDIC coded in that code?
        (A) 294493   (B) 284563   (C) 375582   (D) 394492

15.   If D = 4 and COVER = 63, then BASIS =?   [B]
        (A) 49   (B) 50   (C) 54   (D) 55

16.   If Z = 52 and ACT = 48, then BAT will be equal to   [D]
        (A) 39   (B) 41   (C) 44   (D) 46

17.   If 'cook' is called 'butler' is called 'manager' is called 'teacher',   [D]
        'teacher' is called 'clerk' and 'clerk' is called 'principal', who will teach in the class?
        (A) cook   (B) butler   (C) manager   (D) clerk

18.   If diamond is called gold, gold is called silver, silver is called ruby and   [D]
        ruby is called emerald, which is the cheapest jewel?
        (A) diamond   (B) silver   (C) gold   (D) ruby

19.   If eye is called hand, hand is called mouth, mouth is called ear, ear is called   [C]
        nose and nose is called tongue, with which of the following a person hear?
        (A) eye   (B) mouth   (C) nose   (D) ear

20.   If 'nsoptrkiichn' stands forshrma get marriage gift', 'ptrInm wop chn,   [D]
        stands for 'wife gives marriage gift', tti wop nhi' stands for 'he gives nothing'
        what would mean 'gives'?
        (A) chn   (B) nhi   (C) ptr   (D) wop

21.   If 'tee see pee' means 'Drink fruit juice'; 'see kee lee' means 'juice is sweet'   [B]
        and 'lee reemee' means' He is intelligent',which word would mean 'sweet' in that language.
        (A) see   (B) kee   (C) lee   (D) pee

22.   In a certain code language,   [C]
  (i) 'pit nasom' means 'bring me water':
        (ii) 'na jo tod' means 'water is life';
        (iii) 'jo linkot' means 'Life and death'.
Which of the following represents 'is' in that language?
        (A) jo   (B) na   (C) tod   (D) lin

23.   In a certain code language 'pic vicnic' means 'winter is cold ','to nic re' means   [A]
        'summer is hot'. 're pic boo' means 'nights are cold', which word represents 'winter'?
        (A) re   (B) nic   (C) pic   (D) vic

24. In a certain code 786' means 'study very hard'; '958' means 'hard work pays'   [C]
        and '645' means 'study and work'. Which of the following is the code for 'very'?
        (A) 8   (B) 6   (C) 7   (D) cannot be determined

25. In acertain code language, '324 means ' light is bright', '629' means 'Girl is   [A]

beautiful' and '4758 means 'I prefer bright clothes'. Which digit means 'Light' in that language?

    (A) 3   (B) 2   (C) 4   (D) 7

26. In a certain code language '526' means 'sky is blue'; '24' means 'blue colour'   [C]
and '436' means 'colour is fun'. Which of the following digit stands for 'fun'?

(A) 5   (B) 4   (C) 3   (D) 2

27. In a certain code   [D]
(i) '134' means 'you are well';
(ii) '758' means 'they go home';
(iii) '839' means 'we are home'.
Which of the following represents 'they' in that code language?

    (A) 5   (B) 7   (C) 8   (D) data inadequate

28. In a certain language, "DELHI" is coded as "WVOSR" then what is the code   [A]
 for "JAIPUR"

    (A) QZRKFI   (B) RUPIAJ   (C) KBJQVS   (D) WNVCHE

29. In a certain language, "CODE" is coded as "ERIL", in the same way what   [A]
   is the code for "DECODE"

    (A) FHHVOR   (B) FHIVPR   (C) ROVHHF   (D) FHHVRO

30. In a certain language, Z=1, Y=3, X=5, W=7, V=9………… then which   [B]
   latter value is '21'

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

31. In a certain language, "PAPER" is coded as "NWJWH" . In a same way,   [A]
   which word is coded as "ADUAH"

    (A) CHIAR   (B) CHAIR   (C) CIAHR   (D) CRAIH

32. In a certain language, "SWALLOW" is coded as "SALWWLO" what   [B]
   is the code for "PILLOWS"

    (A) POLLIWS   (B) PLLISOW   (C) PLOWLIS   (D) PWOLLIS

33. If pen means paper, paper means book , book means scale, scale   [A ??]
   means bag, bag means bus. With what will you measure 8 cm?

    (A) book   (B) bag   (C) bus   (D) scale

34. If teacher means doctor, doctor means engineer, engineer means   [D ??]
   lawyer, Lawyer means manger, manger means chartered accountant. Then, who will give a plan
   to construct the house?

    (A) engineer   (B) lawyer   (C) manager   (D) doctor

35. In a certain code language CREATIVE is written as BDSBFUJS. How   [B]
   is TRIANGLE written is what is that code?

    (A) SJSBDOJI   (B) BHSSFKHM   (C) BJSBDOIJ   (D)
    SJSBDIJO

36. In a certain code, BROUGHT is written as SGFVAQN. How SUPREME   [B]
   is written in that code?

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

37. What number is the code for 'blue'?   [D]
   (A) 1   (B) 6   (C) 9   (D) 8

38. If DIAMOND is coded as VQYMKLV, how is FEMALE coded?   [A]
   (A) TUMYNU   (B) UVNZOV   (C) UVNYNV   (D) TVNYNV

  39. In a coding system , SHEEP is written as GAXXR and BLEAT is   [A]
     written as NPXTN. How can SLATE be written in this coding system?
(A) GPTNX   (B) GPTXN   (C) GPXNT   (D) PTGXN

40. In a certain code , STOVE is written as FNBLK , then how will VOTES   [B]
be written is the same code?
(A) FLKBN   (B) LBNKF   (C) LKNBF   (D) LNBKF

41. IF REASON is coded as 5 and BELIEVED as 7, then what is the code   [C]
for GOVERNMENT?
(A) 6   (B) 8   (C) 9   (D) 10

42. If DRIVER = 12, PEDESTRIAN = 20 , ACCIDENT = 16 , then CAR =?   [B]
(A) 3   (B) 6   (C) 8   (D) 10

43. In a certain code , 'lee ra de' means 'what was it; 'mo nil' means 'you go',   [D]
'nil pom ra' , means 'you like it' and 'tok lee to,' means 'she was sick'. How will you write 'what you like' in that code?
(A) nil ra lee   (B) pom nil ra   (C) pom ra lee   (D) nil pom de

Directions (Q. 44 to 49): Below in column I are given some words and in Column II are given their equivalently in some code language. Words in column II do not appear in the same order as in column I. Moreover, the order of letters is also jumbled. Decode the language and choose the correct alternative which is the equivalent of the given word:

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

44. SOUP   [B]
(A) osmj   (B) sojm   (C) osjm   (D) somj

45. REACT   [D]
(A) lhpjk   (B) lihpr   (C) pkjih   (D) kplih

46. POSSESS   [B]
 (A) msoopoo   (B) mosspss   (C) porrprr   (D) mpiioii

46. CREATE   [D]
(A)ljhkhn   (B) jknlhn   (C) jlphip   (D) ilpkhp

47. EASY   [C]
(A)lnps   (B) lpns   (C) plsn   (D) pnls

48. In a certain code language "rib nit ka" means "telephone is essential', "sin fa de"   [D   ]
means "regular good service" and "rib sin" means "essential service". How will "regular service" be
written in that code language?
(A) sin fa   (B) sin de   (C) rib sin   (D) data inadequate

49. In a certain code language "dek sil age" means "how are you" , "age mic ter"   [D   ]
means "you and I" and "mic dek fic" means "how I am" . What is the code for "and" in that
language?
(A) dek   (B) age   (C) sil   (D) ter

**Directions (Q. 50 to 52): Study the following statements A, B, C, D and E and answer the
following questions.**

   A. 1 5 9 means "you better go"
   B. 1 6 7 means "better come here"
   C. 5 6 7 means "you come here"
   D. 1 56 means "better you here"
   E. 3 7 9 means "come and go"

50. Which of the following group of minimum statements are necessary to find the   [A   ]
code number "better"?
(A) A and B   (B) D and E   (C) B & D   (D) B & E

51. which numeral means "and" ?   [C   ]
(A) 6   (B) 9   (C) 3   (D) 7

52. Which numeral means "go" ?   [DD]
(A) 1   (B) 5   (C) 7   (D) 9

***

CHAPTER-3
ANALOGY

**Direction (1-22): Select the pair that has the same relationship as the given pair of word /
number / letters.**

1. Car : garage : : aeroplane : ?   [C]
    (A) port   (B) depot   (C) hangar   (D) harbor

2. Race : fatigue : : fast : ?   [C]
    (A) food   (B) appetite   (C) hunger   (D) weakness

3. ship : sea : : camel:?   [D]
    (A) Forest   (B) land   (C) mountain   (D) desert

4.Calendar : dates : : dictionary: ?   [C]
    (A) Vocabulary   (B) language   (C) words   (D) book

5.Motor cycle is related to Battery in the same way as life is related to   [B]
    (A) earth   (B) sun   (C) moon   (D) star

6.Neck is related to Tie in the same way as waist is related to …..?   [B]
    (A) Watch   (B) belt   (C) ribbon   (D) shirt

7.Chalk : board : : pen : ?   [B]
    (A) Glass   (B) paper   (C) wood   (D) stone

8.Cat : mouse : : ? : ?   [C]
    (A) Horse : stable   (B) trap : cheese
    (C)bird : worm   (D) lion : cage

9. choose a word form the given alternatives that belongs to the same group.   [B]
    Clutch : Brake : Horn
    (A) door   (B) steering   (C) car   (D) accident

10. Ocean : Water : Glacier : ?   [B]
    (A) refrigerator   (B) ice   (C) mountain   (D) cave

11. Food : Stomach : : Fuel : ?   [C]
    (A) plane   (B) truck   (C) engine   (D) automobile

12. Museum is related to Curator in the same way as Prison is related to …… ?   [C]
    (A) manager   (B) monitor   (C) jailor   (D) warden

13. Wax is related to Grease in the same way as Milk is related to ….. ?   [C]
    (A) drink   (B) ghee   (C) curd   (D) protein

14. Dancer is related to Stage in the same way as Minister is related to …. ?   [A]
    (A) pulpit   (B) assembly   (C) parliament   (D) state

15. Knife : Chooper : : ? : ?   [D]
    (A) walking : fitness   (B) swim : float
    (C) scissors : cloth   (D) quilt : blanket

16. Food : Hungry : : ? : ?   [C]
    (A) though : politics   (B) water : river
    (C)rest : weary   (D) wine : intoxication

17. Chair : Carpenter : : ? : ?   [C]
    (A) grass : gardener   (B) medicine : doctor
    (c) bridge: engineer   (D) radio: radiologist

18. CONFESS : DENNY   [C]
    (A) royal : regal   (B) speak : hear
    (C) release : imprison   (D) loud : audible

19. FAIR : FARE   [C]
    (A) smart : pretty   (B) bushel : corn
    (C) hair : hare   (D) moral : amoral

20. EYE : LIGHT   [D]
    (A) hear : see   (B) brain : idea
    (C) hand : fist   (D) ear : sound

21. GALLY : SHIP   [B]
    (A) mall : market   (B) kitchen : house
    (C) bouquet : rose   (D) restaurant : hotel

22. Lace : Shoe   [D]
    (A) cuff : trousers   (B) final : certain
    (C) request : ask   (D) buckle : belt

Directions (23 – 25): Choose a word from the given alternatives that belongs to the same group of three related words.

23. calf : kid : pup   [C]
    (A) infant   (B) young
    (C) larva   (D) animal

24. jute : cotton : Wool   [B]
    (A) terylene   (B) silk
    (C) rayon   (D) nylon

25. Violet : Orange : Yellow   [B]
(A) purple   (B) blue
(C) whit   (D) pink

Direction (26 – 38): Select the pair that has the same relationship as the given pair of numbers.

26. 6: 18 : :4: ?   [A]
(A) 2   (B) 6
(C) 8   (D) 16

27. 25 : 37 : : 49: ?   [D]
(A) 41   (B) 56
(C) 60   (D) 65

28. 583 : 293 : 488 : ?   [B]
(A) 291   (B) 378

(C) 487   (D) 248

29. 9 : 80 : : 7 : ?   [A   ]
(A) 48   (B) 50
(C) 78   (D) 82

30. 372 :124 : : ? : ?   [C   ]
(A)81 : 243   (B) 900 : 450
(C) 624 : 208   (D) 513 : 161

31. 12 : 65 : : 7 : ?   [B   ]
(A) 35   (B) 40
(C) 55   (D) 50

32. 135 : 7911 : : 246 : ?   [D   ]
(A) 81042   (B) 81012
(C) 80102   (D) 82012

33. 7963 : 1321 : 4132 : ?   [B]
(A) 84   (B) 78
(C) 73   (D) 68

34. 231 : 564 : 897 : ?   [D   ]
(A) 101112   (B) 111012
(C) 111210   (D) 121110

35. 2319 : 3129 : : 4137 : ?   [D   ]
(A) 4347   (B) 1437
(C) 473   (D) 1347

36. 12112 : 23223 : 34334 : ?   [B   ]
(A) 45554   (B) 45445
(C) 45545   (D)44555

37. 7 : 21 : : 4 : ?   [C   ]
(A) 10   (B) 24
(C) 12   (D) 48

38. 125 : 64 : : 343 : ?   [B   ]
(A) 125   (B) 216
(C) 27   (D) 512

Direction (39 -43): Choose the number from the four alternatives which is similar to the given set.

39. Given set : 992, 874, 756   [C   ]
(A) 114   (B) 326
(C) 638   (D) 947

40. Given set : 282, 354, 426   [A   ]
(A) 498   (B) 417

(C) 336   (D) 255

41. Given set : 134, 246, 358   [B   ]
(A) 372   (B) 460
(C) 572   (D) 684

42. Given set : 235, 347, 527   [D   ]
(A) 935   (B) 436
(C) 835   (D) 909

43. Given set : 11, 7, 13   [B   ]
(A) 9   (B) 17
(C) 12   (D) 25

Direction (44-47): Choose the set of number from the four alternatives which is similar to the given set.

44. Given set : 6, 13, 22   [C   ]
(A) 6, 13, 27   (B) 10, 16, 28
(C) 11, 18, 27   (D) 13, 19, 27

45. Given set : 9, 15, 21   [D   ]
(A) 10, 14, 16   (B) 7, 21, 28
(C) 5, 10, 25   (D) 4, 8, 12

46. Given set : 21, 51, 15   [D   ]
(A) 21, 30, 51   (B) 21, 35, 41
(C) 31, 51, 42   (D) 21, 91, 35

47. Given set : 64, 32, 8 ?   [C   ]
(A) (125, 25, 5)   (B) (81, 27, 3)
(C) (56, 28, 7)   (D) (112, 56, 16)

Direction (48 – 55): Choose a group of letters from the given alternatives that establish the same relation as given pair.

48. DDA : ADD : : RRB : ?   [C   ]
(A) RBR   (B) BRB
(C) BRR   (D) RBB

49. ACFJ : ZXUQ : : EGJN : ?   [B   ]
(A) DBYU   (B) VTQM
(C) VTRP   (D) VUSQ

50. AG : IO : : EK : ?   [B   ]
(A) LR   (B) MS
(C) PV   (D) SY

51. ACE : FHJ : OQS : ?   [C   ]
(A) PRT   (B) RTU
(C) TVX   (D) UWY

52. ACEG : DFHJ : : QSUW : ?   [D]
(A) KMNP   (B) MNPR
(C) TQST   (D) TVXZ

53. EGIK : FILO : : FHJL : ?   [A]
(A) GJMP   (B) GMJP
(C) JGMP   (D) JGPM

54. IJK : MLK : : OPQ : ?   [B??]
(A) RSQ   (B) SRQ
(C) FGJ   (D) TSR

55. BD : FH : : NP : ?   [D]
(A) ST   (B) VW
(C) UV   (D) RT

***

CHAPTER – 4
CLASSIFICATION

Directions : Find the odd one
1. (A) carpet   (B)purse   (C)bag   (D) pocket   (E) jug [A]
2.   (A) Andhra Pradesh   (B) Pondicherry (C) Delhi   (D)Chandigarh   [
    E   ]   (E) Danman and Diu

3. (A) apple   (B) carrot   (C) orange   (D) guava   [B]
        (E) tomato

4.   (A) lake   (B) pond   (C) pool   (D) brook   [
    D   ]

5. (A) club   (B) brush   (C) crayon   (D)pen   [A]

6. (A) panther   (B) lion   (C) whale   (D) fox   [C]

7. (A) mist   (B) cloud   (C) rain   (D) vapour   [C]

8. (A) banana   (B) mango   (C) guava   (D) ginger   [D]

9. (A) pen   (B) pencil   (C) marker   (D) ink   [D]

10. (A) carbon   (B) copper   (C) silver   (D) gold   [A]

11. (A) plateau   (B) star   (C) mountain   (D) forest   [B]

12. (A) parrot   (B) pigeon   (C) sparrow   (D) kiwi   [D]

13. (A) apple   (B) banana   (C) carrot   (D) date   [C]

14. (A) town   (B) metropolis   (C) house   (D) city   [C]

15. (A) Ear   (B) Tongue   (C) Eye   (D) Throat   [A]

16. (A) BD   (B) MP   (C) NQ   (D) HK   [A]

17. (A) TV   (B) MO   (C) PR   (D) FG   [D]

18. (A) PRT   (B) MOQ   (C) GEC   (D) TVX   [C]

19. (A) EBA   (B) XUT   (C) TQP   (D) JFE   [D]

20. (A) RNJ   (B) XTP   (C) MIE   (D) ZWR   [D]

21. (A) STUA   (B) RQPA   (C) MLKA   (D) HGFA   [A]

22. (A) PRVX   (B) MQTV   (C) DHKM   (D) BFIK   [A]

23. (A) XZCG   (B) OQTX   (C) IMNQ   (D) EGJN   [C]

24. (A) ABCD   (B) EGIK   (C) ACDF   (D) CFIL   [C]

25. (A) 275   (B) 451   (C) 297   (D) 254   (E) 143   [D]

26. (A) 875   (B) 432   (C) 567   (D) 789   (E) 678   [D]

27. (A) 2384   (B) 1592   (C) 3756   (D) 3629   [D]

28. (A) 5698   (B) 4321   (C) 7963   (D) 4232   [D]
(E) 8597

29. (A) 1375   (B) 1245   (C) 1125   (D) 1450   [D]

30. (A) 37   (B) 49   (C) 132   (D) 154   [A]

31. (A) 140   (B) 240   (C) 360   (D) 480   [A]

32. (A) 392   (B) 326   (C) 414   (D) 248   [A]

33. (A) 2345   (B) 3456   (C) 5467   (D) 5678   [C]

34. (A) 2468   (B) 2648   (C) 4826   (D) 6482   [A]

35. (A) 81-63   (B) 24-48   (C) 21-15   (D) 13-39 [A]

36. (A) 3-4   (B) 4-7   (C) 5-12   (D) 20-21 [D]

37. (A) 3-4   (B) 16-26   (C) 26-24   (D) 27-22   [B]

38. (A) 9-3   (B) 1/2-1/8   (C) 1/3-1/12   (D) 24-6   [A]

39. (A) 8-27   (B) 125-216   (C) 343-512   (D) 1009-1331 [D   ]

40. (A) 72-45   (B) 51-24   (C) 46-20 (D) 32-13   [D]

41. (A) 17-19   (B) 29-31   (C) 47-59   (D) 5-7   [C]

42. (A) 13-21   (B) 19-27   (C) 15-23   (D) 16-24   [A]

43. (A) 23-29   (B) 19-25   (C) 13-17   (D) 3-5   [B]

44. (A) 95-82   (B) 69-56   (C) 55-42   (D) 48-34 [D]

45. (A) 6-35   (B) 8-63   (C) 9-82   (D) 13-168   [C]

46. (A) 26-64   (B) 36-81   (C) 87-225   (D) 43-59   [B]

47. (A) 121-81   (B) 49-25   (C) 87-16   (D) 36-16   [C]

48. (A) 61- 4   (B) 94 - 6   (C) 961 - 13   (D) 423 - 18 [C]

49. (A) 19   (B) 9   (C) 7   (D) 13   [A]

50. (A) 7-84   (B) 6-108   (C) 5-75   (D) 3-99   [A]

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CHAPTER-5
LOGICAL VENN DIAGRAM

Direction(1-10) :In each of these questions, three words are related in some way.
The relationship among the words in the question can best be represented by one of the five diagrams (A) ,(B) ,(C) ,(D) and (E) given below. Mark your answer accordingly.

(A)   (B)   (C)   (D)   (E)
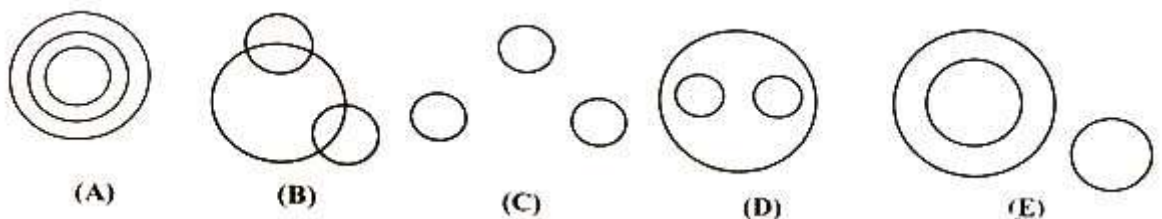
1. Carrot, Food, Vegetable   [A   ]

2. Tie, Shirt, Pantaloon   [E   ]

3. Shirt, Collar, pocket   [D   ]

4. Petals, Bouquet, Flowers   [A   ]

5. Dogs, Pets, Cats   [D   ]

6. Brinjal, Meat, Vegetables   [E   ]

7. Rhombus, Quadrilaterals, Polygons   [E   ]

8. Languages, French, German   [D   ]

9. Sun, Planets, Earth   [A   ]

10. Classroom, Blackboard, School   [A   ]

Directions(11-20): Choose the venn diagram which best illustrates the three given classes in each of the following questions.

(A)   (B)   (C)   (D)   (E)
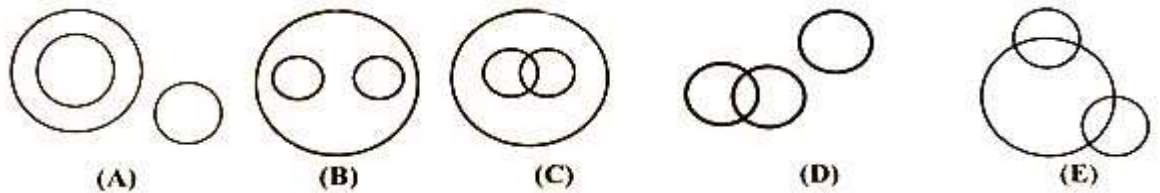
11.Protons,Electrons,Atoms   [B   ]

12. Paper, Stationary, Ink   [B   ]

13. Dog, Animal, Pet   [A   ]

14. Science, Physics, Chemistry   [B   ]

15. Atmosphere, Hydrogen, Oxygen   [B   ]

16. Wheat, Grains, Maize   [B   ]

17. Dog, Carnivore, Tiger   [B   ]

18. River, Canal, Perennial sources of water   [B   ]

19. Students of law, Students of science, Men   [B   ]

20. Vertebrates, Non-vertebrates, Living beings   [B   ]

Directions (21 – 30): Choose the venn diagram which best illustrates the three given classes in each question.

(A)   (B)   (C)   (D)   (E)
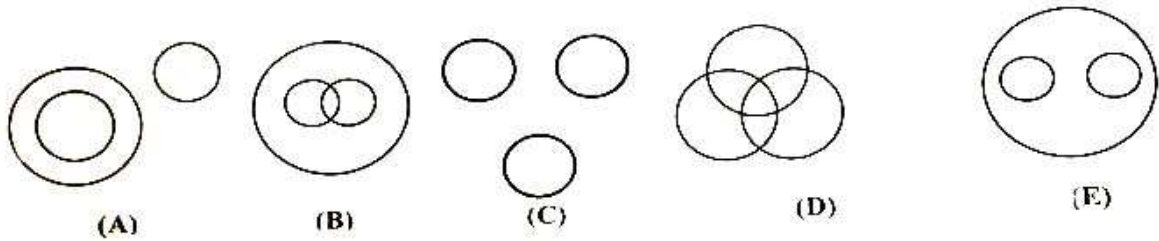
21.Machine, Lathe, Mathematics   [A   ]

22. Citizens, Educated, Men   [B   ]

23. Honesty, Intelligence, Aptitude   [A   ]

24. Sun, Moon, Stars   [A   ]

25. Animals, Men, Plants   [A   ]

26. Mercury, Mars, Planets   [B   ]

27. Yak, Zebra, Deer   [C   ]

28. Water, Atmosphere, Hydrogen   [B   ]

29. Diseases, Leprosy, Scurvy   [B   ]

30. Doctors, Lawyers, Professionals   [E   ]

Directions (31 – 40): To answer these questions, study the following diagram fully:
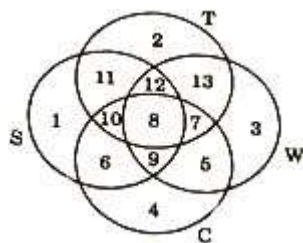
Circle S stands for households having a scooter;
Circle T stands for households having a TV set;
Circle W stands for households having a washing machine;
Circle C stands for households having a car.

31. Households having all the four items are represented by the region   [B   ]
(A) 7   (B) 8   (C) 9   (D) 12

32. Households having only scooter are represented by   [C   ]
(A) Region S   (B) Union of regions 1, 6 and 9(C) Region 1(D)none of these

33. Households having car but not washing machine are indicated by   [A   ]
(A) union of regions 6, 10 and 4   (B) region 3   (C) region 13
 (D) none of these

34. Households having scooter, TV set and washing machine and not car are   [D   ]
represented by the region
(A) 4   (B) 7   (C) 11   (D) 12

35. Households having a car , washing machine, TV set but not scooter   [A   ]
are represented by the region
(A) 7   (B) 8   (C) 9   (D) none of these

36. Households having only car and not the remaining three items are represented by [C
]

(A) region 5   (B) union of regions 4,5 and 7   (C) region 4
(D) None of these

37.Households having only a TV set and washing machine are given by the   [A   ]
(A) region 13   (B) union of regions 7,8,12 and 13   (C) region 12
(D) None of these

38. Households having a car and washing machine only are represented by   [A   ]
(A) region 5   (B) union of regions 5,7,8 and 9   (C) union of regions 9 and 8
(D) none of these

39. Households having TV set but neither scooter nor washing machine are   [A   ]
given by the region
(A) 2   (B) 11   (C) 12   (D) 13

40. Households having neither scooter nor car are represented by   [B   ]
(A) region 2   (B) union of regions 2,13 and 3   (C) region 3
(D) none of these

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CHAPTER – 6
BLOOD RELATIONS

1. Pointing to a photograph, a man said, " I have no brother or sister but that man's   [B]
   Father is my father's son. "whose photograph was it?
   (A) His own   (B) His son's   (C) His nephew's"   (D) None of these

2. Pointing towards a boy, Veena said, "He is the son of only son of my grandfather. [D   ]
   " How is the that boy related to Veena ?
   (A) Uncle   (B) Brother   (C) cousin   (D) Data inadequate
   (E) None of these

3. Introducing Reena, Monika said, "she is the only daughter of my father's only   [E]
   daughter. "How is Monika related to Reena ?
   (A) Aunt   (B) Niece   (C) Cousin   (D) Data inadequate   (E) None of these

4. Pointing to a man, a woman said, "His mother is the only daughter of my   [A]
   mother. "How is the woman related to the mother ?
   (A) Mother   (B) Daughter   (C) Sister   (D) Grandmother   (E) None of these

5. If X is the brother of the son of Y's son , how is the X related to Y ?   [D]
   (A) Son   (B) Brother   (C) Cousin   (D) Grandson   (E) Uncle

6. Pointing towards Rita, Nikhil said, "I am the only son of her mother's son" .   [A]
   How is Rita related to Nikhil ?
   (A) Aunt   (B) Niece   (C) Mother   (D) Cousin

7. Pointing to a lady, a man said, "The son of, her only brother is the brother of   [D]
   my wife". How is the lady related to the man ?
   (A) Mother's sister   (B) Grandmother
   (C) Mother-in-law   (D) Sister of the father-in-law   (E)Maternal aunt

8. Pointing to Ketan, Namrata said, "He is the son of my father's only son". How   [D]
   is Ketan's mother related to Namrata?
   (A) Daughter   (B) Aunt   (C) Sister   (D) Sister-in-law
   (E)None of these

9. Pointing to a man on the stage, Rashi said, "He is the brother of the daughter of [A]
   the wife of my husband". How is themanon the stage related to Rashi ?
   (A) Son   (B) Husband   (C) Cousin   (D) Nephew
   (E) Brother-in-law

10. A woman introduces a man as the son of the brother of her mother. How is the   [C]
    man related to the woman ?
    (A) Nephew   (B) Son   (C) Cousin   (D) Uncle
    (E)Grandson

11. In a joint family, there are father, mother, 3 married sons and one unmarried   [D]
    daughter. Of the sons, two have 2 daughter, each, and one has a son. How many female
    members are there in the family ?
    (A) 2   (B) 3   (C) 6   (D) 9

12. If X is brother of son of Y's son, then how is 'X' son related to 'Y' daughter ?   [C]
    (A) Brother   (B) Cousin   (C) Grandson   (D) Nephew

13.	Given that	[A]
1. A is the mother of B;	2. C is the son of A;
3. D is the brother of E;	4. E is the daughter of B
The grandmother of D is
(A)A	(B) B	(C) C	(D) E

14.	A, B and C are sisters. D is the brother of E and E is the daughter of B .	[D]
How is A related to D ?
(A) Sister	(B) cousin	(C) Niece	(D) Aunt

15.	A and B are married couple. X and Y are brothers . X is the brother of A .	[A]
How is Y related to B ?
(A) Brother-in-law	(B) Brother	(C) Cousin	(D) None of these

16.	Deepak has a brother Anil, Deepak is the son of prem. Bimal is prem's father.	[B]
In terms of relationship, what is Anil to Bimal ?
(A) Son	(B) Grandson	(C)Brother	(D)Grandfather

17.	B is the husband of P. Q is the only grandson of E, who is wife of D and	[D]
mother-in-law of P . How is B related to D ?
(A) Nephew	(B) Cousin	(C) Son-in-law	(D) Son

18.	I. F is the brother of A,	II. C is the daughter of A	[C]
III. K is the sister of F	IV. G is the brother of C
(A) A	(B) C	(C) F	(D) K

19.	A is the uncle of B, who is the daughter of C and C is the daughter-in-law of	[E]
P. How is A related to P ?
(A) Brother	(B) Son	(C) Son-in-law
(D) Data inadequate	(E) None of these

20.	P's fathers is Q's son. M is the paternal uncle of P and N is the brother of Q.	[E]
How is N related to M ?
(A) Brother	(B) Nephew	(C) Cousin
(D) Data inadequate	(E) None of these

Directions (Questions 21 to 23) : Read the following information and answer the questions given below it :

'A+B' means 'A is the daughter of B' ;
'A x B' means 'A is the son of B' ;
'A – B' means 'A is the wife of B'.

21.	If P x Q – S, which of the following is true ?	[B]
(A) S is wife of Q.	(B) S is father of P.	(C) P is daughter of Q
(D) Q is father of P	(E) None of these
22.	1 f T – S x B – M , witch of the following is not true ?	[D]
(A) B is mother of S.	(B) M is husband of B.	(C) T is wife of S.
(D) S is daughter of B	(E) S is son of B.

23. If Z x T – S x U + P, what is U to Z ?   [B   ]
    (A) Mother   (B) Grandmother   (C) Father
    (D) Cannot be determined   (E) None of these

24. It 'P $ Q' means 'P is father of Q'; 'P # Q' means 'P is mother of Q'; 'P *Q' means   [B]
    'p is sister of 'Q', then how is D related to N in N # A $ B * D?
    (A) Nephew   (B) Grandson   (C) Granddaughter
    (D) Data inadequate   (E) None of these

25. If ''P x Q' means 'P is the daughter of Q'; 'P + Q' means 'P is the father of Q';   [C   ]
    P÷ Q' means 'P is the mother of Q' and 'P- Q' means 'P is the brother of Q', then in the
    expression A÷ B + C – E x F , how is A related to F ?
    (A) Mother   (B) Aunt   (C) Daughter-in-law
    (D) Sister-in-law   (E) None of these

**Directions (26 to 30) : Read the following information carefully and answer the
questions given below it :**

'A + B' means 'A is the father of B'; 'A- B' means 'A is the wife of B'; 'A x B' means 'A is
the brother of 'B'; 'A÷B' means 'A is the daughter of B'.

26. If P ÷ R + S + Q , which of the following is true ?   [C   ]
    (A) P is the daughter of Q .   (B) Q is the aunt of P.
    (C) P is the aunt of Q   (D) P is the mother of Q.

27. If P – R + Q, which of the following statements is true ?   [A   ]
    (A) P is the mother of Q.   (B) Q is the daughter of P.
    (C) P is the aunt of Q.   (D) P is the sister of Q.

28. If P x R ÷ Q, which of the following statements is true ?   [D   ]
    (A) P is the uncle of Q.   (B) P is the father of Q.
    (C)P is the brother of Q.   (D) P is the son of Q.

29. If P x R -Q, which of the following is true ?   [A   ]
    (A) P is the brother-in-law of Q. (B) P is the brother of Q.
    (C) P is the uncle of Q.   (D) P is the father of Q.

30. If P + 'R ÷ Q, which of the following is true ?   [C   ]
    (A) P is the brother of Q.   (B) P is the son of Q.
    (C) P is the husband of Q.   (D) P is the father of Q.

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CHAPTER - 7
ALPHABET   TEST

1. If the first three letters of the COMPREHENSION are reversed, then the last three [D] letters are added and then the remaining letters are reversed and added, then which letter will be exactly in the middle?
 (A) H   (B) N   (C) R   (D) S

2. Select the combination of numbers so that letters are arranged accordingly which [D] will from a meaningful word
    R   A   C   E   T
    1   2   3   4   5
 (A) 1,2,3,4,5   (B) 3,2,1,4,5   (C) 5,2,3,4,1   (D) 5,1,2,3,4

Direction (3-6) : find out how many such pairs of letters are there in the given word each of which has as many letters between them in the word as in the English alphabet . choose the correct answer

3. WONDERFUL   [C]
   (A) more than three   (B) one   (C) two   (D) three

4. PRESENCE   [B]
   (A) Two   (B) three   (C) four   (D) five

5. ENIGMATIC   [B]
   (A) nil   (B) one   (C) two   (D) three

6. If the letter in word UNDERTAKING are rearranged in the alphabetical order which [C] one will be in the middle in order after the rearrangement ?
(A) G   (B) I   (C) K   (D) N

RULE DETECTION

Direction (7-11): In each of the following questions , find out which of the letter series following the given rule .

7. Number of letters skipped in between adjacent in the series double every time.   [B]
(A) ADIPY   (B) BCEIQ   (C) EGJOF   (D) GJNSY

8. Number of letters skipped in between adjacent letters do not decrease in order.   [D]
(A) EQZFI   (B) GWIQU   (C) MGVFK   (D) PJXHM

9. The group of letters should not contain more than two vowels.   [A]
(A) BDEJOLY   (B) JKAPIXU   (C) PRAQEOS   (D) ZILERAM

10. The number of letters missed is not uniform.   [C]
(A) BFJNRV   (B) DGJMPS   (C) MORTXY   (D) PRTVXZ

11. Number of letters skipped in between adjacent letters in the series decreases   [C] by one. Which of the following series is observing the rule?
(A) BGKNPR   (B) CINRTU   (C) EJNQST   (D) LQUXAP

ALPHABETICAL QUIBBLE

Directions: (12-15) Following questions are based on the general English alphabet :
    A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

12. If the first 6 letters are written in written in reversed order, then the next 5 letters   [A   ]
are written in reversed order and again next 6 letter are written in reversed order then which letter is
midway between 7th letter from the left and 12th letter from the right?
(A) G   (B) T   (C) H   (D) U

13. With reference of the questions 1, which letter will be midway between 6th letter   [B   ]
from the right and the required letter in question 1?
(A) N   (B) M   (C) L   (D) Z

14. If the alphabets are arranged in the reverse order , which letter will be 8th letter to   [B   ]
 the left of the 7th letter counting from the right end ?
(A) P   (B) O   (C) N   (D) Q

15. If the letter of the given alphabet interchange positions, so that A takes the place   [A   ]
of Z and Z takes the place of A , B exchange its place with Y and so on, what will be the thirteenth
letter from the right?
(A) M   (B) N   (C) O   (D) L

16. How many L's are there which do not have R preceding them and also do not have   [C   ]
      T following them ?
     Z Q S T L R M N Q N R T U V X R L T A S L Q R S L T
(A)1   (B) 2   (C) 3   (D) 5

WORD FORMATION BY UNSCRAMBLINGLETTERS

**Direction (17-18) : Each letter is given unique number . Arrange the letter to make meaningful
word and chose the option which is the arranged in correct order of numbering .**

17. R T E O D P   [C   ]
   1 2 3 4 5 6
   (A) 1, 3, 5, 6, 4, 2   (B) 2, 3, 1, 6, 4, 5
   (C)5, 3, 6, 4, 1, 2   (D) 6, 3, 5, 1, 4, 2

 18. T L P N A E   [B   ]
    1 2 3 4 5 6
   (A) 3, 2, 5, 4, 1, 6   (B) 3, 2, 5, 4, 6, 1
   (B) 4, 5, 3, 6, 2, 1   (D) 4, 6, 1, 35,2

WORD FORMATION USING LETTERS OF A GIVEN WORD :

18. How many meaningful words can be formed using the first , the third, the fifth and   [D   ]
the sixth letters of the word TRADEMARK using each letter only once in each word ?
(A) one   (B) two   (C) three   (D) four

19. How many meaningful words can be formed using the first , the sixth, the seventh,   [C   ]
and ninth letter of the word PROMENADE using each letter only once in each word ?
(A) One   (B) two   (C) three   (D) four

Directions (20-21) : In each of the following questions, choose one word which can be formed from the letters of the given word.

20. EXAMI NATION   [D]
(A) ANIMAL   (B) EXAMINER   (C) NATIONAL   (D) ANIMATION

21. MEASUREMENT   [A]
(A) MASTER   (B) MANTLE   (C) SUMMIT   (D) ASSURE

Directions (22-26) : In each of the following questions, choose one word which cannot be formed from the letters of the given word.

22. TEACHERS   [B]
(A) REACH   (B) CHAIR   (C) CHEER   (D) SEARCH

23. CONTEMPORARY   [C]
(A) PARROT   (B) COMPANY   (C) CARPENTER   (D)PRAYER

24. REFIGERATE   [C]
(A) RAFER   (B) REGRET   (C) REGENERATE   (D) FREE

25. CHOCOLATE   [B]
(A) TALE   (B) HEALTH   (C) HOTEL   (D) COOL

26. CREDENTIAL   [D]
(A) DENTAL   (B) CREATE   (C) TRAIN   (D) CREAM

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CHAPTER – 8
ARITHMETIC   REASONING
LEVEL-1

1. A group of 1200 people consisting of captains and soldiers is traveling in a train.   [C]
    For every 15 soldiers,there is one captain. The no of captains in the group is

     (A) 85   (B) 80   (C) 75   (D) 70

2. Find the number which is as much greater then 20 as it is less than 120?   [A]

     (A) 70   (B) 80   (C) 50   (D) 60

3. In a garden, there are 10 rows and 12 columns of mangos trees. The   [C]

distance between the two trees is 2 meters and a distance of 1 meter is left from all sides of the boundary of the garden.The length of the garden is

    (A) 20 m   (B) 22 m   (C) 24 m   (D) 26 m

4. A farmer built a fence around his square plot . He used 27 fence poles on   [B   ] each side of the square. How many poles did he need altogether?
    (A) 100   (B) 104   (C) 108   (D) None of these

5. If every 2 out of 3 readymade shirts need alterations in the sleeves and   [C   ] every 3 out of 4 need it in collar and every 4 out of 5 need it in the body, how many minimum shirts to be altered ?
    (A) 40   (B) 48   (C) 133   (D) 143

6. The difference between the square of a number and square of the number   [B   ] which is 4 lessthan that number is 112. Find the number?

    (A) 18   (B) 16   (C) 14   (D) 12

7. The number of boys in a class is three times the number of girls.   [C   ] Which one of the followings numbers cannot represent the total number of children in the class ?
    (A) 48   (B) 44   (C) 42   (D) 40

8. A printer numbers the pages of a book starting with 1 and uses 3269 digits.   [D   ] How many pages does the book have ?

    (A) 1074   (B) 1080   (C) 1090   (D) 1094

9. An enterprising business man earns an income of Re.1 on the first day of   [C   ] his business on every subsequent day, he earns an income which is just double of that made on the previous day. On the 10th day of business, his income is
    (A) Rs.256   (B) Rs.1024   (C) Rs.512   (D) Rs.125

10. A is 6 years older to B and 3 years younger to C, which B and D are twins.   [B   ] How many years older is C to D?
    (A) 6   (B) 9   (C) 12   (D) 15

11. A father tells his son,"I was of your present age when you were born''.   [A   ] If the father is 36 now, how old was the boy five years back?
    (A) 13   (B) 15   (C) 17   (D) 20

12.A father is now three times as old as his son . five years back, he was four   [B   ] times as old as his . the age of the son is
    (A) 12   (B) 15   (C) 18   (D) 20

13. In a group of cows and hens, the number of legs are 14 more than twice the   [B   ] number of heads. The number of cows is
    (A) 5   (B) 7   (C) 10   (D) 12

14. In the numbers from 100 to 1000, how many times digit 1 comes at the   [C   ] unit's place ?

(A) 9   (B) 10   (C) 90   (D) 900

15. How many numbers amongst the numbers 9 to 54 are there which are   [D]
exactly divisible by 8 but not by 4 ?
(A) 8   (B) 6   (C) 5   (D) Nil

16. How many numbers FROM 11 to 54 are there which are exactly   [B]
divisible by 5 but not by 3 ?
(A) Two   (B) Four   (C) five   (D) six

17. I think of a number, add 10 to it and divide the answer by 2. Let the resulting   [A]
number be $. Starting with $, how can I get my original number back?
(A) Multiply $ by 2 and then subtract 10 from the result
(B) Divide $ by 2 and then add 10 to the result
(C) Multiply $ by 2 and then add 10 to the result
(D) Add 2 to $ and then divide the resulting number by 10

18. A person is standing on a staircase. He walks down 6 steps, up 4 steps,   [A]
down 2 steps, up 9 steps, and down 4 steps . Where is he standing in relation to the step on
which he started ?
    (A) 3 steps above   (B) 2 steps above   (C) The same place
    (D) 1 step below

19. Farmer Ramu put a square fence around his vegetable garden to keep the deer   [B]
from editing his corn. One side was 10 m in length. If the posts were placed 2m apart, how
many posts did he use ?
(A) 16   (B) 20   (C) 10   (D) 15

20. A number of friends decided to go on a picnic and planned to spend Rs. 96 on   [A]
eatables. four of them, however, did not turn up, As a consequence, the remaining ones had to
contribute Rs.4each extra. The number of those who attended the picnic was
(A) 8   (B) 12   (C) 16   (D) 24

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CHAPTER – 9
MATHEMATICAL OPERATIONS

Direction (1-2): In these questions, relationship between different elements is shown in the statements are followed by two conclusions.
Given Answer
    (a) If only conclusion I follows
    (b) If only conclusion II follows
    (c) If either conclusion I or II follows
    (d) If both conclusion I and II follows

1. Statement   : $E < F \leq G = H > S$ [D]
    Conclusions   : I. $G > S$ II. $F \leq H$

2. Statement   : $P \leq Q < W = L$ [B]

Conclusions : I.L >P   II.Q ≤ L

3. If '+' mean '-', '-' means 'x', 'x' means '÷' means '+' then the value of   [B   ]
    16x2÷ 25+ 7 -4 is
    (a)104   (b)5   (c) 22   (d) 4   (e) 0

4. Find the correct group of sings to solve the equations   [A   ]
    24 * 16 * 8 * 32
    (A) +- =   (B) -+ =   (C) x÷ =   (D) += -

5. If 'P denotes '-' , 'Q' denotes '÷' , 'R' denotes 'x' 'w' denotes '+', then 48   [E   ]
    Q 12 R 10 P 8 W 4=?
      (a) 56   (b) 40   (c) 52   (d) 44   (e) None of these

6. If '+'means 'divided by '-' means ' added to ', 'x' means 'subtracted from'   [B   ]
    and '÷' means 'multiplied by ', then 18×12+4-8÷2=?
    (a) 216   (b) 31   (c) 04   (d) 10 2/3   (e) none of these

7. Which of the following interchanges of numbers would make the given   [C   ]
    equations correct ?
    $8 \times 20 \div 3 + 9 - 5 = 38$
    (A) 3,8   (B) 8, 9   (C) 3,5   (D) 3,9

8. Find the group of mathematic signs in the place of * in the given equation   [B   ]
    $7 * 7 * 2 * 1 = 2$
    (A) × - ÷   (B) + - ×   (C) × - +   (D) + × -

Direction (9-11): If '-' denotes '+' and '+' denotes '-' then what will be the value of following ?

9. $7 \div 3 - 10 \div 15 + 2$ [E   ]
    (A) 56   (B) 59   (C) 52   (D) 61   (E) none of these

10. $12 - 3 + 14 \div 5$ [E   ]
    (A) 38   (B) 25   (C) 23   (D) 27   (E) none of these

11. $8 \div 9 + 7 \div 6 - 3$ [E   ]
    (A) 21   (B) 24   (C) 28   (D) 30   (E) none of these

Direction (12-15): In each of these question, relationship between different elements is shown in the statements. The statements are followed by two conclusions.

Given answers
(a) If only conclusion I is true
(b) If only conclusion II is true
(c) If either conclusion I or II true
(d) If neither conclusion I nor II is true
(e) If both conclusion I and II are true

12. Statements : P≥R, R≤S≤X, Y=X   [B   ]
    Conclusion : I. P≤S   II. Y≥R

13. Statements : Z=C, B≤A=N, C≤B   [E   ]

Conclusion I. Z≤B   II. N≥Z

14. Statements : T≤V=W, X≥Y, W≥X   [A   ]
    Conclusion I. V≥Y   II. V≤X

15. Statements : J ≥ K ≥ P=R ≤ N = S   [A   ]
    Conclusion I. S ≥ P   II. J ≤ R

16. Which of the following interchange of signs would make the given equations correct? [B   ]
    (20-4) × 4 + 16 = 92
    (A) + and -   (B) – and ×   (C) × and +   (D) ÷ and –

17. Which of the following interchange of signs would make the given equations correct ? [A   ]
    2 × 3 + 6 – 12 ÷ 4 = 92
    (A) × and +   (B) + and -   (C) + and ÷   (D) – and ÷

18. Put the correct mathematical signs in the following equations from the given   [B   ]
    Alternatives33 ? 11 ? 3 ? 6 = 115
    (A) + , -, ×   (B) × , ÷, -   (C) ÷, ×, ×   (D) -, ×, +

Directions (19-21): If the given interchanges are made in signs numbers, then which one of the four equations would be correct ?

19. Given interchanges signs '+; and '-', number s '5' and '8'   [A   ]
    (A) 82 – 35 + 55 = 2   (B) 82 – 35 + 55 = 102
    (C)85 – 38 + 85 = 132   (D) 52 – 35 + 55 = 72

20. Given interchanges signs '+' and '×', number '3; and '7'   [D   ]
    (A) 23 + 17 × 73 = 1241   (B) 37 + 73 ×12 = 112
    (C) 23 × 17 + 37 = 428   (D) 23 + 17 × 73 = 388

21. Select the correct combination of mathematical signs to replace * signs and to   [A   ]
        balance the given equation.
    15 * 24 * 3 * 6 * 17
    (A) + ÷ - =   (B) + × = ÷   (C) - × = +   (D) - ÷ + =

Direction (22-26) : Read each statement carefully and answer the following questions

22. Which of the following expression will be true , if the expression R≥O=A≥S≤T   [B   ]
is definitely true?
(a) O≥T   (b) S≤R   (c) T≥A   (d) S=O   (e) T≤R

23. Which of the following symbols should replace the question mark (?) in the given   [≥   ]
expression P≥L? A≥N = T in order to mark expression 'P≥A as well as T≤L definitely true
 (a) ≤   (b) ≥   (c) ≤   (d) ≥   (e) Either ≤ or ≤   Check the
options

24. Which of the following symbols should be place in the blank spaces, respectively   [??   ]
(in the same order form left to right) in order to complete the given expression in such a manner that
makes the expressions 'B ≥ N' as well as 'D ≤ L' definitely true ?
    B_L_O_N_D

(a) =, =, ≥,≥   (b) ≥, ≥, =, ≥   (c) ≥, ≤, =, ≤   (d) ≥, =, =, ≥
(e)≥, =, ≥, ≥

25. Which of the following should be placed in the blank spaces, respectively (in the   [??   ] same order from left to right) in order to complete the given expression in such a manner that makes the expression 'A≤P' definitely false ?
_ ≤ _ ≤ _ ≥ _
   (a) L, N, P, A   (b) L, A, P, N   (c) A, L, P, N   (d) N, A, P, L
   (e)P, N, A, L

26.Which of the following symbols should be place in the spaces, respectively (in the [??   ] same order from left to right) in order to complete the given expression in such a manner that makes expression 'F≥N' and 'U≥D' definitely false ?
   F_O_U_N_D
(a) ≤, ≤, ≥, =   (b) ≤, =, =, ≥   (c) ≤, =, =, ≤   (d) ≥, ==,≥
(e)≥, ≥, =, ≤

Direction (27-28): In the following questions, some equations are solved on the basis of a certain system. On the same basis, find out the correct answer for the unsolved equation.

27. If 5 × 6 × 4 = 456 and 3 × 6 × 5 = 536, then 4 × 8 × 7 = ?   [A   ]
(a) 748   (b) 478   (c) 847   (d) 784

30. Find the correct group of signs to solve the equation   [C   ]
   24*16*8*16
(a) +-=   (b) ÷ - =   (c) - + =   (d) x ÷ =

Directions (32-35): In each of the following questions, all the equations except one have been solved according to a certain rule. You are required to solve the unsolved equations following the same rule and choose the correct answer out of the given options.

32. If 8×6×1 = 168 and 5×2×1 = 125 , then 4×5×7=?   [A   ]
(a) 754   (b) 457   (c) 547   (d)475

33. If 3*8*6=497, and8*4*2 = 953 , then 6*5*1 =?   [D   ]
(a) 386   (b) 726   (c) 863   (d) 762

34. If 16(55) 3 and 30 (157)5, then 9 (?) 25   [C   ]
(a) 335   (b) 125   (c) 232   (d) 342

35. If 4×4=6, 8×8= 54 and 9×9=71, then 2×3=?   [C   ]
(a) 4   (b) -6   (c) -4   (d) 5

36. If '+' denotes ÷, '-' denotes x, 'x' denotes – and '÷' denotes +,   [B   ]
then 35+7-5÷5×6=?
(a) 36   (b) 24   (c) 20   (d) 14

Directions (37-38) : In the following questions, the symbols @ , #, $, %, * are used with the meanings as given below.

'P @ Q' means 'P is not greater than Q.
'P # Q ' means 'P is greater than or equal to Q'.

'P $ Q' means 'P is neither greater than nor less than Q'.
'P % Q' means 'P is less than Q'.
'P*Q' means 'P is neither less than nor equal to Q'.

Now , in each of the following questions, assuming the given statements to be true, find which of the three conclusion I, II and III given below them is/are definitely true ?

37. Statement B$R, R*N, K@N   [C   ]
Conclusion I. B * K   II. K % R   III. B # N
(a) All are true   (b) Only I is true   (c) I and II are true
(d)I and III are true   (e) None of these

38. Statements M%R, R#T, T*N   [B   ]
Conclusion I. N%R   II. M%T   III. M*N
(a) None of these   (b) Only I is true   (c) Only II is true
(d)I and III are true

39. Select the correct combination of mathematical signs to replace * signs and to   [A   ]
balance the given equations.
5 * 5 * 5 * 3 * 10
(a) x+=x   (b) +-x=   (c) +÷=x   (d) +÷x=

40. Some equations are solved by special method, on the basis of it, find the right   [D   ]
answer from the given options which is not solved ?
$6 \times 4 \times 3 = 436$
$8 \times 4\ ? = 468$
$6 \times 9 \times 8 = 986$
(a) 3   (b) 4   (c) 5   (d) 6

Direction (41-45) : If '+'is 'x', '-; is '+' , 'x' is '÷' is '-' , then answer the following questions based on this information.

41. $21 \div 8 + 2 - 12 \times 3 = ?$ [B   ]
(a) 12   (b) 9   (c) 13.5   (d) 11

43. $15 \times 5 \div 3 + 1 - 1 = ?$ [D   ]
(a) -1   (b) 25   (c) 3   (d) 1

44. $9 - 3 + 2 \div 16 \times 2 = ?$ [A   ]
(a) 7   (b) 5   (c) 9   (d) 6

46. If 'P' means '+' , 'Q' means 'X' , 'R' means '÷' and 'S' means '-',   [C   ]
then 44 Q 9 R 12 S 6 Q 4 P 16 = ?
(a) 36   (b) 124   (c) 25   (d) 112

48. If '+' means '÷' , 'x' means '+' , '-' means 'x' and '÷' means '-' ,   [A   ]
then which of the following equations is correct ?
(a) $36 + 6 - 3 \times 2 = 20$ (b) $36 \times 6 + 3 - 2 < 20$
(c) $36 \times 6 + 3 \times 2 > 20$ (d) $36 + 6 \times 3 + 2 = 20$

50. Select the correct combination of mathematical signs to replace * signs and to   [D   ]

balance the given equations

2 * 4 * 3 * 4 * 9

(a) + - = ÷   (b) + × = -   (c) × ÷ - =   (d) × - + =

51. Select the correct combination of mathematical signs to replace * signs and to   [D   ]
    balance the following equation 6 * 4 * 12 * 12

(a) ÷ - =   (b) + - ÷   (c) = - ÷   (d) × - =

52. If 3×9×7 = 379 and 5×4×8 = 584, then 1×2×3 = ?   [D   ]

(a) 123   (b) 231   (c) 213   (d) 132

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CHAPTER – 10
PUZZLE TEST

Read the following information carefully and answer the questions given below :
Direction (1-5): A, B, C, D, and E, are five persons in a group. B and C are intelligent in Mathematics and Geography. A and C are intelligent in Mathematics and History. B and D are intelligent in political science and Geography. D and E are intelligent in political science and Biology. E is intelligent in Biology , History and Political Science

1. Who is intelligent in Political Science , Geography and Biology ?   [B   ]
    (A)E   (B) D   (C) C   (D) B   (E) A

2. Who is intelligent in Mathematics, Political Science and Geography ?   [B   ]
    (A) A   (B) B   (C) C   (D) D   (E) E

3. Who is intelligent in Mathematics, and History but not in Geography ?   [C   ]
    (A) C   (B) E   (C) A   (D) B   (E) D

4. Who is intelligent in Mathematics , Geography and History ?   [D   ]
    (A) E   (B) A   (C) D   (D) C   (E) B

5. Who is intelligent in political Science , History and Biology ?   [E   ]
    (A) A   (B) B   (C) C   (D) D   (E) E

Directions (6-10) : P, Q, R, S, T and X are members of a family. There are two married couples. Q is an engineer and is father of T. X is grandfather of R and is a lawyer. S is grandmother of T and is a housewife and two students in the family.

6. Who is the husband of P ?   [C   ]
    (A) R   (B) X   (C) Q   (D) S   (E) T

7. Which of the following are the two married couples ?   [A   ]
    (A) XS , QP   (B) XS, QT   (C) XS , RP   (D) TS , RX
    (D)None of these

8. which of the following is definitely a group of male members ?   [D   ]

(A) Q , X , T   (B) X , T   (C) Q , X , P   (D) Q , X

(E)Nine of these

9. who is the sisters of T ?   [A   ]

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

(E) None of these

Directions (11-15) : 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: A must be staged a day before E. C must not be staged on Tuesday. B must be stage on the day following the day on which F is staged. D must be staged on Friday only and should not be immediately preceded by B. E must not be staged on the last day of the schedule.

11. Which of the following plays immediately follows B ?   [A   ]

     (A) A   (B) c   (C) D   (D) E   (E) F

12. Which of the following plays is on Monday ?   [B   ]

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

13. Plays D is between which of the following pairs of plays ?   [D   ]

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

     (E) C and F

14. Which of the following is the schedule of plays , with the order of their staging   [E   ] from Monday ?

(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

15. play C cannot definitely be stage on which of the following days in addition to Tuesday ? [C   ]

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

(E) Saturday

Directions (16-19) : There are five friends – Shailendra, Keshav, Madhav, Ashish and Rakesh. Shailendra is shorter than Keshav but taller than Rakesh. Madhav is the tallest. Ashish is a little shorter than Keshav and a little taller than Shailendra.

16. Who is the shortest?   [A   ]

(A) Rakesh   (B) Shailendra   (C) Ashish   (D) Keshav

(E) None of these

17. If they stand in the order of their heights , who will be in the middle ?   [D   ]

(A) Keshav   (B) Rakesh   (C) Shailendra   (D) Ashish

(E) None of these

18. If they stand in the order of increasing heights , who will be the second ?   [B   ]

(A) Ashish   (B) Shailendra   (C) Rakesh   (D) Keshav

(E) None of these

19. Who is the second tallest ?   [B   ]

(A) Shailendra   (B) Keshav   (C) Ashish   (D) Rakesh

(E)None of these

Direction (24-28) : Read the following information carefully and answer the questions given below :

(i)   There is a group of five persons – A, B, C, D, and E.
(ii) One of them is a horticulture, one is a journalist , one is a physicist, one is a journalist , one is an industrialist and one is an advocate.
(iii) There of them – A, C and advocate prefer tea to coffee and two of them – b and the journalist prefer coffee to tea.
(iv) The industrialist and D and A are friends to one another but two of them prefer coffee to tea
(v)   The horticulturist is C's brother

24. Who is the horticulturist?   [A   ]
(A) A   (B) B   (C) C   (D) D   (E) E

25. Who is the industrialist?   [C   ]
(A) E   (B) C   (C) B   (D) A   (E) D

26. Which of the following groups includes a person who likes tea but is not an advocate? [C   ]
(A) ACE   (B) DE   (C) BCE   (D) BD   (E) None

27. Who is a physicist?   [D   ]
(A) A   (B) E   (C) D   (D) C   (E) B

28. Which of the statements given above is superfluous?   [E   ]
(A) (iii)   (B) (iv)   (C) (ii)   (D) (v)   (E) None

Directions (29-33) : Read the following statements carefully to answer these questions :

(i)   X is older than L   (ii) M and N are equal age
(iii) Z is the youngest.   (iv) Y is younger than N
(v)   Y is older than X.

29. Which two of the above statements indicate that Y is older than L?   [A   ]
(A) (i) and (iv)   (B) (iv) and (v)   (C) (i) and (v)   (D) None of these

30. Which statements (s) indicates (s) that N is older than Z?   [B   ]
(A) (ii) and (iii)   (B) (iii) only   (C) (iii) and (iv)   (D) None of these

31. Which statements (s) indicates (s) that Z is younger than M ?   [B   ]
(A) (ii) 0nly (iii)   (B) (iii) only   (C) (iii) and (iv)
(D) None of these

32. Which statements (s) is/are not required to prove that L is younger than M ?   [A   ]
(A) (iii) only   (B) (iii) and (iv)   (C) (iv) and (v)   (D) (iii) and (v)

33. Which set of statements proves that X is younger than M ?   [B   ]
(A) (i), (ii), (iv)   (B) (ii), (iv), (v)   (C) (i), (iv), (v)   (D) None of these

Directions (34-37): Read the following information carefully and answer the questions given below it:

(i) There is a family of six members A, B, C, D, E, and F.
(ii) There are two married couple in the family and the family members represent three generations.
(iii) Each member has a distinct choice of colour amongst green, yellow, black, red, white and pink.
(iv) No lady member likes either green or white
(v) C, who likes black colour, is the daughter-in-law
(vi) B is a brother of F and son of D likes pink.
(vii) A is grandmother of F and F and does not like red.
(viii) The husband has a choice of green colour, his wife likes yellow

34. Which of the following is the colour preference of A?   [B   ]
(A) Red   (B) Yellow   (C) Either Red or Yellow
(D) Cannot be determined   (E) None of these

35. How many male members are there in the family?   [D   ]
(A) Two   (B) Three   (C) Four
(D) Cannot be determined   (E) None of these

36. Which of the following is true about F?   [D   ]
(A) Brother of B   (B) Sister of B   (C) Daughter of C
(D) Either sister or brother of B   (E) None of these

37. Which of the following is the colour combination of one of the couple?   [D   ]
(A) Red – Yellow   (B) Yellow – red   (C) Green – Black
(D) Red- Black   (E) None is these

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CHAPTER – 11
SEATING ARRANGEMENTS

1. Five persons are standing in a line. One of the two persons at the extreme ends is a   [C   ]
professor and the other a businessman. An advocate is standing to the right of a students. An author is to the left of the businessman. The student is standing between the professor and the advocate. Counting
        (A) 1st   (B) 2nd   (C) 3rd   (D) 5th

2.Five friends A,B,C,D and E are standing in a row facing south but not necessary in the [A   ]
same order. Only B is between A and E , C is immediate right to E and D is immediate left to A. On the basis above information , which of the following statements is definitely true ?
        (A) B is to the left A   (B) D is third to the left of E.
        (C)B is to the right of E   (D) A is second to the left of C.

3. Seven people A, B, C, D, E, F and G are standing in a single line, facing north. E is   [C   ]
somewhere ahead of F. There is exactly one person standing Between C and G. D is immediately behind A. F is behind both B and D. If D and C are fourth ' and fifth in line respectively, then which of the following must be true ?

(A) A is first   (B) B is First   (C) F is sixth   (D) F is seventh

4. A, P, R, S and Z are sitting in a row. S and Z are in the centre, and A and P are at the   [C   ]
ends. R is sittings on the left of A. Then who is sitting on the right of P ?
(A) A   (B) S   (C) X   (D) Z

5. In a March past , seven persons are standing in a row Q is standing left to R but right   [B   ]
to P , O is standing right to N and left to P. Similarly , S is standing right to R and left to T. Find out
who is standing in the middle.
(A) P   (B) Q   (C) R   (D) O

6. Five children are sitting in a row, S is sitting next to P but not T ,K is sitting next to   [E   ]
R who is sitting on the extreme left and T is not sitting next to K. Who are sitting adjacent to S ?
(A) K and P   (B) R and P   (C) only P   (D) P and T
(E) Insufficient information

7. Five girls are sitting in a row, Rashi is not a adjacent to Sulekha or Abha. Anuradha is not adjacent
to Sulekha , Rashi is adjacent to Monika, Monika is at the middle in the row. Then Anuradha is
adjacent to whom out of the following ?   [A   ]
(A) Rashi   (B) Sulekha   (C) Abha   (D) Monika
(E) Cannot be determined

8.In the Olympic games, the flags of six nations were flown on the masts in the following   [A   ]
way The flag of America was to the left of Indian tricolor and to the right of the flag of France . the
flag of Australia was on the right of the Indian flag but was to the left of the flag of France. The flag
of Australia was on the right of the Indian flag but was to the left of the flag of Japan , which was to
the left of the flag of china , Find the two flags which are in the centre.
(A) Indian and Australia   (B) America and India
(C) Japan and Australia   (D) America and Australia

Directions (questions 9 to 11) : Read the following information on answer the given following.
Sevan children A, B, C, D, E, F and G are standing in a line. G is to the right of D and to the left
of B. A is on the right of C. A and D have one child between them. E and B have two children
between them D and F have two children between them.

9.Who is on extreme right ?   [C   ]
(A) B   (B) E   (C) F   (D) G

10. Who is extreme in the middle ?   [C   ]

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

11. Who is on the extreme left ?   [C   ]
(A) A   (B) B   (C) C   (D) D

Directions (Questions 12 to 15) : Study the following information carefully and answer the
questions given below :
Six friends A, B, C, D, E, and F are sitting in a row facing towards North. C is sitting between A
and E. D is not at any end. B is sitting immediate right to E. F is not at the right end.

12. How many persons are there to the right of D ?   [D   ]
(A) One   (B) Two   (C) Three   (D) Four
(E) None of these

13. Which of the following pairs is sitting to one side of D ?   [E   ]
(A) FB   (B) FC   (C) FE   (D) Cannot be determined
(E) None od=f these

14. Who is immediate left of C ?   [A   ]
(A) A   (B) E   (C) either E or A   (D) Cannot be determined
(E) None of these

15. Who is at the right end ?   [B   ]
(A) A   (B) B   (C) E   (D) Cannot be determined
(E) None of these

Directions (Questions 16 to 20) : Study the given information carefully and answer the questions that follow :

   (i)   A, B, C, D, E, F and G are sitting on a wall and all of them are facing east.
   (ii) C is on the immediate right of D.
   (iii) B is at an extreme end and has E as his neighbor.
   (iv) G is between E and F.
   (v)   D is sitting third from the south end.

16. Who is sitting to the right of E ?   [E   ]
(A) A   (B) C   (C) D   (D) F   (E) None of these

17. Which of the following of people are sitting at the extreme ends ?   [A   ]
(A) AB   (B) AE   (C) CB   (D) D   (E) None of these

18. Name the person who should change place with C such that the gets the third   [C   ]
place from the north end.
(A) E   (B) F   (C) G   (D) D   (E) None of these

19. Immediately between which of the following pairs of people is D sitting ?   [D   ]
(A) AC   (B) AF   (C) CE   (D) CF   (E) None of these

Directions (21 to 25) : Study the given information carefully and answer the questions that follow :

   (i)   Eleven students A, B, C, D, E, F, G, F, G, H, I, J and K are sitting in the first row of class
             facing the teacher.
   (ii) D who is to the immediate left of F is second to the right of C.
   (iii) A is second to the right of E, who is at one of the ends.
   (iv) J is the immediate neighbour of A and B and third to left of G.
   (v)   H is to the immediate left of D and third to the right of I.

 20. Who is sitting in the middle of the row ?   [D   ]
    (A) B   (B) C   (C) G   (D) I   (E) None of these

22. Which of the following group of friends is sitting to the right of G ? [B]
(A) CHDE   (B) CHDF   (C) IBJA   (D) ICHDF
(E) None of these

21. Which of the following statements is true in the context of the above sitting [C]
    arrangement ?
(A) There are three students sitting between D and G
(B) K is between A and J   (C) B is sitting between J and I
(D) G and C are neighbors sitting to the immediate right of H.   (E) None of these

22. If E and D, C and B, A and H, and K and F interchange their positions , which [C]
    of the following pairs of students is sittings at the ends ?
(A) D and E   (B) E and F   (C) D and K   (D) K and F
(E) None of superfluous

Directions (Questions 30 to 33) : Read the following information carefully and answer the questions given below :
Six persons A, B, C, D, E and F are sitting in two rows, three in each.
E is not at the end of any row
D is second to the left of F.
C the neighbor of E, is sitting diagonally opposite to D.
B is the neighbor of F.

30. Which of the following are sitting diagonally opposite to each other ? [D]
(A) F and C   (B) D and A   (C) A and C   (D) A and F
(E) A and B

31. Which of the following are in the same row ? [A]
(A) A and E   (B) E and D   (C) C and B   (D) A and B
(E) C and F

32. Which of the following are in one of the two rows ? [C]
(A) FBC   (B) CEB   (C) DBF   (D) AEF   (E) ABF

33. After interchanging seat with E, who will be the neighborns of D in the new position? [A]
    (A) C and A   (B) F and B   (C) Only B   (D) Only A
    (A) Only C

Directions (Qs. 34-38): Five friends A, B, C, D and E are sitting on a bench. A is sitting next to B, C is sitting next to D, D is not sitting near E, E is on the left end of the bench. C is on second position from the right end. A is on the right side of B and to the right side of E. A and C are C are sitting together.

34. Where is A sitting? [C]
(A) Between B and D   (B) Between D and C   (C) Between B and C
(D) Between C and E   (E) Between C and E

35. Who is sitting in the centre? [A]
(A) A   (B) B   (C) C   (D) D   (E) E
36. C is sitting between [D]

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

37. What is the position of D?   [B   ]
(A) Extreme left   (B) Extreme right   (C) Third from left
(D) Second from left   (E) None of these

38. What is the position of B?   [D   ]
(A) Second from right   (B) Centre   (C) Extreme left
(D) Second from left   (E) None of these

Directions (Qs. 39-43):
    (i) Eight friends A, B, C, D, E, F, G, & H are sitting in a circle facing the centre
    (ii) A, who is sitting immediately between G and C, is just opposite to F.
    (iii) E, who is sitting immediately between 'H' and 'C' is second to the right of A and second to
          the left of F.
    (iv) D is sitting second to the left of G.
39. Who are the three friends sitting immediately to the right of B?   [B   ]
(A) DFH   (B) GAC   (C) ACE   (D) Cannot be determined
(E) None of these

40. Who is sitting between D and G?   [C   ]
(A) A   (B) F   (C) B   (D) Cannot be determined
(E) None of these

41. Who are the immediate neighbours of D?   [A   ]
(A) B and F   (B) F and H   (C) B and G   (D) B and H
(E) None of these

42. Who is sitting directly opposite to G?   [C   ]
(A) E   (B) F   (C) H   (D) Cannot be determined
(E) None of these

43. Who is sitting directly opposite to C?
        [A   ]
(A) D   (B) F   (C) B   (D) Cannot be determined
(E) None of these

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CHAPTER – 12
NUMBER RANKING AND TIME SEQUENCING

1. How many 3's are there in the following sequence which are neither preceded   [B   ]
by 6 nor immediately followed by 6.
9 9 3 6 6 63 9 5 37 8 9 1 6 3 9 6 3 9
(A) 1   (B) 2   (C) 3   (D) 4

2. Count each 7 which is not immediately preceded by 5 but is immediately followed by [A   ]
either 2 or 3. How many such 7's are there the series?

5 7 2 6 5 7 3 8 3 7 3 2 5 7 2 7 3 4 8 2 6 7 8
(A) 2   (B) 3   (C) 4   (D) 1

3. How many 6's are there in the following series of numbers which are preceded by   [C   ]
7 but not followed by 9?
6 7 9 5 6 9 7 6 8 7 6 7 6 7 8 6 9 4 6 7 7 9 5 7 6 3
(A) 1   (B) 2   (C) 3   (D) 4

4. How many 7's are there in the series which are not immediately followed by 3 but   [C   ]
immediately preceded by 8?
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) 4   (B) 1   (C) 2   (D) 3

5. How many 7's are there in the following series which are preceded by 6 but not   [D   ]
preceded by 8?
8 7 6 78 6 7 5 6 7 9 7 6 1 6 7 7 6 8 8 6 9 7 6 8 7
(A) A   (B) 1   (C) 2   (D) 3

6. In the following list of number, how many 2's are followed by 1's but not   [C   ]
preceded by 4?
4 2 1 21 4 2 1 1 2 4 4 41 2 2 1 2 14 4 2 1 4 2 1 2 1 2 4 1 4 2 1 2 4 4 6
(A) 2   (B) 3   (C) 4   (D) 5

Directions (7-8): Study the following series carefully and answer the following question.
 7 8 9 7 6 5 3 4 2 8 9 7 2 4 5 9 2 9 7 6 4 7

7. How many 7's are there in the series which are preceded by 9 and followed by 6?   [A   ]
(A) 2   (B) 3   (C) 4   (D) 5

8. Which figures have equal frequency?
(A) 253   (B) 245   (C) 375   (D) 865

9.How many 6's are there in the series which are immediately preceded by 9 but not   [D   ]
followed by 4?
5 6 4 3 2 9 6 1 6 4 9 6 4 2 1 5 9 6 7 2 1 4 7 4 9 6 4 2
(A) 1   (B) 2   (C) 3   (D) 4

10. In the following series of numbers, find out the how many times 1,3 and 7 have   [B   ]
appeared together, 7 being in the middle and 1 and 3 on either side of 7 ?
(A) 3   (B) 4   (C) 5   (D) 2

11. In the series 6 4 1 2 2 8 7 4 2 1 5 3 8 6 2 1 7 1 4 1 3 2 8 6 how many pairs of   [B   ]
alternate numbers have a difference of 2?
(A) 1   (B) 2   (C) 3   (D) 4

12. How many even numbers are there in the following series which are immediately   [A   ]
followed by an odd number as well as immediately preceded by an even number?
8 6 7 6 8 9 3 2 7 5 3 4 2 2 5 5 2 2 8 1 1 9
(A) 1   (B) 3   (C) 5   (D) none of these

Directions (13-15): study the following series and answer the following questions

5   1 4 7 3 9 8 5 7 2 6 3 1 5 8 8 6 3 8 5 2 2 4 3 4 9 6

14. How many odd numbers are there in the sequences which are immediately   [C   ]
followed by an odd number?
(A) more than 4   (B) 4   (C) 3   (D) 4

14 How many even numbers are there in the sequence which are immediately preceded   [D   ]
by an odd number but immediately followed by a even number?
(A) 1   (B) 2   (C) 3   (D) 4

15. How many odd numbers are there in the sequence which are immediately preceded and also
immediately followed by an even numbers?   [C   ]
(A) 1   (B) 2   (C) 3   (D) 4

16. In the following series, how many such odd numbers are there which are divisible   [C   ]
by 3 or 5, then followed by odd numbers and then also followed by an even number?
12, 19, 21,3,25,18,35,20,22,21,45,46,47,48,9,50,52,54,55,56
(A) nil   (B) 1   (C) 2   (D) 3

17. In the following number sequence, how many such even number's are there which   [B   ]
are exactly divisible by its immediate preceding number but not exactly divisible by its immediate
following number?
3 8 4 1 5 7 2 8 3 4 8 9 3 9 4 2 1 5 8 2
(A) 1   (B) 2   (C) 3   (D) 4

18. Ram is counting down from 32. Rahul was counting the upwards the numbers starting [D   ]
from 1 and he was calling out only the odd numbers. What common number will they call out at the
same time if they were calling out at the same speed?
(A) 19   (B) 21   (C) 22   (D) they will not call out same number

19. If the first and second digit in the sequence 5 9 8 1 3 2 7 4 3 8 are interchanged, also [D   ]
the third and fourth digits, the fifth and sixth digits and so on, which digit would be the seventh
counting to your left?
(A) 1   (B) 4   (C) 7   (D) 9

20. If the positions of first and the sixth digits of the sequence of numbers   [C   ]
8 9 0 3 2 1 4 6 7 5 are interchanged , the second and seventh and so on, which number would be
seventh from the right end?
(A) 2   (B) 6   (C) 7   (D) 8

21. In a row of trees. One tree is fifth from either end of the row. How many are there   [B   ]
in the row?
(A) 8   (B) 9   (C) 10   (D) 11

22. In a queue, Amrith is 10th from the front while mukul is 25th from behind and   [C   ]
Mamatais just in the middle of the two. If there be 50 persons in the queue, what position does
mamata occupy from the front?
(A) 20th   (B) 19th   (C) 18th   (D) 17th

23. Raman ranks 16th from the top and 49th from bottom in the class. How many   [A   ]
students are there in the class?

(A) 64   (B) 65   (C) 66   (D) none

24. Sanjeev ranks 7th from the top and 28th from the bottom then how many students   [D   ]
are there in the class
(A) 37   (B) 36   (C) 35   (D) 34

25. If Arun finds that he is 12th from the right in a line of boys and fourth the left,   [B   ]
  how many boys should be added to the line such that there are 28 boys in the line?
(A) 12   (B) 13   (C) 14   (D) 15

26. Manish ranked 16th from the top and 29th from the bottom among those who   [D   ]
passed an examination. Six boys did not participate in the competition and five failed in it. How many
boys are there in the class?
(A) 40   (B) 44   (C) 50   (D) 55

27. Aruna ranks 12th in a class of 46. What will be her rank from the last?   [C   ]
(A) 33   (B) 34   (C) 35   (D) 37

28. Ravi is 7th ahead of Sumit in a class of 39. If Sumit rank is 17th from the last,   [B   ]
what is Ravi rank from the starting?
(A) 14th   (B) 15th   (C) 16th   (D) 17th

29. In a class of 60 students, where girls are twice that of boys, Kamal ranked   [C   ]
17th from the top, if there are 6 girls ahead of Kamal, how many boys are after him in rank?
(A) 3   (B) 9   (C) 12   (D) 23

30. In a row of 10 boys, when Rohit was shifted by two places towards left, he   [B   ]
became 7th from the left end. What was his earlier positions from the right end of the row?
(A) 1st   (B) 2nd   (C) 4th   (D) 6th

31. Sangeetha remembered that her father's birthday was certainly after 10th but   [D   ]
before 13th of December . Her Sister Natasha remembered that her father's birthday was definitely
after 9th but before 14th of December. On which date of December was their father's birthday?
(A) 10th   (B) 11th   (C) 12th   (D)date inadequate

32. Standing on a platform. Amit told Sunitha that Aligarh was more than ten   [C   ]
kilometers from there. Sunitha knew that is was more than12 but less than 14 kilometers from there. If
both of them were correct, which of the following could be the distance of Aligarh from the platform?
(A) 11km   (B) 12km   (C) 13km   (D) 14km

33. Asish leaves his house at 20 minutes to 7 in the morning, reaches Kunals house   [B   ]
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 Kunals house to reach their office
(A) 7.40am   (B) 7.20am   (C) 8.15am   (D) 7.55am

34. Ajay left home for the bus stop 15 minutes earlier than usual. It takes 10 minutes   [B   ]
to reach the stop. He reached the stop at 8.40 am. At what time does he usually leave home for the bus
stop?
(A) 8.30am   (B) 8.45pm   (C) 8.55am   (D) 8.45am

35. The priest told the devotee. The temple bell is rung at regular intervals of 45 minutes.   [B   ]

The last bell was rung 5 minutes ago. The next bell is due to the rung at 7.45 am, At what time did the priest given the information to the devotee?

(A) 7.40am   (B) 7.05am   (C) 7.00am   (D) 6.55am

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CHAPTER – 13
DIRECTION SENSE TEST

1. Deepak starts walking straight towards east. After walking 75 m he turns to the left and walks 25 m straight. Again he turns to the left and walks a distance of 40m straight, again he turns to the left and walks a distance of 25 m. How far is he from the starting point?   [E   ]

 (A) 140 m   (B) 35 m   (C) 115 m   (D) 25 m
(E) None of these

2. Arun started walking towards North. After walking 30 m, he turned left and walked 40 m. He then turned left and walked 30 m. He again turned left and walked 50 m. How far is he from his original position?   [D   ]
(A) 50 m   (B) 40 m   (C) 30 m   (D) 20 m
(E) None of these

3. Ramu went 15 km to the west from his house, then he turned and walked 20 km. He then turned east and walked 25 km and turning left covered 20 km. How far is the he from his house? [B   ]
(A) 5 km.   (B) 10 km.   (C) 40 km.   (D) 80 km.
(E) None of these

4. Rekha who is facing south turns to her left and walks 15 m, then she turns to her left and walks 7 metres, then facing west she walks 15 m. How far is she from her original position?   [D   ]
(A) 22 m   (B) 37 m   (C) 44 m   (D) 7 m
(E) None of these

5. Going 50 m to the south of her house, Radhika turns left and goes another 20 m. Then, turning to the north, she goes 30 m and then starts walking to her house. In which direction is she   [A   ] walking now?
(A) North-west   (B) North   (C) South-east   (D) East
(E) None of these

6. Shailesh and Mohan start from a fixed point. Shailesh moves 3 km. Northward, turns right and then covers 4 km. Mohan moves 5 km westwards, turns right and walks 3 km. The distance between Shailesh and Mohan now is   [B   ]
(A) 10 km   (B) 9 km   (C) 8 km   (D) 6 km
(E) 4 km

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

(A) 30 metres　　　　(B) 20 metres　　　　(C) 80 metres　　　　(D) 60 metres
(E) None of these

8. Suresh starts from his house towards west. After walking a distance of 30 m, he turned towards right and walked 20 metres. He then turned left and moving a distance of 10metres, turned to his left again and walked 40 metres. He now turns to the left and walks 5 metres. Finally he turns to his left. In which direction is he walking now?　　　　　　　　　　　　　　　　　　[A   ]
(A) North　　　　(B) South　　　　(C) East　　　　(D) South-West
(E) West

9. Raj travelled from a point X straight to Y at a distance of 80 m. He turned right and walked 50 m, then again turned right and walked 70 metres. Finally he turned right and walked 50 m. How far is he from the starting point?　　　　　　　　　　　　　　　　　　[D   ]
(A) 20 metres　　　　(B) 50 metres　　　　(C) 70 metres　　　　(D) 10 metres
(E) None of these

10. A man walks 10 km towards 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 references to his starting point?　[B   ]
(A) 7 km East　　　　(B) 5 km West　　　　(C) 5 km North-East　　　　(D) 7 km West
(E) None of these

11. One morning after sunrise, Sumesh and Ratheesh were standing on a lawn with their backs towards each other. Sumesh's shadow fell exactly towards his left hand side. Which direction was Ratheesh facing?　　　　　　　　　　　　　　　　　　[D   ]
(A) East　　　　(B) West　　　　(C) North　　　　(D) South
(E) North-east

12. A watch reads 4.30 if the minute hand points east, in which direction does the hour hand point?　　　　　　　　　　　　　　　　　　[C   ]
(A) North　　　　(B) North-west　　　　(C) South-east　　　　(D) North-east
(E) None of these

13. Facing the east, Rajesh turned left and walked 10 metres, then he turned to his left again and walked 10 m. He then turned 45º towards his right and went straight to cover 25 metres. In which direction direction from his starting point is he?　　　　　　　　　　　　[A   ]
(A) South-west　　　　(B) South-east　　　　(C) North-west　　　　(D) North-east
(E) East

14. A direction pole was situated on the crossing. Due to an accident, the pole turned in such a manner that the pointer which was showing east, started showing south. One traveler wentto the wrong direction thinking it to be west. In what direction actually he was traveling?　　　　[D   ]

(A) east　　　　(B) west　　　　(C) north　　　　(D) south

15.Ram goes first 7km north then turns left and moves 10km, again he turns left and moves 7km. How far is he from the starting point?　　　　　　　　　　　　　　　　[B   ]
(A) 7km　　　　(B) 10km　　　　(C) 17km　　　　(D) 24km

16. A is 40 km south-west of B. C is 40 km south-east of B. Then C is in which direction of A? [A   ]

(A) east   (B) west   (C) north-east   (D) south

17. A man is performing yoga with his head down and legs up. His face is towards the west. In which direction will his left hand be?   [A   ]
(A) east   (B) west   (C) north   (D) south

18. A policeman left his police post and proceeded south 4 km on hearing a loud sound from point A. On reaching the place, he heard another sound and proceeded 4 km to his left to the point B. From B, he proceeded left to reach another place C, 4 km away. In which direction, he has to go to reach his police post?   [D   ]
(A) North   (B) South   (C) South-east   (D) West

Direction (19-21): Each of the following questions is based on the following information:
Six flats on a floor in two rows facing North and South are allotted to P, Q, R, S, T and U.
Q gets a North facing flat and is not next to S.
S and U get diagonally opposite flats.
R next to U, gets a south facing flat and T gets North facing flat.

19. If the flats of P and T are interchanged then whose flat will be next to that of U?   [A   ]
(A) P   (B) Q   (C) R   (D) T

20. Which of the following combination get south facing flats?   [C   ]
(A) QTS   (B) UPT   (C) URP   (D) Data is inadequate

21. The flats of which of the other pair than SU, is diagonally opposite to each other?   [A   ]
(A) QP   (B) QR   (C) PT   (D) TS

22. One morning Udai and Vishal were talking to each other face to face at a crossing. If Vishal's shadow was exactly to the left of Udai, which direction was Udai facing?   [C   ]
(A) East   (B) West   (C) North   (D) South

23. One evening after sunset Hari and Murari were standing on a lawn facing each other.
Hari's shadow fell exactly towards his left hand side. Which direction was Murari facing? [D   ]
(A) East   (B) West   (C) North   (D) South

24. I am facing east. Turning to the right I go 20m. then turning to the left I go 20m and turning to the right I go 40m and then again I go 40m to the right. In which direction am I from my original position?   [A   ]
(A) East   (B) West   (C) North   (D) South

25. Two boys Anil and Sunil walk in opposite directions for 3km. Anil is walking towards East. After 3km each both turn right and walk 3km each. Both turn to face each other. In which direction is Sunil looking?   [C   ]
(A) North   (B) West   (C) South-East   (D) South

***

CHAPTER – 14
SYLLOGISMS

Directions (Qs. 1 – 25): Each of the following questions contains two statements followed by two conclusions numbered I and II. You have to consider the two statements to be true, even if they seem to be at variance at the commonly known facts. You have to decide which of the given conclusions definitely follows from the given statements.

Given answer (a) If only I follows;
(b) If only conclusion II follows
(c)If either I or II follows
(d) If neither I nor II follows
(e) If both I and II follow.

1. Statement: Some tables are glasses.   [D]
   All trees are tables.
   Conclusions: I. Some trees are glasses
   II. Some glasses are trees.

2. Statement: No man is a lion.   [A]
   Somu is a man.
   Conclusions: I. Somu is not a lion.
   II. All men are not Somu.

3. Statement: All boys are mothers.   [B]
   All mothers are fathers
   Conclusions: I. All mothers are boys.
   II. All boys are fathers

4. Statement: All pots are cups.   [A]
   All cups are bowls.
   Conclusions: I. All pots are bowls.
   II. All cups are pots.

5. Statement: All students are girls   [D]
   No girl is dull
   Conclusions: I. There are no boys in the class
   II. No students is dull.

6. Statement: Some cats are kittens.   [D]
   All goats are kittens.
   Conclusions: I. Some cats are goats.
   II. Some goats are cats.

7. Statement: All names are houses.   [D]
   No houses are foxes
   Conclusions: I. All names are foxes
   II. No houses are names.

8. Statement: All pens are dogs.   [A]

Some pens are lights
Conclusions: I. Some dogs are lights
                II. Some lights are not dogs.

10. Statement: All tables are ants.   [B   ]
                Some ants are chairs.
Conclusions: I. All ants are tables
                II. Some chairs are not ants.

11. Statement: All elephants are birds.   [A   ]
                Some birds are cows.
Conclusions: I. some cows are birds.
                II. Some elephants are cows.

12. Statement: All papers are pencils.   [E   ]
                All pencils are erasers.
Conclusions: I. some erases are papers.
                II. Some pencils are papers.

13. Statement: Some trees are horses.   [B   ]
                Some ships are trees.
Conclusions: I. some horses are ships
                II. Some trees are neither ships nor horses.

14. Statement: All glasses are mirrors.   [D   ]
                Some mirrors are red.
Conclusions: I. All mirrors are glasses.
                II. Some glasses are red.

15. Statement: Some dogs are horses.   [B   ]
                No horse is black.
Conclusions: I. somedogs are black.
                II. Some horses are dogs.

16. Statement: All roads are poles.   [D   ]
                No poles are houses.
Conclusions: I. some roads are houses.
                II. Some houses are poles.

17. Statement: many actors are singers.   [A   ]
                All singers are dancers.
Conclusions: I. Some actors are dancers.
                II. No singer is an actor.

18. Statement: Only cats are animals.   [E   ]
                No historian is an animal.
Conclusions: I. Some cats are not historians.
                II. Some historians are not cats.

19. Statement: Some desks are caps.   [A   ]
                No cap is red.

Conclusions: I. Some caps are desks
               II. No desk is red

20. Statement: Some pots are belts.   [D   ]
                 No belt is white.
Conclusions: I. Some pots are white.
               II. Some pots are not white.

21. Statement: Some girls are flowers.   [D   ]
                 Some flowers are books.
Conclusions: I. Some girls are books.
               II. No books are girls.

22. Statement: Some files are ants.   [B   ]
                 All insects are ants.
Conclusions: I. All files are ants.
               II. Some ants are insects.

23. Statement: All players are tall.   [D   ]
                 Pranesh is tall.
Conclusions: I. Pranesh is a player.
               II. Pransh is not a player.

24. Statement: Some hens are cows.   [E   ]
                 All cows are horses.
Conclusions: I. Some horses are hens.
               II. Some hens are horses.

25. Statement: All business men are hard working.   [E   ]
                 No hard working men are superstitious
Conclusions: I. No business men are superstitious.
               II. All Superstitious are not businessmen.

Directions (Qs. 26-40): In each question below, there are two or three statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follow(S) from the given statements.

26. Statement: Some boys are girls.   [A   ]
                 All girls are students.
Conclusions: I. Some boys are students.
               II. Some students are boys.
               III. Some students are girls
               IV. All students are girls.
        (A) I, II and III follow   (B) II, III and IV follow
        (C) I, III and IV follow   (D) I, II and IV follow
        (E) All follow

27. Statement: All books are watches.   [B   ]
              Some watches are clips.
Conclusions: I. Some watches are books.
               II. No watches are books.
               III. Some books are clips.
               IV. No books are clips
        (A) I, and III follow   (B) Only I follow
        (C) Either I or II follows   (D) Either III or IV and I follow
        (E) Either I or II and III follow.

29. Statement: Some reds are blues.   [B   ]
              No greens are blues.
Conclusions: I. Some reds are not greens.
               II. All reds are greens.
               III. Some greens are not reds.
               IV. All greens are reds.
        (A) Only I follows   (B) Only I and III follows
        (C) Either I or II follows   (D) Either III or IV and I follow
        (E) I and II follow

31. Statement: All birds are animals.   [E   ]
              Many birds are stones.
Conclusions: I. Some birds are animals
               II. Some animals are stones
               III. All animals are stones
               IV. Some animals are not stones.
        (A) Only I follows   (B) Only II follows
        (C) Either III or IV follows   (D) I and II follow
        (E) I , II and IV follow

33. Statement: Some girls are teens.   [??   ]
              No teens are snakes.
Conclusions: I. Some teens are girls.
               II. Some snakes are not girls..
               III. Some girls are not snakes.
               IV. All snakes are girls.
        (A) Only I follow   (B) Either II or III follows
        (C) Only I, II and III follow   (D) Only I and II follow
        (E) Either III or IV follows

34. Statement: No blankets are pillows.   [C   ]
              Some beds are blankets.
Conclusions: I. Some blankets are not pillows.
               II. Some pillows are not beds.
               III. Some beds are not pillows.
               IV. All beds are pillows.
        (A) Either II or IV follows   (B) Either I or II follows
        (C) I II and III follow   (D) Either II or III follows
        (E) None of the above

35. Statement: All classes are glasses.   [D   ]
                 All brasses are glasses.
Conclusions: I. Some classes are brasses.
                 II. Some brasses are glasses.
                 III. Some brasses are classes.
                 IV. Some classes are glasses.
        (A) Only I follow   (B) Only II follows
        (C) I and II follow   (D) II and IV follow
        (E) All follow

36. Statement: All cars are buses.   [A   ]
                 Some buses are cycles.
Conclusions: I. All cycles are buses.
                 II. All cycles are car.
                 III. Some cars are cycles.
                 IV. No cars are cycles.
        (A) None follows   (B) Only II and III follow
        (C) Either II or III follows   (D) Either I or IV follows
        (E) Either III or IV follows

37. Statement: Some singers are rockers.   [A   ]
                 All rockers are westerners.
Conclusions: I. Some rockers are singers.
                 II. Some westerners are rockers.
                 III. Some singers are westerners.
                 IV. Some singers are not westerners.
        (A) I, II and III follow   (B) I, II and IV follow
        (C) II, III and IV follow   (D) I, III and IV follow
        (E) All follow

38. Statement: All pigs are elephants.   [E   ]
                 No pigs are bakers.
Conclusions: I. Some bakers are not pigs.
                 II. Some pigs are not bakers.
                 III. Some elephant are not bakers.
                 IV. Some bakers are not elephants.
        (A) I, II and III follow   (B) I, II and IV follow
        (C) I, III and IV follow   (D) II, III and IV follow
        (E) All follow

39. Statement: All green are blue.   [C   ]
                 All blue are white.
Conclusions: I. Some blue are green.
                 II. Some white are green.
                 III. Some green are not white.
                 IV. All white are blue.
        (A) Only I and follow   (B) Only II and III follow
        (C) Only I and II follow (D) Only I and IV follow
        (E) All follow

40. Statement: Some soaps are clean.   [D   ]
                All clean are wet.
Conclusions: I. Some clean are soaps.
                II. No clean are soaps
                III. Some wet are soaps.
                IV. All wet are soaps.
        (A) Only I follows   (B) Either I or II follows
        (C) Either III or IV follows (D) only I and III follow
        (E) None of the above

***

CHAPTER – 15
CLOCKS

1. Choose the Correct Option:

1. A clock is started at noon. By 10 minutes past 5, the hour hand has turned through   [C   ]
(A) 145º   (B) 150º   (C) 155º   (D) 160º

2. An accurate clock shows 8'0 clock in the morning. Through how many degrees   [D   ]
    will the hour hand rotate when the clock shows 2'0 clock in the afternoon?
(A) 144º   (B) 150º   (C) 168º   (D) 180º

3. At 3:40, the hour hand and the minute hand of a clock from an angle of   [C   ]
(A) 120º   (B) 125º   (C) 130º   (D) 135º

4. The angle between the minute hand and the hour hand of a clock when the time is 8:30 is [B   ]
(A) 80º   (B) 75º   (C) 60º   (D) 105º

5. The angle between the minute hand and the hour hand of a clock when the time is 4:20 is [B   ]
(A) 0º   (B) 10º   (C) 5º   (D) 20º

6. At what angle the hands of a clock are inclined at 15 minutes past 5?   [C   ]
(A) 58½º   (B) 64º   (C) 67½º   (D) 72½º

7. The reflex angle between the hands of clock at 10:25 is   [D   ]
(A) 180º   (B) 192½º   (C) 195º   (D) 197½º

8. How many times do the hands of clock coincide in a day?   [C   ]
(A) 20   (B) 21   (C) 22   (D) 24

9. How many times in a day, the hands of a clock are straight?   [C   ]
(A) 22   (B) 24   (C) 44   (D) 48

10. How many times are the hands of a clock at right angles in a day?   [A   ]
(A) 22   (B) 24   (C) 44   (D) 48

11. 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

12. How much does a watch lose per day, if its hands coincide every 64 minutes?   [A   ]
(A) 32 8/11 min   (B) 36 5/11 min   (C) 90 min   (D) 96 min

13. At what time, in minutes, between 3'0 clock and 4'0 clock, both the needle will   [D   ]
    coincide each other?
(A) 5 1/11 min   (B) 12 4/11 min   (C) 13 4/11 min   (D) 16 4/11 min

14. At what time between 9 and 10' O clock will the hands of a watch be together   [C   ]
      (A) 45 min , past 9   (B) 50 min , past 9
      (C)49 1/11 min , past 9   (D) 48 2/11 min , past 9

15. At what time between 7 and 8 ' O clock will the hands of a clock be in the straight   [D   ]
    line but, not together ?
      (A) 5 min . past 7   (B) 5 2/11 min . past 7
      (C) 5 3/11 min . past 4   (D) 5 5/11 min . past 7

16. At what time between 4 and 5 ' O clock will the hands of a watch point in   [D   ]
    opposite directions ?Type equation here.
      (A) 45 min . past 4   (B) 40 min . past 4
      (C) 50 4/11 min . past 4   (D) 54 6/11 min . past 4

17. At what time between 5.30 and 6 will the hands of a clock be at right angular.   [B   ]
      (A) 43 5/11 min . past 5   (B) 43 7/11 min . past 5
      (C) 40 min . past 5   (D) 45 min . past 5

18. Find the angle between the hour hand and the minute hand of a clock when   [C   ]
    the time is 3:25
      (A) 47°   (B) 1/2°   (C) 47 1/2°   (D) None of these10

19. At what time between 2 and 3 ' O clock will the hands of a clock be together?   [A   ]
      (A) 10 10/11 min. past 2   (B) 5 min . past 2
      (C) 11 10/11 min . past 2   (D) 10 min . past 2

20. At what time between 4 and 5' O clock will the hands of a clock be at right angle?   [A   ]
      (A) 5 5/11 min . past 4   (B) 5 7/11 min . past 5
      (C) 5 min . past 4   (D) None of these

***

CHAPTER – 16
CALENDAR

I.   **Choose the Correct option :**

1. January 1, 2007 was Monday. What day of the week lies on January 1, 2008?   [B   ]
    (A) Monday   (B) Tuesday   (C) Wednesday   (D) Sunday

2. January 1, 2008 is Tuesday. What day of the week lies on January 1, 2009   [C   ]
    (A) Monday   (B) Wednesday   (C) Thursday   (D) Sunday

3. On 8th December , 2007 Saturday falls. What day of the week was it   [D   ]
    on 8th December, 2006?
    (A) Sunday   (B) Thursday   (C) Tuesday   (D) Friday

4. The calendar for the year 2007 will be the same for the year   [D   ]
    (A) 2014   (B) 2016   (C) 2017   (D) 2018

5. On 6th March, 2005 Monday falls. What was the day of the week   [A   ]
    on 6th March , 2004 ?
    (A) Sunday   (B) Saturday   (C) Tuesday   (D) Wednesday

6. On what dates of April, 2001 did Wednesday fall?   [D   ]
    (A) 1st, 8th, 15th, 22nd, 29th (B) 2nd, 9th, 16th, 23rd, 30th
    (C) 3rd, 10th, 17th, 24th (D) 4th, 11th, 18th, 25th

7. What was the day of the week on 17th June, 1998?   [C   ]
    (A) Monday   (B) Tuesday   (C) Wednesday   (D) Thursday

8. What was the day of the week on 28th May, 2006?   [D   ]
    (A) Thursday   (B) Friday   (C) Saturday   (D) Sunday

9. What will be the day of the week on 15th August, 2010?   [A   ]
    (A) Sunday   (B) Monday   (C) Tuesday   (D) Friday

10. Today is Monday. After 61days, it will be   [B   ]
    (A) Wednesday   (B) Saturday   (C) Tuesday   (D) Thursday

11. The last day of a century cannot be   [C   ]
    (A) Monday   (B) Wednesday   (C)Tuesday   (D) Friday

12. Which of the following is not a leap year?   [A   ]
    (A) 700   (B) 800   (C)1200   (D) 2000

13. How many days are there in x weeks x day?   [B   ]
    (B) 7x^{2} (B) 8x   (C)14x   (D) 7

14. It was Sunday on January 1, 2006. What was the day of the week on   [C   ]
    January 1, 2010?
    (A)Sunday   (B) Saturday   (C) Friday   (D) Wednesday

15. On 8th February, 2005 it was Tuesday. What was the day of the week   [C   ]
    on 8th February, 2004?
    (A) Tuesday   (B) Monday   (C) Sunday   (D) Wednesday

16. The calendar for the year 1982 is the same as which year   [B   ]
    (A) 1984   (B) 1993   (C)1985   (D) 1989

17. What day of the week was 2ⁿᵈ November, 1981?   [A   ]
    (A) Monday   (B) Tuesday   (C)Wednesday   (D) Thursday

18. On which day of the week does 30ᵗʰ June, 1994 fall?   [A   ]
    (A) Thursday   (B) Monday   (C)Tuesday   (D) Wednesday

19. What was the day of the week on 15ᵗʰ August, 1947?   [A   ]
    (A) Friday   (B) Saturday   (C)Sunday   (D) Monday

20. What was the day of the week on 4ᵗʰ June, 2002?   [A   ]
    (A) Tuesday   (B) Monday   (C) Wednesday   (D) Sunday

***

CHAPTER -17
DATA SUFFICIENCY

Directions: Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer.

(A) If the data in statements I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question

(B) If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question

(C) If the data either in statement I alone or in statement II alone are sufficient to answer to the question.

(D) If the data given either in both statement I and II together are not sufficient to answer to the question; and

(E) If the data in both statement I and II together are necessary to answer the question.

1.   What is the colour of 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.

2. What is the code for 'sky' in the code language?   [D   ]
          I.   In the code language, 'sky is clear' is written as 'da ra fa'.

II.   In the same code language 'make it clear is written as 'da ga jo'.

3. Which code word stands for 'good; in the coded sentence 'sin co bye' [C   ]
   which means 'He is good?
       I. In the same code language, 'co mot det' means 'They are good'.
       II. In the same code language, 'sin mic bye' means 'He is honest'.

4. Among five friends, who is the tallest?   [E   ]
       I. D is taller than A and C
       II. B is shorter than E but taller than D

5. What is the numerical code for 'water' in a certain code?   [D   ]
       I. The code for 'give me water' is '719'.
       II. The code for 'you can bring water for me' is written as '574186'.

6. How is D related to A?   [D   ]
       I. B is the brother of A
       II. B is D's son

7. B is the brother of A. How is A related to B?   [C   ]
       I.   A is the sister of C
       II.   E is the husband of A

8. How is X related to Y?   [E   ]
       I. Y says, " I have only one brother'.
       II. X says, " I have only one sister'.

9. How many sons does D have?   [??   ]
       I. A's father has three children.
       II. B is A's, brother and son of D

10. How is Sulekha related to Nandini?   [C   ]
       I. Sulekha's husband is the only son of Nandini's mother
       II. Sulekha's brother and Nandini's husband are cousins.

11. T studies in which of the schools B, C, D, E and F?   [D   ]
       I. T does not study in the same school as either R or J
       II. R and J study in schools D and F respectively.

12. In a row of five children A, B, C, D and E, who is standing in the middle? [E   ]
       I. D is the immediate right of E and B is to the immediate left of E
   II. B is the extreme left of the row

14. A, B, C, D and E are sitting around a circular table facing the centre. [D   ]
   Who is to the immediate left of C?
   I. Only A is between E and B
   II. D is to the immediate left of B

14. A, B, C, D and E are seated around a circular table facing at the centre. [D   ]
   Who is to the immediate right of B?
   I. D is in between A and E

II. C is in between B and E

15. What is the value of 144 $ 16 & 7# 9   [C   ]
I. $ means ÷, & means * and # means +
II. 16 $ 4 & 2 # 2 = 10

16. Who among P, Q, R, S and T is lightest?   [D   ]
I. R is heaviest than Q and T but lighter than S
II. S is not the heaviest

17. Among A, B, C, D, E, and F, who is the heaviest?   [A   ]
I. A and D are heavier than B, E and F but none of them is the heaviest
I. A and D are heavier than B but lighter than C.

18. Among Monika, Anitha, Sonal, Ratna and Tanvy, who came last for   [E   ]
 the programme?
I. Monika came after Anitha but not after Tanvy
II. Ratna came after Tanvy but not after Sonal

19. What is the Shortest distance between Devipur and Durgapur?   [D   ]
I. Durgapur is 20km away from Rampur
II. Devipur is 15km away from Rampur

20. Which Direction is Sunny facing now?   [C   ]
   I.   If Sunny turns to his right and again turns to his right, he will be facing North
   II. I f Sunny walks some distance and turns left and again walks some distance, then his
        face will be towards left of Dinesh who is facing South.

***

CHAPTER – 18
CRYPTOGRAPHY

1.   What would be the value of the code 'A' where A + 1= 2   [C   ]
        (A) 1   (B) 2   (C) 0   (D) 3

2.   What would be the value of 'L' where L + M =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: [C   ]
                                AB
                        +   72
                        _____
                                96
                        _____

_____
        (A) 12   (B) 22   (C) 24   (D) 28

4.   'PQ' is the representation for which number?   [C   ]

```
                  78
            +     PQ
            _____
                  112
```

(A) 24   (B) 32   (C) 34   (D) 22

5.   'MN' is the representation for?   [B   ]

```
                  26
            x     MN
            _____
                  312
```

(A) 18   (B) 12   (C) 17   (D) 14

7.   What is the value of ABC in the given Cryptogram?   [C   ]

```
                        A     B     C
                  +     3     4     7
                  _____
                        9     1     2
```

(A) 564   (B) 365   (C) 565   (D) 465

8.   A   B   C   [A   ]
          +   3   4   A
          _____
                5   7   6

(A) 234   (B) 736   (C) 108   (D) 546

9.   If A is the product of 2 different composite number. Then one of the   [C   ]
     possible value of B is
     (A) 1   (B) 2   (C) 6   (D) 5

Direction (11 to 13): Refer to the data below and answer the questions that follow:

```
                        A     A     A
                  +           A     A
                  _____
                        A     B     B
```

11.   If $A^2 = B$ then find the value of A.   [B   ]
        (A)1   (B) 2   (C) 4   (D) 6

12.   If $A^2 = B$, then find the value of B.   [B   ]
        (A) 2   (B) 4   (C) 6   (D) 8

13.   If $A^2 = B$ then find the value of A + B   [C   ]
        (A) 2   (B) 4   (C) 6   (D) 8

Direction (14 to 16): In the given illustration, each letter stands for the same integer throughout. Answer the following based on the given operation:

```
              A     A
      x       A     A
      _____
              A     A
    +  A      A     x
      _____
        A     B     A
      _____
```

14.   What is the value of A?   [D   ]

       (A) 2   (B) 4   (C) 7   (D) 1

15.   Which of the following could be the correct value of B?   [B   ]
       A) 1   (B) 2   (C) 3   (D) 4

16.   What is the sum of A and B?   [C   ]
       A) 1   (B) 2   (C) 3   (D) 4

Direction (27 to 33): In the following addition each of the letters denotes a different integer. Each letter stands for the same integer throughout where 'P' stand for 4.

```
          M     N     O     P
    +  A     Q     R     P
      _____
          Z     Z     Z     Z
      _____
```

27. What is the value of the letter 'Z' throughout?   [C   ]
       A) 4   (B) 6   (C) 8   (D) cannot be determined

28. If the value of N is greater than 5, then 'N' stands for?   [D   ]
       A) 6   (B) 7   (C) 8   (D) 6 or 7

29. If M > N and the value of N = 6, then what is the value of R?   [C   ]
       A) 2   (B) 1   (C) 3   (D) cannot be determined

30. If the value of N is 6 and M> N, then what is the value of A?   [B   ]
       A) 2   (B) 1   (C) 3   (D) None of these

31. If N = 6 and M> N, then which of the following numbers stand for MAN? [B   ]
       A) 146   (B) 716   (C) 356   (D) 236

32. If N = 6, M > N and O = 5, then what is the value of POAR?   [A   ]

A) 4513   (B) 4514   (C) 4517   (D) 4615

33. What is the remainder when 'P' is divided by Q?   [B   ]
    A) 3   (B) 0   (C) 1   (D) 2

Direction (34 to 40): In the following multiplication, each of the letters denotes 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
      E   C   E   x
      _____
      E   F   G   D
      _____
```

34. What is the value of C?   [C   ]
    A) 4   (B) 2   (C) 3   (D) 6

35. What is the value of F?   [D   ]
    A) 9   (B) 8   (C) 3   (D) 7

36. What is the sum total of BAD?   [C   ]
    A) 16   (B) 14   (C) 7   (D) 9

37. Which of the following number stand for CAB?   [D   ]
    A) 467   (B) 324   (C) 627   (D) 321

38. Which of the following stand for DEAF?   [B   ]
    A) 6784   (B) 4627   (C) 3247   (D) 3216

39. What is the value of $B^2 \times D^3$ [A   ]
    A) 16   (B) 64   (C) 8   (D) 256

40. What is the final product?   [C   ]
    A) 4624   (B) 6364   (C) 6784   (D) 4246

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