1	2	3	4	5	6	7	8	9	10	11	12	13
A	В	С	D	Е	F	G	Н	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	О	N
26	25	24	23	22	21	20	19	18	17	16	15	14
Е		J			0			T		Y		
5		10)		15			20		25		

Alphabet Series

1. X, V, S, O, J ,?	(a) L,	(B) M	(C) D	(D) R
2. R,U,X,A,D,?	(a) F	(b) G	(c) H	(d) I
3. T,R,P,N,L,?,?	(a) J,G	(b) J,H	(c) K,K	(d)
4. B, D, F, I, L, P, ?	(a) R	(b) S	(c) T	(d) U
5. U, B, I, P, W,?	(a) D	(b) F	(c) Q	(d) Z
6. H, I, K, N, ?	(a) 0	(b) Q	(c) R	(d) S
7. Z?T?N?H?B	(a) W,Q,K,E	(b) W,R,K,E	(c) X,Q,K,E	
8. Z, Y, X, V, T, S, N, P, ?, ?,	(a) H,G	(b) F, M	(c) I, H	(d) J, I
9. C, Z, F, X, I, V, L, T, O, ?, ?	(a) O, P	(b) P, Q	(c) R, R,	(d) S, R
10. Z, S, W, O, T,K, Q, G, ?, ?	(a) N, C	(b) N, D	(c) O, C	(d)0, D
11.A, Z, X, B, V, T, C, R, ?, ?	(a) P, D	(b) E, O	(c) Q, E	(d)0, Q
DUIDLE VIDRADE	T CEDIEC			

DOUBLE ALPHABET SERIES

1. AF, GL, MR, ?	(a) SX	(B) V,	(C)U,X	(D)T,V
2. AI BJ CK ?	(a) DI	(b) DM	(c) GH	(d) CM
3. GH, JL, NQ, SW, YD, ?	(a) ES	(b) FJ	(c) EL	(d) FL
4. DF, GJ, KM, NQ, RT, ?	(a) UV	W (b) YZ	(c) XZ	(d) UX
5.HS, JQ, LO,NM?	(a) IJ	(b) OP	(c) KP	(d) PK
6.BA, ED, JI, ? ZY	(a) o _j	(b) PO	(c) PQ	(d) QP
7.JE,LH,OL,SQ, ?	(a) W	V (b) WX	(c) VW	(d) XW
TRIDIE ALDIIADE	T CEDIEC			

TRIPLE ALPHABET SERIES

1. PMT, OOS, NQR, MSQ, ?	(a) LUP	(b) LVP	(c) LVR	(d) LWP
2. VPI, ?, ODL, MBO, LAS	(a) RHJ	(b) SHJ	(c) SIJ	(d) THK
3. BMO, EOQ, HQS, ,?	(a)KSU	(B)LMN	(C)SOV	(D)SOW
4., YEB, WFD <mark>, UHG, SKI,</mark> ?	(a)QOL	(B)QGL	(C)TOL	(D)QNL
5. ABD, DGK, HMS, MTB, SBL, ?	(a)ZKU	(B)ZKW	(C)ZAB	(D)XKW

TRICKY QUESTION/NATURALQUESTION

1.S, M, T, W, T, F ?	a) S	b) M	c) T	d) K
2.M, V, E, M, J, S?	a) K	b) T	c) N	d) U
3.A, E, I, O,?	a) S	b) U	c) R	d) O
4.O, T, T, F, F,?	a) W	b) J	c) S	d) N
5.F, S, T, F, F, S, ?	a) S	b) O	c) Q	d) V
7.B , J ,A S,B, ?	a) K	b) A	c) J	d) K
8.T, I,M, R,?	a) K	b) L	c) F	d) E
9. J, F, M, A, M, ?	a) J	b) L	c) U	d) H
10.M,K,S,J,?	a) K	b) L	c) B	d) N

PATTERN

Abc bca cab abc abc bca

Abba abba abba abba...... CONTINUOUS PATTERN SERIES

1 aba	ba	_ab		
(a) abbba	(b) abbab	(c) b	abb (d)	bbaba
2. ab baa	ab			
(a) aaaa	b (b)	aabaa	(c) aabab	(d) baaba

```
3. m_nm_n_an_a_ma_
                   (b)ammanm (c) aammnn
 (a) aamnan
                                                           (d)amammn
                                                                       (d) bbabb
4. a ba b b a b
                              (a) abaab
                                             (b) abbab
                                                          (c) aabba
5. <u>stt_tt_tts_</u>
  (a) tsts
                   (b) ttst
                                       (c) sstt
                                                    (d) tsst
6,__ op__mo__n_ _ pnmop _
(a) mnpmon
                   (b) mpnmop (c) mnompn (d) npmon
7. __nmmn__mmnn__mnnm__
                               (a) nmmn
                                              (b) mnnm
                                                          (c) nnmm
                                                                        (d) nmnm
8. _tu_rt_s_ _ usrtu_
                               (a) rtusru
                                              (b) rsutrr (c) rsurt (d) rsurts
9. ba cb b bab
                               (a) acbb
                                             (b) bacc
                                                           (c) bcaa
                                                                       (d) cabb
10. bca b aabc a caa
                               (a) acab
                                              (b) bcbb
                                                          (c) cbab (d)ccab
Other Series
1.aababcabcd.....then find the 50<sup>th</sup> letter
2. abbcccdddd eeeee...... then find the 90<sup>th</sup> letter
3. Aa ABab ABCabc.....then find the 80<sup>th</sup> letter
4.A1a AB12ab ABC123abc......then find the 100<sup>th</sup> letter
4.ZYYXXXWWWW.....then find the 75<sup>th</sup> letter?
     b. Q c. O d. M
5. AABABCABCD.....then find 100<sup>th</sup> letter?
a. M b. N C. J d. E
6.aAbbBBcccCCCddddDDDD...... then find 100<sup>th</sup> letter?
a. J
     b. K
           c. j d. L
7.aAbbBBcccCCCddddDDDD...... then find 75<sup>th</sup> letter?
     b. i c. H
                  d. h
8.1Aa12abAB123abcABC.....then find 100<sup>th</sup> letter?
a. H b. h c. G
                 d. 1
                   Number series
      31,29,27,25,23 2. 1,4,7,10,13
1.
      1,4,9,16,25______4.
3.
                                1,2,4,8,16,32
      1000,200,40_____6.
5.
                                1000,400,200,80,40
7.
      3,5,8,13,21,34,55
                                       3,8,15,24,35
9.
      8,22,8,28,8
                                       10.
                                             2,3,4,2,6
                                                               8
      6,24,60,120,600 12.
11.
                                       50,30,40,75,170
      8,4<mark>.5,5.5,9.</mark>75,21.5_____14.
                                       24,12,12,18, 90
13.
15.
      7,4,5,9, 52.5,160.5
                                       16.
                                             10,5,5,7.5,15,37.5
      6<mark>,9,18,45</mark>,135 18. 12,12,18,45,180
17.
      1,3,3,6,7,9____12,21,___
19.
      15,14,19,11,23,8 5
20
21.
      50,200,100,100,200,50,____25
      5,16,49,104, 280
22.
      13,19,30,48,75
23.
      50,6,45,11,40,16,35,21,30
24.
25.
      544,509,474,439
      1,5,13,25,41 (51,57,61,63)
25.
      2,15,41,80___(111,120,121,132)
26.
      5,6,9,15, 40(26,25,40,45)
27.
28.
      1,9,25,49,81, (122,121,132,144)
      240, 120,40,10,2(120,240,40,60)
29.
```

- 30. 6,13,25,51,101____(102,202,203,204)
- 31. 2,12,36,80,150 (252,152,256,284)
- 32. 625,125,125,25, 5(5,25,125,625)
- 33. 3,4,7,7,13,13,21,22,31,34 (41,42,43,44)
- 34. 3,10,29,66,127 (164,187,216,218)
- 35. 24,60,120,210 (300,336,420,525)
- 36. 24,12,12,18, 90(40,36,54,66)

JUMBLED WORD PRACTICE QUESTIONS

The following answers refer to the Jumbled Word Practice questions.

- 1. OPTTAOA kind of vegetable
- 2. O B E T L T Drinks container
- 3. T C R O D O Hospital worker
- 4. CROTCUALALAdding Machine
- 5. R M I N O T O View Computer
- 6. L A P E N Air Transport
- 7. G M O A N A kind of fruit
- 8. LSOACMOSRA place of study
- 9. R O T P O I N A single helping

10. E P H A R C U S Buy something

1. P O T A T O	2. BOTTLE	3. DOCTOR	4. CALCULATOR	5. MONITOR
6. P L A N E	7. M A N G O	8. CLASSROOM	9. PORTION	10. PURCHASE

Assertion and Reason

- 1. A When the bus starts, the persons inside it falls forwards
- R- The bus pushes the man Forward
- A. Both A and R are true and R is the correct explanation of A.
- B. Both A and R are True but R is not the correct explanation of A.
- C. A is true but R is false
- D. A is False but R is true
- E. A and R both are False
- 2. A-We feel colder on mountain than on plains

R-Temperature decreases with Altitude

- A. Both A and R are true and R is the correct explanation of A.
- B. Both A and R are True but R is not the correct explanation of A.
- C. A is true but R is false
- D. A is False but R is true
- E. A and R both are False
- 3.A- Inside the earth metals are present in the molten state
- R- Earth absorbs the sun Rays.
- A. Both A and R are true and R is the correct explanation of A.
- B. Both A and R are True but R is not the correct explanation of A.
- C. A is true but R is false
- D. A is False but R is true
- E. A and R both are False
- 4. A- There is no vaccine for AIDS.
- R- The AIDS virus changes its genetic code.
- A. Both A and R are true and R is the correct explanation of A.
- B. Both A and R are True but R is not the correct explanation of A.
- C. A is true but R is false

- D. A is False but R is true
- E. A and R both are False
- 5. A-Clothes are not washed properly in hard water.
- R- Hard water contains many minerals.
- A. Both A and R are true and R is the correct explanation of A.
- B. Both A and R are True but R is not the correct explanation of A.
- C. A is true but R is false
- D. A is False but R is true
- E. A and R both are False
- 6. A- Unpolish rice should be eaten
- R- Polished rice lacks Vitamin B
- A. Both A and R are true and R is the correct explanation of A.
- B. Both A and R are True but R is not the correct explanation of A.
- C. A is true but R is false
- D. A is False but R is true
- E. A and R both are False
- 7. A-Glass tumbler breaks in winter when hot water is poured in it.
- R-When hot water is poured the outer surface of glass expands.
- A. Both A and R are true and R is the correct explanation of A.
- B. Both A and R are True but R is not the correct explanation of A.
- C. A is true but R is false
- D. A is False but R is true
- E. A and R both are False
- 8. A- Cotton is grown in alluvial soil.
- R-Alluvial soil is very fertile.
- A. Both A and R are true and R is the correct explanation of A.
- B. Both A and R are True but R is not the correct explanation of A.
- C. A is true but R is false
- D. A is False but R is true
- E. A and R both are False

Common Sense Test

- 1. How many times you can subtract the number 5 from 25?
- 2. Is it legal for a man to marry his widow's sister?
- 3. Two mothers and two daughters were fishing. They managed to catch one big fish, one small fish, and one fat fish. Since only three fish were caught, how is it possible that they each took home a fish?
- 4. What is the beginning of eternity, the end of time, the beginning of every end, and the end of every place?
- 5. If there are fifteen crows on the fence and the farmer shoots a third of them, how many are left?
- 6. Before the Mount Everest was discovered, what was the highest mountain in the world?
- 7. Why is it against the law for a man living in North Carolina to be buried in South Carolina?
- 8. There are five oranges in a basket. How will distribute the oranges to five people, such that one orange is still in the basket?
- 9. How many birthdays does the average man have?
- 10. Some months have 31 days; how many have 28?
- 11. A woman gives a beggar 1 dollar and 32 cents; the woman is the beggar's

- sister, but the beggar is not the woman's brother. How come?
- 12. Divide 30 by 1/2 and add 10. What is the answer?
- 13. If there are 3 apples and you take away two, how many do you have?
- 14. A doctor gives you three pills telling you to take one every half hour. How long would the pills last?
- 15. A clerk in the butcher shop is 5'10" tall. What does he weigh?
- 16. How many two cent stamps are there in a dozen?

Situation Judgement Test

- 1. Your maid has invited you to her daughter's wedding . You should
 - a. Completely ignore her
 - b. attend the wedding
 - c. buy a gift for her daughter
 - d. Congratulate her and make up some excuse for not being able to attend.
- 2. Your friends like smoking and influence you to do the same. You will
 - a. smoke only because your friends are smoking.
 - b. refuse to smoke.
 - c. smoke but only in their presence.
 - d. refuse and tell lie to them that you have asthma.
- 3. when you see a blind man trying to cross the road, you
 - a. ask someone to help him
 - b. go and help him
 - c. wait till he crosses the road
 - d.ignore and move on
- 4. You have made some silly mistakes which have been pointed out to you. You will
 - a. Laugh it away.
 - b. get angry
 - c. feel miserable
 - d. feel thankful
- 5. Your friend has not invited you to his marriage party. You will
 - a. hold it against him
 - b. attend the ceremony
 - c. send him your best wishes
 - d. ignore whole affairs

Verification of Truth

b. mind

- 1. Atmosphere always has
- a. Oxygen b. Air c. germs d. Moisture
- 2. A train always has
- a. Engine b. rails c. Driver d.passengers
- 3. which of the following an animal always has
- 4. A Race always has

a. Lungs

- a. Rafree b. Rivals c. price d. Victory
- 5. which of the following a Drama must have?
- a. Actor b. Story c. Sets d. Director

c. Heart

d. Life

- 6. A car always has
- a. Driver b. Bonnet c. Dickey d. Wheel
- 7. A book always has
- a. Chapters b. pages C. Contents d. Pictures
- 8. A hill always has

a. Trees	b. pitch	c. water	d. height					
9. Cricket always ha	S							
a. Stumps b. Pit	ch:	c. Glove	d. Bats					
10. Milk always con	ntains							
a. Sugar	b. Fats	c. Calcium	d. Water					
Puzzle que								
_		efully and answer the	e given questions					
i) B and E are good i		-						
ii) A and B are good	•	• •						
iii) A,D and C are go		-						
iv) C and A are good	-							
v) D and E are good	•							
Q1). Who is good in		, Dramatist						
a. A b. B c. C	d. D							
· -	-	, Mathematics but n	ot in Computer Science?					
a. A b. B c. C								
Q3). Who is good in	-	tory and Drama?						
a. B b. C c. E	d. D							
Q4). Who is good in	•	iter, Maths?						
a. B b. A c.D	d. C							
	_		seated in one row , they are J,K,L,M,N,O,P,Q,R . L					
_	-	_	is at one end of the row. Q is seated between O					
and P. O is at the th	ird place at left	of K. J is right next to	left of O.					
Q1. Who is sitting at	t the centre of t	he row?						
a. I b. J c. O	d. Q							
Q2. Who is at the ot	ther end of the i	row?						
a. J b. N c. P	d. R							
Q3. Which of the fo	llowing stateme	nt is true?						
a. N is two seats aw	ay from J							
b. M is at one Extre	me end							
c. R and P are neigh	bors							
d. There is one pers	on between L ai	nd O						
	and conclusion							
1.All windows are d	oors. No door is	wall						
Conclusions:								
1. No window is wal	II							
2. No Wall is door								
A) Only 1 follows	B) Only 2 follo	ows						
C) Either 1 or 2 follo	•	th 1 and 2 follow						
-	s. Some toys ar	e trees. Some angels	are trees					
Conclusions:								
_	1. Some angels are toys							
2. Some trees are flo	owers							
3. Some flowers are	angels							
A) None follows	B) Only 1 follo	ows						

- C) Only 2 follows D) Only 1 and 3 follow
- 3. Some blankets are beds. Some pillows are blankets. All beds are pillows

Conclusions:

- 1. Some blankets are pillows
- 2. Some pillows are beds
- 3. Some beds are blankets
- A) Only either 1 or 2 follows B) Only 1 and either 2 or 3 follows
- C) Only 3 and either 1 or 2 follows D) All 1,2 and 3 follow
- 4. Some blankets are beds. Some pillows are blankets. All beds are pillows

Conclusions:

- 1. Some blankets are pillows
- 2. Some pillows are beds
- 3. Some beds are blankets
- A) Only either 1 or 2 follows B) Only 1 and either 2 or 3 follows
- C) Only 3 and either 1 or 2 follows D) All 1,2 and 3 follow
- 5.All snakes are trees. Some trees are roads. All roads are mountains.

Conclusions:

- 1. Some mountains are snakes
- 2. Some roads are snakes
- 3. Some mountains are trees
- A) Only 1 follows B) Only 2 follows
- C) Only 3 follows D) Both 1 and 2 follow
- 6.Artists are generally whimsical. Some of them are frustrated. Frustrated people are prone to be drug addicts.

Based on these statements which of the following conclusions is true?

- A) All frustrated people are drug addicts B) Frustrated people are whimsical
- C) All drug addicts are artists D) Some artists may be drug addicts
- 7. Some boys are men. No man is black

Conclusions:

- 1. Some boys are not black
- 2. Some men are boys
- A) Only 1 follows B) Only 2 follows
- C) Either 1 or 2 follows D) Neither 1 nor 2 follows
- 8. Some mountains are hillocks. Some mountains are rivers. Some mountains are valleys.

Conclusions:

- 1. All mountains are either hillocks or rivers or valleys
- 2. No valley is river
- 3. Some river are valleys
- A) None follows B) Only 1 follows
- C) Only 2 and 3 follow D) Only 3 follows
- 9. Some hills are rivers. Some rivers are desrets. All desrets are roads.

Conclusions:

- 1. Some roads are rivers
- 2. Some roads are hills
- 3. Some deserts are hills

- A) None follows
- B) Only 1 follows
- C) Only 1 and 2 follows
- D) All follow

1D	1D	2A	130	l 4D	5D		7C	8B	
----	----	----	-----	------	----	--	----	----	--

Coding Decoding

- 1. IF TABLE=95 THEN WHAT IS THE CODE FOR EDUCATION, POKHARA, KATHMANDU
- 2. IF NAME =910, GOD=420, GUN=?,HEN=?
- 3. IF COME=315135, NUMBER=1421132518 THEN FIND THE CODE FOR PENCIL, TABLE=?
- 4. IF **ROOF=2337 ADB=651 GIVE=0894** THEN WHAT IS CODE FOR **VIDEO,DOVE, FIVE?**
- 5. IF TOP= UPQ THE WHAT IS CODE FOR HAT.
- 6. IF PEN=ODM THEN FIND THE CODE FOR BIG.
- 7. IF **NATURE** IS FOR **ENATUR** THEN **DONKEY** IS FOR
- 8. TABLE IS FOR GZYOV THEN WHAT IS CODE FOR HORSE
- 9. IF **FEMALE** IS FOR **ELAMEF** THEN WHAT IS CODE FOR **DISCIPLINE**
- 10. IF GREAT=21597 THEN STARK IS FOR
- 11. **POND** IS FOR **RSTL** THEN **KITE** IS FOR
- 12. IF **RED IS TO WHITE, WHITE IS TO BLACK, BLACK IS TO BLUE, BLUE IS TO RED** THEN WHAT IS THE COLOR OF THE **BLOOD AND SKY**
- 13. IF HORSE IS PIRFT THEN ANKLE IS FOR
- 14.KINETIC IS FOR TICDKIN THEN MACHINE IS FOR
- 15. RELATED IS FOR EFUBKDQ THEN RETAINS IS FOR
- 16. IF RAM IS CODED AS 32 THEN WHAT IS MAN CODE FOR
- 17. *IF RAM* IS CODED AS [★]\ ,MAN IS FOR ↑ \$ THEN WHAT IS THE CODE FOR MARN
- 18. If in a certan language FASHION is coded as FOIHSAN, how is PROBLEM coded in that code?
- A) PELBORM B) PRBOELM C) RPBOELM
- D) RPBOELM
- 19. If in a certain language CHARCOAL is coded as 45164913 and MORALE is coded as 296137, how are the following words coded in that language," REAL"
- A) 8519

B) 6713

C) 6513

- D) 6719
- 20.IF "ROSES ARE BLUE" MEANS" ILL PEE DE"
- IF "RED FLOWERS" MEANS "SILK HEE"
- IF "FLOWERS ARE VEGETABLES" MEANS "PEE NUT HEE"
- IF "ROSES GREEN" MEANS "ILL KILL"
- THEN FIND THE CODE FOR "ROSES ARE FLOWERS"
- 21."YOU ARE GOOD " MEANS " PEM LEM TA"
- "THEY ARE WELL" MEANS "LEM SE PAR"
- "THEY ARE INNOCENT" MEANS "PAR LEM MUG"
- "YOU ARE SICK" MEANS "TA LEM KA"
- THEN FIND THE CODE FOR "YOU ARE WELL INNOCENT"
- 22. IF 5862 = 714 3948=1113 THEN 2965=?
- 23. IF CHAIR=53269, EAR=729 THEN HEAR =? HAIR =?

Extra Questions

1.In a certain code language COMPUTER is written as RFUVQNPC. How will MEDICINE be written in that code language?

- A) MFEDJJOE B) EOJDEJFM C) MFEJDJOE D) EOJDJEFM
- 2. If FRIEND is coded as HUMJTK, how is CANDLE written in that code?
- A) EDRIRL B) DCQHQK C) ESJFME D) DEQJQM
- 3. If Z = 52 and ACT = 48, then BAT will be equal to
- A) 39
- B) 41
- C) 44
- D) 46
- 4. In a certain code language,
- (A) 'pit na som' means 'bring me water'
- (B) 'na jo tod' means 'water is life'
- (C) 'tub od pit' means 'give me toy'
- (D) 'jo lin kot' means 'life and death'

Which of the following represents 'is' in that language?

- A) jo B) na C) tod D) lin
- 5) If train is called bus, bus is called tractor, tractor is called car, car is called scooter, scooter is called bicycle, bicycle is called moped, which is used to plough a field?
- A) Train
- B) Bus C) Tractor
- D) Car
- 6) In a certain coding language, iF GO = 32 & SHE = 49 then SOME will be equal to?
- A) 56 B) 58
- C) 62 D) 64

Arithmetic Reasoning

- 9. राम हिर र गीताको वर्तमान उमेरको योगफल ८० वर्ष छ। तीन वर्ष पिहला उनीहरूको उमेरको योगफल कित थियो होला? The sum of the present age of Ram, Hari and Gita is 80 years. What was the sum of their age three years before?
- २. १० जना व्याक्तिले एक अर्कासंग हात मिलाएमा जम्मा कित पटक हात मिलाउदा रहेछन् ?
- 10 people shake hands with each other. How many times will the number of handShake by all the people?
- यदि ६० वटा टोपी सुक्नलाई ६० मिनेट लाग्छ भने ५ वटा टोपी सुक्नलाई कित मिनेट लाग्छ ?
- If 60 caps dry in 60 minutes then at what time will 5 caps dry?
- ४. मलाई TEA एकपटक नभईकन हुन्न, COFFEE दुईपटक चाहिन्छ तर MILK मनै पर्देन भने म को हो ?

I need Tea once, Coffee twice but I don't like milk, who am I?

५.परिक्षामा एउटा विधार्थीले सही उत्तर वापत ४ नम्बर प्राप्त गर्छ र गलत उत्तर भएमा १नम्बर घट्छ । यदी उसले ६० प्रश्नको उत्तर लेखेछ र १३० नम्बर प्राप्त गर्यो भने उसले कित सही उत्तर लेखेछ ।

In an examination, a student scores 4 marks for every correct answer and loses 1 mark for every wrong answer. If he attempts all 60 questions and secures 130 marks, what is the number of questions he attempted correctly?

- ६. एउटा विधार्थीले परिक्षामा २०० प्रश्न सोधियो । प्रत्येक सही जवाफ दिएमा २ नम्बर प्राप्त हुन्छ भने गलत उत्तर दिएमा ०.५ नम्बर घट्छ । एक जना विधार्थीले २०० प्रश्न हल गरेर ३०० नम्बर प्राप्त गरे भने कित प्रश्नको सही उत्तर दिएछन्। In an examination, a student scores 2 marks for every correct answer and loses 0.5 mark for every wrong answer. If he attempts all 200 questions and secures 300 marks, what is the number of questions he attempted correctly?
- ७. एउटा हाँसको पछाडि दुई हाँस, एउटा हाँसको अगाडि दुई हाँस ,दुई हाँसको बीचमा एक हाँस निश्चित रचना बनाएर पौडिरहेका छन् भने त्यहाँ न्युनतम् जम्मा कति हाँस रहेछन् ।

Two ducks behind a duck, two ducks in front of a duck, one duck between two ducks are swimming with a certain composition and find the minimum number of ducks.

५. २० मिटर अग्लो पर्खालमा कमिला दिनमा ५ मिटर चढ्छ र रातमा ४मिटर फर्छ भने कमिलालाई सो पर्खाल चढ्न कित दिन लाग्ला?

If an ant climbs a 20 meter high wall 5 meters during the day and falls 4 meters at night, how many days will it take for the ant to climb the wall?

९. २० मिटर अग्लो पर्खालमा कमिला दिनमा ५ मिटर चढ्छ र अर्को दिनमा चार मिटर भर्छ भने कमिलालाई सो पर्खाल चढन कित दिन लाग्ला? If an ant climbs a 20 meter high wall 5 meters during the day and falls 4 meters the next day, how many days will it take for the ant to climb the wall?

90. एउटा वादर ८० मिटर अग्लो खम्बामा प्रतिमिनेट ५ मिटर चढ्छ र अर्को मिनेटमा २मिटर भर्छ भने सो वादर कित मिनेटमा खम्बाको टुप्पोमा पुग्ला?

If a Monkey rises 5 meters per minute on an 80 meter high pole and falls 2 meters in another minute, in how many minutes will the Monkey reach the top of the pillar?

99. एउटा वर्गको भुजा 25%ले वृद्धि गर्दा क्षेत्रफलमा कति % ले वृद्धि होला?

If each side of a square is increased by 25%, find the percentage change in its area?

१२. ३०० पेज भएको एउटा किताबमा जम्मा कित अंकहरुको संख्या रहेको हुन्छ ?

What is the total number of digits in a book of 300 pages?

१३. ४४२ पेज भएका एउटा किताबमा जम्मा कित अंकहरुको संख्या रहेको हुन्छ?

What is the total number of digits in a book of 552 pages?

- १४. एउटा समुहमा केहि बाखा र कुखुरा रहेका छन्। त्यहाँ जम्मा टाउकाको संख्या ५६ र खुट्टाको संख्या २०० भए सो समुहमा जम्मा कित बाखा र कुखुरा रहेका छन? There are some goats and chickens in one group. If there are 56 heads and 200 legs, how many goats and chickens are there in that group?
- १५. एउटा समुहमा केहि बाखा र कुखुरा रहेका छन्। त्यहाँ जम्मा खुट्टाको संख्या टाउकाको दोब्बर भन्दा २०ले बिंढ भए सो समुहमा जम्मा कित बाखा रहेका छन? There are some goats and chickens in one group. If the total number of legs is 20more than double the number of heads, how many goats are there in that group?
- १६. एउटा समुहमा केहि गाई र कुखुरा रहेका छन्। त्यहाँ जम्मा खुट्टाको संख्या टाउकाको तेब्बर भन्दा २०ले बढि भए सो समुहमा जम्मा कित गाई रहेका छन? There are some goats and chickens in one group. If the total number of legs is 20more than Thrice the number of heads, how many goats are there in that group?
- १७. एक देखि बीस सम्मको विजोर संख्याको योगफल कित हुन्छ ?Find the sum of the odd numbers from 1-20.

(क) १०० (ख) ४० (ग) ७५ (घ) ५०

१८. १ देखि १०० सम्म जोड्दा योगफल कति हुन्छ ? Find the sum from 1 -100.

(क) १००१ (ख) ४०४० (ग) ७४ (घ) ५०

9९. एउटा डण्डा २/३ भाग निलो रङ्ग, 9/४ भाग हरियो रङ्ग र 9० मिटर कालो रङ्गले रङ्गाईएको भए उक्त डण्डाको पुरा लम्बाई कित

If a rod is painted 2 /3 parts blue, 1 /4 parts green and 10 meters black, what is the full length of the rod?

(क) १२० मिटर (ख) ११२ मिटर (ग) ११० मिटर (घ) १४० मिटर

20. A shepherd had 17 sheep. All but 9 died. How many was he left with

a. Nil b. 8

c. 9

d. 17

21. A group of 1200 persons consisting of captains and soldiers are travelling in a train. For every 15 Soldiers there is one captain. Find the number of captains in a group?

a.70

b.75

c.80

d.85

22. Aruna cut a cake into two halves and cuts one half into smaller pieces of equal size. Each of the small pieces is twenty gm in weight. If she has seven pieces all together with her then find the weight of original cake

a. 120gms

b. 140gms

c. 280gms

d. 240 gms

23.Reduction of 40% in the price of bananas would enable a man to obtain 64 more for Rs. 40. What is the original price per dozen?

केराको मुल्यमा ४० प्रतिशत घटाउँदा एक जना मानिसले रु ४० मा ६४ बढी केरा लिन सक्छ भने शुरुको प्रति द्रजन केराको मुल्य पत्ता लगाउनुहोस्।

a. Rs. 5

b. Rs. 3

c.Rs.2

d. Rs. 4

Homework

- 1. In an election between two candidates, one got 55% of the total valid votes, 20% of the votes were invalid. If the total number of votes was 7500, the number of valid votes that the other candidate got, was :
 - a)2700
- b)3300
- c)3100
- d)2500
- 2. If each side of a square is increased by 30%, find the percentage change in its area?
- a)65 b)69 c)96 d)70
- 3. Today is Varun's birthday. One year, from today he will be twice as old as he was 12 years ago. How old is Varun today?
- a)20 b)25 c)22 d)27
- 4. A pineapple costs Rs. 7 each. A watermelon costs Rs. 5 each. X spends Rs. 38 on these fruits. The number of pineapples purchased is
- a)2 b)3 c)4 d)Data inadequate
- 5. A woman says, "If you reverse my own age, the figures represent my husband's age. He is, of course, senior to me and the difference between our ages is one-eleventh of their sum." The woman's age is
- a)23 years b)34 years c)45 years d)None of the above

Ranking Order

- १.राम कुनै लहरमा शुरुबाट १५औं स्थान र अन्तिमबाट ४५औं स्थानमा भए सो लहरमा जम्मा कित जना होलान् । In a line Ram is in15thposition from the front and 45th position from the last then how many people are there in line?
- २.राम विद्यालयको लाइनमा अगाडिबाट १०औं स्थानमा र पछाडिबाट २५औं स्थानमा उभिएका छन् भने सो लाइनमा कित विधार्थी रहेछन्। In a line of school Ram is in 10th position from the last then how many students are there in line?
- ३. हरिको कक्षामा जम्मा ५० जना विधार्थी रहेका छन्। हरि अगाडिबाट गन्दा १२औं स्थानमा पर्छन भने पछाडिबाट गन्दा कतिऔं स्थानमा पर्लान। In a class of Hari there are 50 students. If Hari is in 12th position from the front then what is the position of Hari from the last?
- ४. सिवन परिक्षामा सफल भएका विधार्थीमध्ये माथीबाट गन्दा २६औं स्थान र तलबाट गन्दा २९औं स्थानमा पर्छन्। १६ जना विधार्थी परिक्षामा सामेल हुन सकेनन् र ५जना फेल भए भने सो कक्षामा कित विधार्थी रहेछन्। Among the passed students Sabin is 26th position from front and 29th position from the last. 16 students did not attend the exam and 5 students are failed in exam. How many students were there in class?
- प्र. ६० जना विधार्थी रहेको एउटा कक्षामा केटीको संख्या केटाको दोब्बर रहेको छ। यदि रामको स्थान उच्चतम माथिबाट १७औं स्थानमा पर्छ र राम भन्दा अगाडी ९ जना केटि भए राम भन्दा पछाडि कित केटि र कित केटा होलान् ।In a class of 60 students, the number of girls is double that of boys. If Ram's place is 17th from the highest and there are 9 girls in front of Ram, how many girls and how many boys are behind Ram? ६. ३१ जना विधार्थी भएको कक्षामा राम र हिर वाया बाट कमशः १९औ र ७औ स्थानमा छन् भने उनीहरूको स्थान दायाबाट कित कित होला ? In a class of 31 students, Ram and Hari are in 11th and 7th position from Left respectively. What is their position from right?
- ७.राम वायाबाट ११औं स्थानमा रहेका छन् भने श्याम सोहि लाइनमा दायाबाट ९ औं स्थानमा रहेका छन् । उनीहरुको बीचमा ५जना रहेका छन् भने सो लाइनमा कित जना रहेका होलान् । Ram is in 11th position from left while Shyam is in 9th position from right in the same line. If there are 5 people among them, how many people are there in that line?
- द. ३० जना विधार्थी भएको लाइनमा सिता वायाबाट १५औं स्थानमा गीता दायाबाट १०औं स्थनामा रहेकी छिन्। यदी रिता दुवैको विचमा भए रिता दाया र वायाबाट कित औं स्थानमा होलीन्। In the line of 30 students, Sita is 15th from Left and Gita is 10th from Right. If Rita was between the two, Then find the position of Rita from right and left.
- A)12 and 17
- b)18 and 13
- c)18 and 12
- d)13 and 18

- ९.A, P, R, X, S र Z एउटा लाइनमा बसेका छन्। S र Z बिचमा बसेका छन्। A र P छेउमा बसेका छन्। R A को वायामा बसेको छ। P को दायामा को बसेको छ? A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P?

 A. P B. X C. S D. Z
- १०. राम वायाबाट ३३औं स्थानमा र हिर दायाबाट २८औं स्थानमा रहेका छन्। यदि हिरको स्थान रामको स्थान भन्दा ७औं स्थान दायामा पर्छ भने जम्मा कित जना होलान्। Ram is ranked 33rd from Left and Hari is ranked 28th from Right. If Hari's place is 7th to the right of Ram's place, how many people are there? ११.राम वायाबाट ३६औं स्थानमा रहेका छन्। हिर दायाबाट ४८औं स्थानमा रहेका छन्। यदि रामको स्थान हिरको स्थान भन्दा १२औ स्थान दायामा पर्छ भने सो लाइनमा जम्मा कित जना होलान्। Ram is ranked 36th from the Left. Hari is ranked 48th from the right. If Ram's place is 12th place to the right of Hari's place, how many people are there in that line?
- १२. १२० जना विधार्थी भएको कक्षामा यदी राम उच्चतम विन्दुबाट ४४औ स्थानमा पर्छन् । हरि न्युनतम् विन्दुबाट ४६औं स्थानमा पर्छन् भने राम र हरि बीचमा कित जना विधार्थी होलान् । In a class of 120 students, Ram ranks 44th from the highest point. Hari ranks 46th from the lowest point then how many students are there between Ram and Hari.
- १३. कुनै कक्षामा राम वायादेखि १३औं स्थानमा रहेका छन् र हिर दायाबाट ७औं स्थानमा रहेका छन्। यदि उनीहरु बीचमा ५जना भएको भए जम्मा न्युनतम् विधार्थीको संख्या कित होला? In a class, Ram is ranked 13th from Left and Hari is ranked 7th from Right. If there are 5students between them, what is the minimum number of students?
- १४.एउटा लाइनमा अंकित वाया देखि ९औं स्थानमा छन् र भिष्म दायादेखि ७औं स्थानमा छन्। यदि उनीहरुको बिचमा ३जना भए न्युनतम् कित जना सो लाइनमा मिलाउन सिकएला? Ankit is in 9th position in a line from left and Bhishma is in 7th position from right. If there are 3 students between them, what is the minimum number of students in the line?
- १५. कुनै लाइनमा राम वायाबाट १३औं स्थानमा र श्याम दायाबाट १७औं स्थानमा रहेका छन्। यदि राम दायाबाट ११औं स्थानमा पर्छन् भने श्याम वायाबाट कितऔं स्थानमा पर्लान्। In a line, Ram is in 13th position from Left and Shyam is in 17th position from Right. If Ram's position is 11th from Right, then what is the position of Shyam from Left.
- १६.कुनै लाइनमा रमेश वायाबाट १२औं स्थानमा र श्याम दायाबाट १७औं स्थानमा रहेका छन्। ती दुवैले स्थान परिवर्तन गरे र श्याम दायाबाट २७औं स्थानमा परे भने रमेश र श्याम बीचमा कित जना रहेछन्। In any line, Ramesh is in 12th position from Left and Shyam is in 17th position from Right. Both of them interchange their place and Shyam is in 27th position from Right. How many people are there between Ramesh and Shyam?
- १७.A B र C कुनै लाइनमा बसेका छन्। जहाँ A को अगांडि 5 जना A र B को बीचमा 8 जना B र C को बीचमा 15 जना र C को पछांडि 3 जना भए सो् लाइनमा जम्मा -अधिकतम्) कित जना होलान। A,B and C are sitting in a line. Where 5 persons are in front of A, 8 persons are between A and B,15 persons are between B and C and 3 persons are behind C. Then how many persons are there in the line?
- १८. ८०० पूणांक भएको परिक्षामा रामले ८० प्रतिशत हरिले ९० प्रतिशत गीताले ८५ प्रतिशत सीताले ८३ प्रतिशत र ५ जनाले ८८ प्रतिशत ल्याए भने सीताको स्थान कितऔं हो? In the exam of 800 full Marks, Ram scored 80 percent, Hari scored 90 percent, Gita scored 85 percent, Sita scored 83 percent and 5 students scored 88 percent. What is Sita's position?
- 1) If you are 10^{th} in queue of a bus, from both ends, how many persons are in the queue ?
 - (a) 19 (b) 20 (c) 18 (d) 29
- 2) Arpan's position is 15th from right and 14th from left, how many persons are in the queue?
 - (a) 28 (b) 29 (c) 30 (d) 27

- 3). Sachina is eight from the left and pabitra is eleventh from the right. When they exchange their positions, then sachina becomes thirteenth from the left. What will be pabitra's position from the right?
 - (a) 13 (b) 14 (c) 16 (d) 15
- 4).In a row of Boys A is 10th from the left and B is 9th from the right. They interchange their position and A becomes 15th from the left. Find the number of Boys in that line. (a) 23 (b) 27 (c) 28 (d) 24
- 5). In a police row Santosh's position is 17th from the left and sujan's position is 13th from the right . If Sabita is between them. What will be the Sabita's position from the left? there are 41 persons in a police row.
 - (a) 23^{rd} (b) 24^{th} (c) 26^{th} (d) 20^{th}
- 6). In a queue Gopal's position is 10th from the left and jack's position is 12 from the right, 15 persons are between them. Find the total persons are in a queue?

 (a) 38 (b) 37 (c)40 (d) 30
- 7). Madan, Manish ,Santosh and Aayush are playing cards, Madan and Manish are partners Aayush faces toward west and Madan is right of Santosh then who faces towards south?
 - (a) Madan (b) Santosh (cAaayush (d) Manisha
- 8). In a queue of 42 persons, Mina's position is 15th from the right then what is the position of her From the left of the queue?
 - (a) 28 (b) 25 (c) 27 (d) 30
- 9). In an annual exam of class ten,40 students are success 10 students are failed, 7 students are absent and 5 students exam are rusticated. Find the total students of class ten?
 - (a) 40 (b) 58 (c) 57 (d) 62
- 11). In a class Ram's position is 12^{th} position infront of Saroj. Saroj's position is 15^{th} from the back. In the class Ram merits is 4^{th} . How many students are there in the class?
 - (a) 30 (b) 31 (c) 32 (d) 33
- 12). Z,Y,X,W,V and U are sitting in a queue .V and U are in the center. Z and Y are at the ends. X is sitting to the left of Z. who is to the right of Y?
 - (a) Z (b) X (c) W (d) Y
- 13). P,Q,R,S,T,U,V,W are sitting around a round table in the same order, for group discussion equal distances. Their positions are clockwise. If V sits in the north, then what will be the position of S?
 - (a) East (b) south East (c) south (d) south-west
- 14). Of the six members of a panel sitting in a row A is to the left of D, but one the right of E. C is on the right of F, but is on the left of B. Which two members are sitting in the middle?
 - (a) D and C (b) A and C (c) C and B (d) D and F

Answer Kev

			_		,		
1.A	2.A	3. C	4. a	5. A	6. A	7.D	8.a
9. d	10. D	11. a	12.w	13.d	14.D		

Direction and Distance(दिशा र द्री)

9.राम उत्तर फर्केको छ । उ केहि दुरी पार गरेर दाया फर्कन्छ र फेरी केहि दुरी पार गरि दाया फर्कि फेरी केही दुरी पार गरि अन्त्यमा वाया फर्किन्छ भने राम शुरुको विन्दु देखि कुन दिशामा रहेको छ ?Ram faced to the north. He crosses some distance and turns right and then crosses some distance and turns right again and after crossing some distance he turns left at the end. In which direction is Ram from the starting point?

२ .राम आफू भएको ठाउँबाट १० कि मी पश्चिम तर्फ अगांडि बढेर दाया मोडि ८ कि मी हिड्यो भने उ शुरुको विन्दुबाट कुन दिशामा हुन्छ ।

If Ram moves 10 km west and turns right and walks 8 km, in which direction is he from the starting point?

३.राम उत्तर फर्केको छ । यदि उ ९० डिग्री घडिको विपरित दिशा घुम्छ भने राम अहिले कुन दिशामा हुन्छ ? Ram Faces towards North direction. If he turns 90° anti clockwise direction, in which direction is Ram now?

४.सिता दक्षिण पश्चिम दिशा फर्केकी छिन्। यदि उनी १३५ डिग्री घडि घुम्ने दिशातर्फ धुम्छिन् भने अब उनी कुन दिशामा हुन्छिन्। Sita is facing towards southwest direction. If she turns in a 135-degree clockwise direction, which direction is she now?

४. एउटा मानिस दक्षिण दिशामा उभिएको छ । यदि उ घडि घुम्ने दिशा तर्फ १३४ डिग्री घुम्छ र फेरि घडिको विपरित दिशामा १८० डिग्री घुम्छ भने उ अहिले कुन दिशामा हुन्छ । A man is standing in south direction. If he turns 1350 clockwise direction and again turns 1800 Anticlockwise direction then in which direction is he now?

६ . राम अहिले उत्तर दिशामा छ । उ सिधा १८० डिग्री फर्केर केहि दुरि पार गरी ९० डिग्री घडि घुम्ने दिशामा घुम्छ भने उ अहिले कन दिशामा हन्छ ।

Ram is facing towards North direction . if he turns 180° Straight and crosses some distance and turns 90° Clockwise direction then which direction is he now?

- ७ . हिर ५ कि मि पश्चिम लाग्छ । उ उत्तर फर्केर ४ कि मी हिड्छ र फेरि पूर्व फर्कि ८ कि मि हिड्छ भने शुरुको स्थानबाट उ कुन दिशामा हुन्छ । Hari walks 5km towards west direction and turns towards north and walks 4km and turns towards east and walks 8km . In which direction is he now from the starting point?
- द . राम १ कि मी पूर्व हिडेर ५ कि मी दक्षिण लाग्छ । फोर २ कि मी पूर्व हिडेर ९ कि मी उत्तर लाग्छ भने राम शुरुको विन्दुबाट कुन दिशामा र कित दुरीमा रहेको हुन्छ । Ram walks 1km towards east and turns south and walks 5 km again turns towards east and walks 2km and turns towards north and walks 9km . in which direction and how far is he from starting point?
- ९. सिता पश्चिम फर्किएकी छिन्। उनी २ कि मि दुरि पार गिर दाया फर्की ४ कि मी दुरि पार गिर्छन र फेरि दाया फर्कि ५ कि मी दुरी पार गिर्छन भने उनी कुन दिशामा हुन्छिन। Sita is facing towards west. She walks 2km and turns right and walks 4km. She turns right and walks 5km. In which direction is she now?
- 90. X को पूर्वमा Y र दक्षिणमा Z छ । Z को दक्षिणमा P छ भने Y को कुन दिशामा P पर्छ ।
- If Y is to the East of X and Z is to the south of X. if P is to the south of Z. then find the position of P from Y?
- ११. यदि दक्षिण पश्चिम भनेको उत्तर हुन्छ । पश्चिम भनेको उत्तर पूर्व भए उत्तर भनेको कुन दिशा पर्छ । if South-west means North, West means North- East then which direction is the North?
- १२. सूर्योदयको समयमा राम र श्याम आमनेसामने भएर कुराकानी गर्दै छन्। त्यस समयमा रामको छाया श्यामको अगाडि परेको भए,राम कुन दिशा फर्केर कुराकानी गर्दै छ ? Ram and Shyam are talking face to face at sunrise. IF Ram's Shadow falls in front of Shyam then in which direction is Ram facing and Talking?
- १३. सूर्यास्तको समयमा राम र श्याम आमनेसामने भएर कुराकानी गर्दै छन्। त्यस समयमा रामको छाया श्यामको दाया हात तर्फ परेको भए श्याम कुन दिशा फर्केर कुराकानी गर्दै छ। Ram and Shyam are talking face to face at sunset. If Ram's Shadow falls at the right hand side of Shyam then which direction is Shyam Facing and talking?

१४ . एक व्यक्ति आफू उभिएको ठाउँबाट ५ कि मी दक्षिण तर्फ लाग्छ र दाया फर्कन्छ अनि ३ कि मी हिडेर फेरि वाया तर्फ ५ कि मी हिड्छ भने उ कुन दिशा तर्फ जादै छ । उ शुरुको बिन्दु देखि कुन दिशामा छ । A man walks 5km towards south direction and turns right and walks 3km and again turns towards left and walks 5km. In which direction is he from starting point? and in which direction is he going? १५ . भित्तामा घडि भुण्डाइएको छ । यदि घडिले रातको ९:१५ बज्दा घडिको मिनेट सुइले पश्चिम दिशा देखाउछ भने बिहानको ६ बज्दा घण्टा सुइले कुन दिशा देखाउला? The clock is hanging on the wall. If the clock Minute hand shows the west direction at 9:15 pm, what direction will the hour hand point at 6 o'clock in the morning?

१६ . राम टाउकाले टेकेर उभिएको छ । यदि उसको अनुहार दक्षिण दिशा फर्केको भए उसको वाया हात कुन दिशा तर्फ फर्केको हुन्छ । Ram is standing with his head down and Legs Up . If his face is facing south direction, which direction is his left hand shows?

१७.हिर टाउकाले टेकेर उभिएको छ। यदि उसको अनुहार पश्चिम दिशा फर्केको भए उसको दाया हात कुन दिशा तर्फ फर्केको हुन्छ। Hari is standing with his head bowed. If his face is facing West, which direction is his Right hand facing?

१८ ABCD तास खेल्न बिसरहेका छन्। A ले फालेको तास B ले टिप्छ B ले फालेको तास C ले टिप्छ C ले फालेको तास D ले टिप्छ । यदि A पूर्व दिशा फर्केर तास खेलिरहेको भए D कुन दिशा फर्केर तास खेलिरहेको छ । ABCD are playing Cards. B picks the card thrown by A, C picks the card thrown by B, D picks the card thrown by C.IF A faces towards East direction and playing card then in which direction D faces?

१९ . A,B,C,D,E,F,G,H एउटा राउण्ड टेबलमा बसेका छन् यदि E पश्चिम फर्केको भए B क्न दिशा फर्केर बसेको छ ।

QUESTION

- 1. A North facing cadet obeys the command "About turn & walks 10 m. forward then he turns left & walks 5 m. Now he turns right and walks 10 m. then he walks 5m. to his right. How far is he from the starting points?
 - (a) 20 m North (b) 20 m. South (c) 10 m. North (d) 15 m. South
- 2. Naresh facing towards the North and after sometimes he turns right and again right then left. In which direction is he walking?
 - (a) East (b) South (c) North (d) West
- 3. Shantosh K.C. put his timepiece on the table in such and way that at 6 P.M. hour points to North. In which direction the minute hand will point at 9:15 P.M.?
 - (a) South-East (b) South (c) North (d) West
- 4. One evening before sunset Rekha and Hema were talking to each other face. If Hema's shadow was exactly to the right of Rekha, which direction was Rekha facing ?
 - (a) North (b) South (c) East (d) West
- 5. Muna is 40 m. South west of Luna. If Juna is 40 m. South-East of Luna, then juna is in which direction of Muna.
 - (a) East (b) West (c) North-East 9d) South
- 6. Some boys are sitting in three rows all facing North such that A is in the middle row. P is just to the right of A but in the same row. Q is just behind of A while R is in the North of A. In which direction of R is Q?
 - (a) South (b) South-West (c) North-East (d) South-East
- 7.From his house, Lokesh went 15 km to the North. Then he turned west and covered 10 km. Then he turned south and covered 5 km. Finally turning to the east, he covered 10 km. In which direction is he from his house?

(a) North (b) South- west (c) East (d) West

Distance

To convert km/hr to m/sec then we have to multiply by $\frac{5}{18}$. To convert m/sec to km/hr then we have to multiply by $\frac{5}{18}$. $S = \frac{d}{18}$

- 1. 500m लम्बाई भएको Train 10sec मा प्लेटफर्ममा रहेको व्याक्ति पार गर्छ भने रेलको गति कित होला? 500m long train crosses the man standing in platform in 10 sec then find the speed of train?
- 2. एउटा 500m लम्बाई भएको Train 60km/hr को Speed मा कुदेको छ। 1500 m पर रहेको 1000 mको प्लेटफर्म पार गर्न कित समय लगाउला? The length of a Train is 500m and the speed is 60km/hr. How long does it take to cross 1000m platform which is 1500m far .
- 3. एउटा 500m लम्बाई भएको रेल 60km/hr को speed मा कुदेको छ भने 1500 m पर रहेको खम्बा पार गर्न कित समय लाग्छ ?The length of a train is 500m and the speed of train is 60km/hr. How long does it take to cross the pole which is 1500m far?
- 4. एउटा 100m लम्बाई भएको Train 200m लम्बाई भएको पुल cross गर्न 15sec लगाउछ भने Train को Speed कित होला? 100m long train crosses 200m bridge in 15second then find the speed of a train?
- 5. एउटा 300m लम्बाई भएको Train 60km/hr को Speed मा 30 Sec मा एउटा सुरुड पार गर्छ भने सुरुडको लम्बाई पत्ता लगाउनुहोस्। The speed of a train is 60km/hr and the length is 300m. if it crosses the tunnel in 30sec then find the length of a tunnel?
- 6. एउटा विधार्थी $2^{1}/_{2}$ km/hr को speed मा स्कूल जादा 6min ढिला पुग्छ तर यदी उ 3km/hr को speed मा गएको भए 10min छिटो पुग्थ्यो भने घर र स्कूल बीचको द्री पत्ता लगाउन्होस् ।
- 7. The distance between two cities A & B is 330km. A Train Starts From A at 8am and travels towards B at 60km/hr. Another train Starts from B at 9am towards A at 75km/hr. At what time do they meet?
- 8.Two Trains A &B starts at the same time from Delhi and Patna respectively towards each other and met after 16hrs. If the distance between Delhi to Patna is 1872km and B trains runs 27km/hrFaster than Train A. Then find the speed of Train A?
- 9. A train running at the speed of 84km/hr passed man walking in opposite direction at the speed of 6km/hr in 4 sec. what is the length of train?
- 10. A train of 150m long is travelling with a speed of 36km/hr. If the man in cycling in the direction of train at 9km/hr. Then the time taken by train to pass the man is

रामको मासिक आम्दानी ५४००० छ

Data Interpretation

विविध ४५

बचत ६०

शिक्षा १२०

क)रामले खानामा भन्दा शिक्षामा कति प्रतिशत बढी खर्च गर्छ?

What percentage Ram spends more on education than on food?

b. 25%

c. $33\frac{1}{3}\%$

d.300%

ख) रामले वचत भन्दा खानामा कित रुपैया बढी खर्च गर्छ? How much more money does Ram spend on food than on savings?

a.3600

b.4500

c.45000

d.5000

ग) खानामा क्ल आयको कित प्रतिशत खर्च गर्छ? What percentage of total income is spent on food?

a.50% b.25% c.20% d.55%

घ)वार्षिक रामको वचत कति रुपैया छ ?

How much is Ram's annual savings?

a. 72000

b.108000

c.96000

d. 9000

ङ)घरभाडा र खानामा ४ महिनाको क्ल खर्च कित हुन्छ? What is the total cost of rent and food for 4

a. 81000

b.8100

c.88000

d.9000

च) क्न क्न शिर्षकमा बराबर खर्च गर्छ?

Which titles cost the same?

a. बचत र विविध

b. घरभाडा र विविध

c. खाना र शिक्षा

d. कुनै पनि होइन

Given below is the table which shows the total students in 4 different classes and percentage of students participating in Dance and Play.

Classes	Total students	%of Students parti	cipating
		Dance	Play
VI	500	15	8
VII	400	10	6
VIII	360	25	10
IX	250	10	12

1. What is the ratio of Students participating in Dance from class VII and IX together to the students participating in play from Class VI and Class VIII together?

a. 43:53

b.65:76

c.44:57

d.63:71

e.62:77

2. What is the average of students in play from all the classes

b. 34.5

c.27.5 d.35.5e.30.5

3. Students who are participating in dance from class VII are what percentage more or less than students who are participating in play from class IX.

a. $12\frac{2}{7}\%$ b. $14\frac{2}{7}\%$ c. $33\frac{1}{3}\%$ d. $16\frac{2}{3}\%$ e. $66\frac{2}{3}\%$

4. What is the sum of students who do not participate in dance and play from class VI and IX together?

a. 720b. 480c. 620 d. 580e. None

5. If 20% Students who participate in dance from class VI also participate in play then Find the students from class VI who participate only in Dance to Students participate only in Play.

a. 25:16

b.16:25

c.19:20

d.20:19

e.12:5

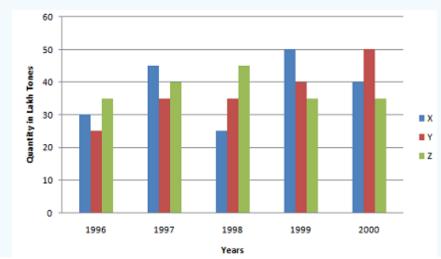
6.Students participating in dance from class VII is what percentage of Students participating in Play from class IX?

a. $133\frac{1}{2}\%$

b. $33\frac{1}{3}\%$ c. $120\frac{2}{7}\%$ d. $114\frac{2}{7}\%$ e. $116\frac{2}{3}\%$

Homework

1. Production of paper (in lakh tonnes) by three companies X, Y and Z over the years. Study the graph and answer the questions that follow.



- 1. What is the difference between the production of company Z in 1998 and company Y in 1996?
- A. 2,00,000 tons
- B. 20,00,000 tons C. 20,000 tons
- D. 2,00,00,000 tons
- 2. What is the ratio of the average production of company X in the period 1998-2000 to the average production of company Y in the same period?
 - A. 1:1
- B. 15:17
- C. 23:25

- D. 27:29
- 3. What is the percentage increase in the production of company Y from 1996 to 1999?
 - A. 30%
- B. 45%
- C. 50%
- D. 60%
- 4. 4. The average production for five years was maximum for which company?
 - A. X
- B. Y
- C. X and Y both
- D. X and z both

अनुपात समानुपात

- १. १ के.जी र २५० ग्रामको अनुपात कति हुन्छ ? What is the ratio of 1 kg to 250 gm?
- २. 4,8,X,12 अन्पातमा भए X को मान पत्ता लगाउन्होस् । Find the value of X in the ratio 4, 8, X, 12.
- ३. 4,X र 9 निरन्तर समान्पात भए X को मान पत्ता लगाउन्होस्।

Find the value of X if 4,X,9 are in Continuous proportion

४.if a:b =3:4 b:C=7:9 then find a:b:c

.if a:b =3:4 b:C=5: 7 then find a:c

- ४. if a:b=2:3 b:c=6:9 C:d=5:7 then find a:d and a:b:c:d
- ६. रु २५० लाई 2:3:5 को अनुपातमा बाड्न्होस Divide 250 in the ratio 2:3:5.
- ७ रु 72 लाई 4:5 को अनुपातमा बाडुन्होस्। Divide Rs. 72 in the ratio 4:5.
- ८. एउटा विद्यालयमा भएका २६० विधार्थीहरु मध्ये १८२ जना केटाहरु रहेछन् भने निम्न अनुपातहरु पत्ता लगाउनुहोस् । In a School of 260 students there are 182 boys then find the given ratio.
 - क केटाहरु र सम्पूर्ण विधार्थीहरु (Boys and total students)
 - ख केटीहरु र सम्पूर्ण विधार्थीहरु (Girls and Total Students)
 - ग केटाहरु र केटीहरु (Boys and Girls)
- ९. बाबुको र छोराको उमेरको अनुपात 5:2 छ। छोराको उमेर 14 वर्ष भए बाबुको उमेर कित होला? The ratio of father and son is 5:2. If son is 14 years old then find the age of Father.
- 90. एउटा विधालयमा खाजाको लागी पाउरोटी र विस्कुट 6:4 को अनुपातमा बाडियो , यदी 120 ओटा पाउरोटी लाग्यो भने जम्मा कतिबटा विस्कुट लागेको होला? Bread and biscuits were distributed in the ratio of 6: 4 for

lunch at a school. If 120 pieces of bread were needed, how many biscuits would be needed?

११. एउटा भोलामा ६०० रुपैया छ । जसमा रुपैया,मोहर र सुकीको अनुपात 3:4:12 छ भने उक्त भोलामा कित रुपैया कितिवटा मोहर र कितवटा सुकी रहेका होलान् । There is 600 rupees in a bag. The ratio of rupee, 50 paisa and 25 paisa is 3: 4: 12. Find the number of Rupees, 50 paisa and 25 paisa.

एउटा फोलामा २४ पैसा,१० पैसा र ४ पैसाको सिक्काको अनुपात 1:2:3.छ। यदि फोलामा जम्मा ३० रुपैया रहेको भए ४ पैसाका सिक्काको संख्या पत्ता लगाउनुहोस्। In a bag, there are coins of 25 p, 10 p and 5 p in the ratio of 1:2:3. If there is Rs. 30 in all, how many 5 p coins are there?

9२. A र B को वर्तमान आयुको अनुपात 2:1 छ । ५ वर्ष पछि A र B को आयुको अनुपात 3:2 हुन्छ भने तिनीहरूको हालको आयु पत्ता लगाउनुहोस्।

The ratio of present age of A and B is 2:1. After 5 years their ratio will be 3:2 then find the present age of A and B.

9३. A र B को वर्तमान आयुको अनुपात 9:10 छ। चार वर्ष पछि उनीहरूको आयुको अनुपात 11:12 भए A को हालको आयु पत्ता लगाउनुहोस् ।

The ratio of present age of A and B is 9:10. After 4 years their age ratio will be 11:12 then find the present age of A.

१४. १० वर्ष पहिला बाबु र छोराको उमेरको अनुपात 3:1 थियो। १० वर्ष पछि बावु र छोराको उमेरको अनुपात 5:3 भए हालको छोरा र बावुको उमेर पत्ता लगाउनुहोस्।10years ago the ratio of father and son was 3:1.After 10 years their age ratio will be 5:3. Then find their present age.

१५.४ वर्ष पहिला कमल र विमलको आयुको अनुपात 3:4 थियो । ६ वर्ष पछि उनीहरुको उमेरको अनुपात 14:17 हुनेछ , दुवैको हालको उमेर पत्ता लगाउन्होस्।

4years ago the ratio age of Kamal and Bimal was 3:4. After 6 years their age ratio will be 14:17 then find their present age.

१६.२ वर्ष पहिला बावु छोराको उमेरको ६ गुणा थियो । १८ वर्ष पछि बावुको उमेर छोराको २ गुणा हुनेछ भने हालको बावु र छोराको उमेर पत्ता लगाउनुहोस् । Two years ago, father was six times as his son's age. After 18 years, the age of the father will be twice that of the son and find the present age of father and son.

9७. A ले B को दोब्बर B ले C को दोब्बर खर्च गर्दा जम्मा ९८० खर्च भएछ भने प्रत्येकले कित कित रकम खर्च गरेछन् । ५.६० लिटर मिश्रणमा दुध र पानीको अनुपात 2:1 छ । दुध र पानीको अनुपात 1:2 बनाउन कित लिटर पानी थप्नु पर्ला ?

Ratio & Proportion

- 1. एउटा कलेजमा भएका केटा र केटीको अनुपात 7:8 छ। यदि केटा र केटीको अनुपात क्रमश: 20% and 10% ले बृद्धि भएमा नयाँ अनुपात कित हुन्छ? The ratio of the number of boys and girls in a college is 7:8. If the percentage increase in the number of boys and girls be 20% and 10% respectively, what will be the new ratio?
 - A. 8:9
- B. 17:18C.21:22
- D.Cannot be determined
- 2. रिव र सुमितको तलबको अनुपात 2:3 छ। यदि उनीहरुको दुबैको तलब रु ४००० ले वृद्धि हुदा नयाँ अनुपात 40:57 हुन्छ भने सुमितको तलब कित होला?

Salaries of Ravi and Sumit are in the ratio 2 : 3. If the salary of each is increased by Rs. 4000, the new ratio becomes 40 : 57. What is Sumit's salary?

A. Rs. 17,000 B.Rs. 20,000 C.Rs. 25,500 D.Rs. 38,000

3. If 0.75 : x :: 5 : 8, then x is equal to:

A.1.12 B.1.2

C.1.25 D.1.30

4. तीनओटा संख्याको योगफल ९८ छ । यदि पहिलो र दोस्रो संख्याको अनुपात 2:3 र दोस्रो र तेस्रो संख्याको अनुपात 5:8 भए दोस्रो संख्या कित होला?

The sum of three numbers is 98. If the ratio of the first to second is 2:3 and that of the second to the third is 5:8, then the second number is:

- A. 20
- B. 30
- . 48
- D. 58

5. 782 लाई तीन	भागमा बाढ्नु	होस जुन	1: 2:3 2: 3:4 सम	गुपातमा	रहेका ह	र् रन भने प	हिलो भ	ाग पत्ता लग	ाउनुहोस्		
If Rs. 782 l										st par	t is:
A. Rs. 182		B.	Rs. 19	0		C.	Rs. 1	96	D.	R	s. 204
6. A र B दुवैसंग				J		,					
A and B toget				of A's	amoı	unt is e	equal	to $\frac{2}{5}$ of B'	's amou	ınt, ho)W
much amo						_	_				
A. Rs. 460								50			s. 664
7. दुई नम्बरहरु तेस्							_		-		-
Two numbers	_		ly 20% a	and 50)% m	ore th	an a t	hird nun	nber. T	ne rat	io of
the two nu											
A. 2:5											
8. A, B, C, D कित रुपैया पाउ		: 4 : 3के	ो अनुपातम	ा केहि र	क्रम बार	इनुछ ।र्या	दे C ले	D भन्दा १०	००० बढी	पाउछ भ	ाने B ले
A sum of mon	ey is to b	e distr	ibuted a	among	g A, B,	C, D ir	ո the յ	proporti	on of 5	: 2 : 4	: 3. If
C gets Rs. 1	1000 mor	e than	D, wha	t is B's	s shar	·e?					
A. Rs. 500		B.	Rs. 15	00		C.	Rs. 2	000 E). No	one of	these
9. स्कुलमा Math	nematics,	Physic	s and B	iology	को लाग	ी seatह	हरको अ	नुपात 5 : 7	7:8 रहेक	गेछ ।	यदि सो
seatहरु क्रमश	т: 40% , 50	% ₹ 75	5% ले वृहि	द्व गर्ने प्र	स्ताव छ	भने वृद्धि	भएका	seatको अ	नुपात कति	ा होला?	
Seats for Matl	hematics,	Physic	cs and E	Biology	in a	school	l are i	n the rat	io 5 : 7	: 8. Th	nere is
a proposal	to increa	se the	se seats	by 40	%, 50	0% and	d 75%	6 respect	tively. <mark>V</mark>	What v	will be
the ratio o	f increase	ed seat	s?								
A. 2:3:4		B.	6:7:8	8		C.	6:8	: 9	D.	N	one of
these											
10.६० लिटर मिश्र	णमा दुध र प	ानीको अन्	नुपात 2:1	छ । दुध	र पानी	को अनुपा	त 1:2	बनाउन की	ते लिटर प	ानी थप्नु	पर्ला ?
In a mixture 6	60 litres, t	he rati	io of mi	lk and	wate	r 2 : 1.	If thi	s ratio is	to be 1	l : 2, t	hen
the quanit	y of wate	r to be	further	adde	d is:						
A. 20 litre	S	B.	30 litr	es		C.	40 lit	tres	D.	6	0 litres
11. यदि कुनै संख्या	को 40% अ	ार्को संख्या	को दुई तिह	डाइसँग ब	ाराबर भ	ाए पहिलो	र दोस्रो	संख्याको अ	नुपात कति	ा हुन्छ?	
If 40% of a n	umber is	equal t	to two-t	hird o	f ano	ther n	umbe	r, what i	s the ra	itio of	first
number to	the seco	nd nun	nber?								
A. 2:5	B. 3	: 7	(C.	5:3		D.	7:3			
12. तीनओटा संख्य	T 5, 8, 15	समानुपात	मा भए चौ	थो संख्या	पत्ता ल	गाउनुहोर	म् ।				
The fourth pr	oportiona	al to 5,	8, 15 is	:		_					
-	В.				19		D.	20			
13. दुई संख्याको अ पत्ता लगाउनुहो	•	छ । यदि	दुवै संख्याब	गाट ९ घ	टाएमा र	नयाँ संख्य	ाको अनु	पात 12:2	3 हुन्छ भ	ाने सानो	संख्या
Two number	`	ratio	3 : 5. If 9	9 is su	btrac	ted fro	m ea	ch. the n	ew nun	nbers	are in
the ratio 1								,			
A. 27	B.		(D.	55			
14.६३ पर्ने जिरा म									मल्य रु ७३	≀ हन्छ ॽ	
At what ratio				_	_				-	-	
so, the mixed	_					. o por	0 50				
-,u			- P -	.0.							

15. रु ३६ प्रति लिटर दुधमा कुन अनुपातमा पानी मिसाएमा मिश्रणको मुल्य प्रति लिटर रु २८ हुन्छ । कुन अनुपातमा दुधमा पानी मिसाउदा ऋ.य मुल्यमा बेच्दा २५ % नाफा हुन्छ? एउटा ड्रममा ६४ लिटर दुध रहेको छ । सो ड्रमबाट १६ लिटर दुध

निकालेर १६ लिटर पानी थपिन्छ र यही अनुपात पुन दुइ चोटी दोह्याएमा सो ड्रममा कृति लिटर दुध कृति लिटर पानीको मिश्रण होला?

भिन्नलाई प्रा	तेशतमा बदल्नुहोस्			
1	1	<u>1</u>		1
20	16	8		5
प्रतिशतलाई	भिन्नमा बदल्नुहोस्	\		
50%		25%		60%
दशमलवलाई	भिन्नमा बदल्नुहोर	<u>म्</u>		
a)0.5	b)0.25	c)0.125	d)0.7	
सानो देखि ट्र	लो भिन्न मिलाएर	लेख्नुहोस्		
1	11	2		3
$\frac{\overline{2}}{2}$	12	- 7		$\frac{\overline{4}}{4}$

प्रतिशत percentage

- 1. कुनै कक्षामा २४० जना केटा र ४०% केटि भए जम्मा कित विधार्थी होलान?(If there are 240 boys and 40% girls in a class, how many students are there?)
- 2. वर्गको भुजा २० % ले बृद्धि गर्दा क्षेत्रफलमा कित प्रतिशतले बृद्धि हुन्छ । What is the percentage increase in area when the square length increases by 20%?
- 3.बर्गको भुजा १० % ले कम गर्दा बर्गको क्षेत्रफलमा कित प्रतिशतले किम आउला? What is the percentage reduction in the area of the square when the side of the square is reduced by 10%?
- 4.आयतको लम्बाई र चौडाई क्रमश १० % र २० % ले वृद्धि गर्दा आयातको क्षेत्रफलमा कित प्रतिशतले वृद्धि हुन्छ। What is the percentage increase in the area of rectangle when the length and width of the rectangle are increased by 10% and 20% respectively.
- 5. तरकारीको भाउ २५ %ले बृद्धि हुदा शुरुको जित्तकै खर्च कायम गर्न तरकारीको खपतमा कित % कम गर्नुपर्ला ? When the price of vegetables goes up by 25%, what percentage of vegetable consumption should be reduced to maintain the same cost as in the beginning?6.तरकारीको भाउ २० % ले घट्दा शुरुको जित्तकै खर्च कायम गर्न तरकारीको खपतमा कित % वृद्धि गर्नुपर्ला ?When the price of vegetables decreases by 20%, what is the percentage increase in the consumption of vegetables to maintain the same cost as in the beginning?
- 7. ५०० अंकित मुल्य भएको शर्टमा २० % छुट पछि १५ % भ्याट थप्दा चुक्ता मुल्य कित हुन्छ ? What is the paid price of 15% VAT after 20% discount on a shirt with a Marked price of Rs. 500?
- 8. कुनै गाउको जनसंख्या २००० छ। र बार्षीक १० % का दरले बृद्धि भएमा ३ बर्ष पछिको जनसंख्या कित होला? A village has a population of 2,000. And if it grows at an annual rate of 10%, what will be the population after 3 years?
- 9. ६०० को दुई तिहाईको ५०% को ०.२ को एक चौथाई कति हुन्छ? What is 50% of two thirds of 600, one quarter of 0.2?
- 10. ८०को तीन चौथाई र ८० को ३०%को फरक कति हुन्छ ? What is the difference between three guarters of 80 and 30% of 80?

Home Work

- 1.Aको तलब B को तलब भन्दा २० % बढी छ। B को तलब A को तलब भन्दा कति % कम हुन्छ?
- 2.Aको तलब B को भन्दा २५ % कम छ । B को तलब A कोभन्दा कति प्रतिशत बढी हुन्छ?
- 3. रु ६०० मा २० % थप्दा कति हुन्छ ?

4.रु २०० मा कति प्रतिशत थप गर्दा रु २५० हुन्छ ? 5.कतिमा २० %थप गर्दा ४८० हुन्छ ?

Profit and Loss

यदि CP दिएर SP निकाल्न भनेमा यदि SP दिएर CP निकाल्न भनेमा बास्तविक नाफा / नोक्सान प्रतिशत

- १. ९००मा किनेर १२ % नाफा गरि बेच्दा वि.मु कित होला? What is the selling price when you buy at 900 and sell at 12% profit?
- २. ६०० मा किनेर ५०%नाफा गरि बेच्दा वि.मु कित होला? What is the S.P. when you buy at 600 and sell at 50% profit?
- ३. ८०० मा किनेर १००० मा बेच्दा कित % नाफा हुन्छ? What is the percentage of profit when you buy at 800 and sells at 1000?
- ४. ५०० मा किनेर ४२५ मा बेच्दा कति % नोक्सान हुन्छ। What is the loss if you buy at 500 and sell at 425?
- ५. कुनै बस्तुको वि.मु ४५०० र नोक्सान २५% भए क्र.मु कति होला? If the value of an item is 4500 and the loss is 25%, Find the C.P?
- ६. ४००० मा किनेको सामान राम ले श्यामलाई २०% नाफामा बेच्छ । श्यामले हरिलाई ३०% नोक्सानमा बेच्छ । हरिले कृषलाई १० % नाफामा बेच्छ भने कृषले सो सामान कतिमा किनेको होला? Ram sells the goods bought for Rs 4,000 to Shyam at 20% profit. Shyam sells Hari at a loss of 30%. If Hari sells Krish at 10% profit, at what rate did Krish buy the goods?
- ७. ५००० मा किनेको सामान रामले श्यामलाई २०% नाफामा बेच्छ । श्यामले हरिलाई ३०% नाफामा बेच्छ । हरिले रमालाई ४०% नोक्सानमा बेच्छ भने रमाले सो सामान कतिमा किनेकी होलीन् । Ram sells the goods bought for Rs 5,000 to Shyam at a profit of 20%. Shyam sells Hari at 30% profit. Hari sells it to Rama at a loss of 40%. How much did Rama buy the goods?
- ८. यदि A ले कुनै बस्तु २०% नाफामा B लाई बेच्छ I B ले C लाई १०% नाफामा बेच्छ I C ले D लाई १०% नाफामै बेच्छ I यदि C ले D लाई ७२६ मा बेचेको भए A ले सो सामान कित रुपैयामा खरिद गरेको रहेछ I If A sells an item to B at 20% profit. B sells C at 10% profit. And C sells D at 10% profit. If C had sold to D at 726, how much would A have bought the goods for?
- ९. कुनै बस्तु A ले Bलाई १० % नाफामा B ले C लाई ५% घाटामा ,C ले D लाई २०% नाफामा बेच्दा Dले C लाई १२५४० दिएमा A ले कित रुपैयामा खरिद गरेको होला? A sells B at 10% profit, B sells C at 5% loss, C sells D at 20% profit, D pays to C 12540, At what price does A buy the goods?
- १०. एक पसलेले २५० मा बेच्दा २५% नाफा कमाउछ भने कित रु मा बेच्दा २०% नाफा कमाउला? A shopkeeper earns 25% profit if he sells at 250, at what price he has to sell to earn 20% profit.
- ११. कुनै बस्तु ६०० मा बेच्दा २०% नाफा हुन्छ तर सो वस्तु २०% घाटामा बेच्दा वि.मु कित हुन्छ। An item is sold at 600 to get 20% profit, if the item is sold at 20% loss then find the selling price.
- १२. १० रु मा १२ कागति किनेर ६ रुपैयामा ५ कागति बेच्दा नाफा वा नोक्सान %कति होला? What is the profit or loss %of buying 12 lemons for Rs 10 and selling 5 lemons for Rs 6?
- १३. एक व्याक्तिले १२ रुपैयामा १५ पेन्सिल खरिद गरी १४ रुपैयामा २० पेन्सिल बेच्छ भने नोक्सान % निकाल्नुहोस् । If a person buys 15 pencils for 12 rupees and sells 20 pencils for 14

rupees, calculate the loss percentage.

14. कुनै बस्तु १२० मा किनेर रु १५० मा बेच्दा कित प्रतिशत फाइदा हुन्छ?

If an item was purchased for RS 120 and was sold for Rs. 150. Find the profit percentage?

15. रामले रु १८५० मा औजार बेच्दा २५ % नाफा कमायो भने रामले सो औजार कित रुपैयामा किनेको रहेछ ?

Ram sold his work tools for Rs. 1850 and earned a profit of 25%. At what price did Ram buy his tools?

Homework

- 1. एउटा व्याक्तिले एउटा घिंड रु २४०० मा बेच्दा २५ %नोक्सान भयो भने कित रुपैयामा सो घिंड बेचेको भए २५ % नाफा कमाउने थियो ?
- 2. रामले क्नै सामान १४४ मा बेच्दा १० % नाफा हुन्छ भने सो सामान १८२ बेचेको भए कृति % नाफा हुने थियो?
- 3.एउटा व्यापारिले एउटा सर्ट 10 % नोक्सानमा बेच्यो । यदि उसले सो सर्ट रु 140 बढिमा बेचेको भए उसलाई 4% नाफा हुने थियो भने सो सर्टको ऋय मृल्य पत्ता लगाउनुहोस्।
- 4.कुनै ठाउँमा भएका bacteria प्रत्येक मिनेटमा दोब्बर हुन्छन् 26औं मिनेटबाट 28 औं मिनेट हुँदा bacteria कित प्रतिशतले वृद्धि हुन्छन् निकाल्नुहोस
- 5.परीक्षामा उत्तीर्ण हुन 975 अङ्क आवश्यक हुन्छ ,राजेशले 870 अङ्क ल्याएर 7 प्रतिशतले फेल भयो भने पूणांङ्क कति हुन्छ?
- 6.एउटा मानिसले रु ८००० मा केहि घडिहरु किन्यो र प्रत्येकमा रु २० नाफा हुने गरि अबेच्दा जम्मा रकम रु ९००० भयो भने कति ओटा घडि किन्यो ?
- 7.एउटा व्यापारिले २वर्ष चलाइसकेको मोटरसाइकल खरिद गरी बेच्दा १७ % नाफा लिदा जम्मा रु ९३६०० पाएछ भने उसले मोटरसाइकल कतिमा किनेको होला?

Average

- १. पहिलो ५० Odd numbers को Average निकाल्न्होस् ।
- २. पहिलो ७५ Odd Numbers को Average निकाल्न्होस्।
- ३. पहिलो ५० Even Numbers को Average निकाल्न्होस्।
- ४. पहिलो १०० Even numbers को Average निकाल्नुहोस्।
- ४.The average of first 60 odd natural numbers
- €. Find the average of first 99 even numbers.
- ૭.Find the average of first 4 natural numbers.
- ς . The average of first 100 natural numbers.
- ९. पहिलो लगातार आउने ५ संख्याको औसत ६३ हो भने पहिलो र अन्तिम संख्याको गुणा कित होला? If the average of the first 5 consecutive numbers is 63, what is the product of the first and last number?
- १०. पाँच लगातार आउने विजोर संख्याको औसत ११३ हो भने उनीहरू मध्येको दोस्रो सानो संख्या कुन हो। The average of the five consecutive odd numbers is 113, which is the second smallest of them.
- 99. लगातार आउने ६जोर संख्याको औसत २०७ छ भने सबैभन्दा सानो र सबै भन्दा ठूलो संख्याको योगफल निकाल।The average of the six consecutive even numbers is 207 then find the sum of the smallest and biggest numbers.
- १२. लगातार आउने ७ विजोर संख्याको औसत २९१७ हो भने पहिलो ४ संख्याको औसत कित होला? If the average of 7 consecutive odd numbers is 2117, what is the average of the first 4 numbers?
- १३.हाल बाजे र बज्योको औसत उमेर ५० वर्ष छ । बाबु आमाको औसत उमेर ३० वर्ष छ र ४ छोराछोरीको औसत उमेर ६ वर्ष छ भने हाल सबैको औसत उमेर कित होला? The present average age of Grand father and Grand mother is 50 years. The present average age of Father and Mother is 30 years and the average age of 4 children is 6 years then find the present average age of all?
- ९४.राम र श्यामको औसत उमेर ८० वर्ष छ । सिता र गीताको औसत उमेर ४५ वर्ष छ । ३ बच्चाको औसत उमेर ९० वर्ष भए सबैको औसत उमेर कित होला?

The average age of Ram and Shyam is 80 years. The average age of Sita and Gita is 45 years

and the average of three children is 10 years then find the average age of all family.

१५.२० ओटा संख्याको औसत ३० छ । एउटा संख्या 🛱 लेब्नुपर्नेमा भुलवश ४३ लेखेर हिसाब गरिएको रहेछ भने शुद्ध औसत कति होला?

The average of 20 numbers is 30. What is the correct average if a number 83 is calculated by writing 43 by mistake?

9६. १० विधार्थीको औसत उमेर १५वर्ष छ । एक शिक्षकको उमेर थप्नेहो भने सबैको औसत उमेर १८ हुन्छ भने शिक्षक कति वर्षका रहेछन्।

The average age of 10 students is 15 years. If one teacher joins then the average age becomes 18 years. Find the age of Teacher.

9७. ५० जना विधार्थीसँग औसत ५० रुपैया छ । यदि १ जना नयाँ विधार्थी थिपएमा उनीहरुसँग भएको रुपैयाको औसत रु ५१ हुन्छ भने नयाँ विधार्थीले कित रुपैया ल्याएको होला?

Average money of 50 students is Rs 50. If 1 new student joins then the new average becomes 51. Find the amount which brings by new students.

१८. २० जना विधार्थीसँग औसत ३० रुपैया छ । यदि १ जना नयाँ विधार्थी थिपएमा उनीहरुसँग भएको रुपैयाको औसत रु २९ हुन्छ भने नयाँ विधार्थीले कित रुपैया ल्याएको होला?

Average money of 20 students is 30. If a new students joins the new average becomes 29. Then find the amount which brings by new students.

19.तीन केटाहरुको औसत उमेर १५ वर्ष छ र उनीहरुको उमेरको अनुपात 3:5:7 रहेको छ । भने उनीहरु मध्येको सबैभन्दा कान्छो केटाको उमेर पत्ता लगाउन्होस्।

The average age of three boys is 15 years and their ages are in proportion 3:5:7. What is the age in years of the youngest boy?

A. 15 B. 9 C. 18 D. 21

20.५ वर्ष पहिला विवाह गर्दा श्रीमान र श्रीमितको उमेरको औसत २३ वर्ष थियो । अहिले श्रीमान, श्रीमित र बच्चाको औसत उमेर २० वर्ष छ । भने हालको बच्चाको उमेर पत्ता लगाउनुहोस् ।

The average age of a husband and a wife is 23 years when they were married five years ago but now the average age of the husband, wife and child is 20 years. What is the present age of the child?

A. 1 year B. 2 years C. 3 years D. 4 years

Homework

1. किकेट खेलको पहिलो १० ओभरमा जम्मा रन रेट ३.२ थियो। २८२ रनको लक्ष्य पुग्न बाँकि ४० ओभरमा कित रन रेट हुनुपर्छ ? In the first 10 over's of a cricket game, the run rate was only 3.2. What should be the run rate in the remaining 40 over's to reach the target of 282 runs?

A) 6.25

B) 6.5

C) 6.75

D) 7

2. एउटा परिवारमा हजुरवुवा, हजुरआमा, बुवा,आमा र तीन नातिनातिना रहेका छन्। हजुरवुवा र हजुरआमाको औसत उमेर ६७ वर्ष रहेको छ। बुवाआमाको औसत उमेर ३५ वर्ष रहेको छ र नातीनातीनाको औसत उमेर ६वर्ष रहेको छ। भने परिवारको औसत उमेर पत्ता लगाउनुहोसु।

A family consists of two grandparents, two parents and three grand children. The average age of the grandparents is 67 years, that of the parents is 35 years and that of the grand children is 6 years. What is the average age of the family?

A) $28\frac{4}{7}$ years B) $31\frac{5}{7}$

years C) $32\frac{1}{7}$

years

D) None of the above

3. तीन वर्ष पिहला श्रीमान ,श्रीमती र बच्चाको औसत उमेर २७ वर्ष थियो । श्रीमती र बच्चाको ५ वर्ष पिहलाको औसत उमेर २० वर्ष थियो भने अहिले श्रीमान कित उमेरका होलान् ?

The average age of husband, wife and their child 3 years ago was 27 years and that of wife and the child 5 years ago was 20 years the present age of the husband is?

A) 35 years

B) 40 years

C) 50 years

D) None of these

4.~A~,B~,C~ को औसत तौल ४५ के.जी छ । यदि A~र B~ को औसत तौल ४० के.जी र B~र C~ को औसत तौल ४३ के.जी

भए B को तौल पत्ता लगाउनुहोस्।

The average weight of A,B and C is 45 kg. If the average weight of A and B be 40kg and that of B and C be 43kg. Then the weight of B is.

- A)17kg B) 20 kg C) 26kg D) 31kg
- 5.एउटा पुस्तकालयमा आइतबार औसतमा ५१० जना आगन्तुक आउछन् र बाँकि दिनमा औसतमा २४० आगन्तुक आउछन्। यदि आइतबार बाट महिना शुरु छ र ३० दिनको महिना भए सो महिनामा प्रति दिन आउने आगन्तुको औसत संख्या पत्ता लगाउन्होस्।

A library has an average of 510 visitors on Sunday and 240 on others days. The average number of visitors per day in a months of 30 days beginning with a Sunday is.

- A) 250 B) 276
- C) 280
- D) 285

Time and Work

- १. रामले कुनै काम १० दिनमा पुरा गर्छ । श्याम ले सो काम १५ दिनमा पुरा गर्छ भने दुवै मिली सो काम कित दिनमा गर्न सक्लान् ।(Ram can completes a work in 10 days. Shyam can complete the same work in 15 days, in how many days both of them can complete the work?)
- 2. रामले कुनै काम ९ दिनमा पुरा गर्छ र हरिले सो काम १० दिनमा पुरा गर्छ। श्यामले सो काम गर्न १५ दिन लगाउछँ भने तीनै जना मिलि सो काम कित दिनमा सकाउलान्। Ram completes a work in 9 days and Hari completes the same work in 10 days. If Shyam takes 15 days to do the same work, in how many days will they complete the work together?
- 3. A र B मिलि कुनै काम १५ दिनमा पुरा गर्छन। B र C मिली सो काम १२ दिनमा पुरा गर्छन। C र A मिली सो काम २० दिनमा पुरा गर्छन भने A ,B र C मिलि सो काम कित दिनमा सकाउलान्। A and B can complete the work in 15 days while B and C can complete the the same work in 12days and C and A can complete the work in 20 days. In how many days A,B,C take to complete the work? A एक्लैले सो काम कित दिनमा पुरा गर्न सक्छ?

B एक्लैले सो काम कित दिनमा पुरा गर्न सक्छ?

C एक्लैले सो काम कित दिनमा पुरा गर्न सक्छ?

- 4.A ले कुनै काम १२ दिनमा पुरा गर्छ। B ले सो काम गर्न १५ दिन लगाउछ। A ले काम शुरु गर्छ र ३ दिन पछिबाट A र B मिलि काम गर्न थाल्छन भने बाँकी काम कित दिनमा सिकएला। A can complete the work in 12 days and B can complete the work in 15 days. A starts the work and after 3 days, A and B together do the work in How many days the rest of the work will be completed by A and B together?
- 5. A,B र C ले क्रमशः ९, १० र १५ दिनमा कुनै काम गर्न सक्छन्। B र C ले काम शुरु गरे र २ दिन पछि छोडे भने बाँकी काम गर्न A लाई कित समय लाग्ला? A ,B and C can do a work in 9,10 and 15 days respectively. If B and C start work and leave after 2 days, how long will it take A to do the rest of the work?
- 6. A रB ले कुनै काम क्रमशः २० र ३० दिनमा गर्न सक्छन्। दुबैले काम शुरु गरे तर B ले काम सिकनु ५ दिन अगाडि छोड्यो भने सो काम कित दिनमा सिकएला? A and B can do any work in 20 and 30 days respectively. Both of them started work but if B left 5 days before the end of the work, in how many days will the work be completed?
- 7. A,B र C ले कुनै काम क्रमशः २४, ३२ र ६४ दिनमा पुरा गर्छन्। तीनै जनाले काम शुरु गरे तर A ले ६ दिन काम गरेपछि छोड्यो र B ले काम सिकनु ६ दिन अघि छोड्यो भने सो काम कित दिनमा सिकएला? A, B, C complete a task in 24, 32 and 64 days respectively. All three of them started working but A left after working for 6 days and B left 6 days before the end of the work. How many days will the work be completed?
- 8. A ,B,C तीनओटा पाइप एउटा ट्याड्डीमा जडान गरिएको छ । A, B पाइपलाईलाई सो ट्याड्डी भर्न क्रमश २०र ३० मिनेट लाग्छ तर C पाइपलाई सो भरिएको ट्याड्डी खालि गर्न ४० मिनेट लाग्छ? यदि तीनओटा पाइप खाली ट्याड्डीमा सँगै खोलेमा

टयाड्डी कति समयमा भरिएला?

Three pipes A,B and C are connected in a tank. A and B pipes can fill the tank in 20 minutes and 30 minutes respectively but C pipe can empty the full tank in 40 minutes .if three pipes are opened together in the empty tank. At what time the tank will be filled?

- 9. P, Q,R धारालाई सो ट्याड्डी भर्न क्रमश १०,२०र ३० घण्टा लाग्छ ?P धारा सबै समय खुला र Q र R धारा बैकल्पीक धण्टामा खोलेमा ट्याड्डी कित समयमा भिरएला?Three taps P,Q and R can fill a tank in 10,20 and 30hours respectively. If P is open all the time and Q and R are open for one hour each alternately, then the tank will be full in:
- a)20 days b)15days c)25days d)35days
- **10.**. A र B मिली कुनै काम १८ दिनमा B र C ले सो काम २४ दिनमा र C र A मिली सो काम ३६ दिनमा पुरा गर्न सक्छन भने A B र C ले सो काम कित दिनमा पुरा गर्लान? A and B can do a piece of work in 18days, B and C in 24 days, C and A in 36 days. In how many days A,B,C can do the work if they work together?
- a)8 days b)16days c)9days d)18days
- 11. Aले B को दुइ गुणा काम गर्छ IAले कुनै काम ५ दिनमा गर्छ भने दुबै मिलि सो काम कित दिनमा गर्न सक्लान्? A is twice as efficient as B. If A can complete the work in 5 days. In how many days both A and B together can complete the work?
- 12. A ले B को दुई गुणा काम गर्न सक्छ। यदि A र B मिली कुनै काम ३० दिनमा गर्न सक्छन् भने A एक्लैले सो काम कित समयमा पुरा गर्न सक्छ ? A is twice as efficient as B and both of them together can complete the work in 30 days. In how many days can A alone complete it?
- 13. A B भन्दा ६०% बिंढ क्षमतावान छ।यदि A ले सो काम गर्न १५ दिन लगाउछ भने A र B दुवैमिली सो काम कित समयमा सक्लान्?

A is 60% more efficient than B. In how many days will A and B working together complete a piece of work which A alone takes 15 days to finish?

14. A ले कुनैं काम १६ दिनमा पुरा गर्छ। A को तुलनामा B ले ६० % ज्यादा काम गर्छ भने सो काम B ले कित दिनमा गर्न सक्लान? A can do a piece of Work in 16 days. B is 60% more efficient than A. In how many days B alone can complete the work?

a)20 days b)30days c)40days d)10days

15.१२०० सिपाहीका लागी ६० दिनको खाना छ। १५ दिन पछि २०० सिपाहीले छोडेर गएमा बाँकी खाना बाँकी सिपाहीका लागी कित दिनलाई पुग्ला?

There is provision of food in fort for 1200 soldiers for 60 days. After 15 days, 200 soldiers leave the fort. Remaining food will last for how many days?

16. १२०० सिपाहीका लागी ६० दिनको खाना छ । १४ दिन पछि ३०० सिपाही थिपएमा बाँकी खाना सिपाहीका लागी कित दिनलाई पुग्ला?

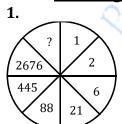
There is provision of food in fort for 1200 soldiers for 60 days. After 15 days, 300 soldiers joins the camp. Remaining food will last for how many days?

- 17. १२० विधार्थीको लागी ६० दिनको खाना छ । २० दिनपछि केहि विधार्थी थिपए र वाँकी खाना १० दिन अगावै सिकयो भने थिपएका विधार्थीको संख्या निकाल्नुहोस् ।There is food for 120 students for 60 days. After 20 days some new students joins and the remaining food finished 10 days earlier then find the number of new Students .
- 18. A ,B and C can do a work in 11, 20 and 55 days respectively . How soon the work be completed if A is assisted by B and C on alternate days. A B र C ले कुनै काम क्रमश : ११,२० र ५५ दिनमा पुरा गर्न सक्छन् । यदि A लाई B र C ले वैकल्पिक दिनमा सहयोग गरेमा काम कित समयमा सिकएला?
- 19. A, B and C can do a work in 20,30 and 60 days respectively. In how many days A can do the complete work if he is assisted by B and C on every 3 days.

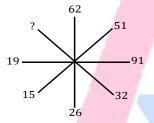
A B र C ले कुनै काम ऋमश : २०,३० र ६० दिनमा पुरा गर्न सक्छन् । यदि A लाई B र C ले प्रत्येक तेस्रो दिन सहयोग गरेमा काम कित समयमा सिकएला?

- 20. 12 men or 18 women can do a job in 14 days. The number of days in which 8 men and 16 women work together can do it? १२ जना पुरुष वा १८ जना महिलाले कुनै काम १४ दिनमा गर्न सक्छन्। यदि दजना पुरुष र १६ जना महिलाले सँगै काम गरेमा सो काम कित समयमा सिकएला?
- 21. If one man or two women or 3 boys can do a job in 44 days. Then the same job can be done by 1 man 1woman and 1 boy indays.एक जना पुरुष वा २जना महिला वा ३जना केटाले कुनै काम ४४ दिनमा पुरा गर्न सक्छन् भने १जना पुरुष,१जना महिला र १जना केटा मिली सो काम कित समयमा पुरा गर्न सक्लान् ?
- 22. 10 men working 6 hrs a day can complete a work in 18 days. How many hours a day must 15 men work to complete the same work in 12 days. १०जना मानिसले ६ घण्टाको दरले कुनै काम १८ दिनमा पुरा गर्न सक्छन् भने १५ जना मानिसले कित घण्टाको दरले काम गर्दा सो काम १२ दिनमा पुरा गर्न सक्छन् ।
- 23. Aman engaged 10 labourers to make 320 toys in 5 days. After 3 days he found that only 120 toys were made. How many additional labourers should he engage to finish the work on time? एक जना व्यापारिले १० जना कामदारलाई ५दिनमा ३२० खेलौना तयार गर्न लगायो तर उनीहरूले ३दिनमा जम्मा १२० खेलौना तयार गरे भने बाँकी खेलौना समयमै बनाउन किंत कामदार थप्न पर्ला ?

Inserting the Missing Character.



(a) 18739 (b) 18732 (c) 19700 (d) 20205 2.



(a) 20 (b) 23 (c) 60 (d) 56

23	6/5
2 25	121
7 ?	256 9
6	7

(a) 169 (b) 196 (c) 144 (d) 225

4.		
1	4	?
4	2	5
2	2	3
49	64	169

a)3 b)4 c)5 d)6

5	

167	854	313
5	12	?
142	710	213`

a)6 b)8 c)100 d)10

6.

U.		10	
	6	8	18
	7	9	3
	5	4	6
	228	309	?

a)351 b)54 c)384 d)174

7.

•		
1	7	9
2	14	?
3	105	117

a)9 b)10 c)12 d)13

8.

٠.			
	2	5	10
	17	26	?
	50	65	82
	30	03	02

a)38 b)37 c)39 d)40

9.

6	9	7
8	8	5
3	5	?
51	77	38

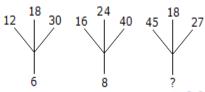
a)5 b)2 c)4 d)3

1	\sim	
- 1	()	

52	31	66	42
79	?	17	74
48	69	34	58
21	73	83	26

a)25 b)26 c)27 d)28





a)12 b)18 c)9 d)6

12.







a)25 b)37 c)41 d)47

13.







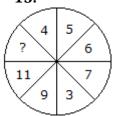
a)115 b)130 c)135 d)140

14.



a)41 b)64 c)35 d)61

15.



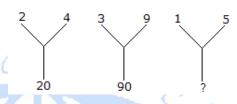
a)13 b)14 c)12 d)15

16.



a)4 b)32 c)8 d)16

17.



a)20 b)26 c)25 d)75

18.

4 4 7	7
-------	---

3 6 2 4

2 6 2 ?

a)2 b)4 c)8 d)6

19.

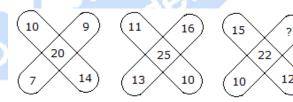






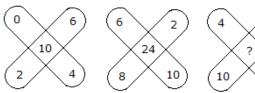
a)22 b)14 c)32 d)320

20.



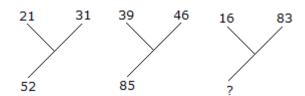
a)7 b)6 c)8 d)9

21.



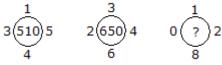
a)36 b)48 c)38 d)30

22.



a)92 b)72 c)62 d)99

23. Which one will replace the question mark?



A.660 B.670 c.610 d.690

Odd man out

1). 3, 5, 11, 14, 17, 21

B.17 C.14 D.3 A.21

2).8, 27, 64, 100, 125, 216, 343

A.27 B.100 C.125 D.343

24.

E	J	0
Α	С	В
D	G	?

A. M В. N C. 0 d. T

25.

Α	В	В
С	E	0
D	F	?

c.T d.Y

3).10, 25, 45, 54, 60, 75, 80

A.10 B.45 C.54 D.75

4). 2, 5, 10, 17, 26, 37, 50, 64

A.50 B.26 C.37 D.64

- 5). Choose the word which is different from the rest.
 - A. Chicken A. Kiwi

II.

III.

- B. Snake B. Eagle
- C. Swan C. Emu
- D. Crocodile E. Frog
- D. Ostrich

- A. Sparrow B. Swan
- C. Parrot

- IV. A. Physics
- B. Chemistry
- C. Geography D. Botany
- D. Crow

(2)

(2)

(3)

E. Zoology

- V. A. Trunk
- B. Tree
- C. Fruit D. Leaf
- E. Flower

- VI. A. Mercury
- B. Mars
- C. Earth D. Jupiter
- E. Neptune

(5)

(5)

- VII. A. Eyes
- B. Ears
- C. Hands D. Legs

3.

(1)

E. Nose

(4)

Extra Questions

Odd man out

- a. Gold, Silver, Bronze, Iron
- b. Yen, Dollar, Taka, Kg
- c. January, July, December, April
- d. Parrot, Bat, sparrow, crow
- e. curd, butter, cheese, oil
- f.cheetah,Lion,Bear,Tiger
- g. Football, volleyball, cricket, chess, Hockey

h.1,3,5,7,9,11,17

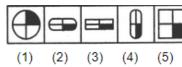
i.144,168,196,256

j.15,21,24,28,30

Figure Classification

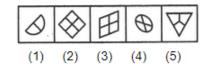
Choose the figure which is different from the rest

4.

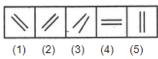


(3)

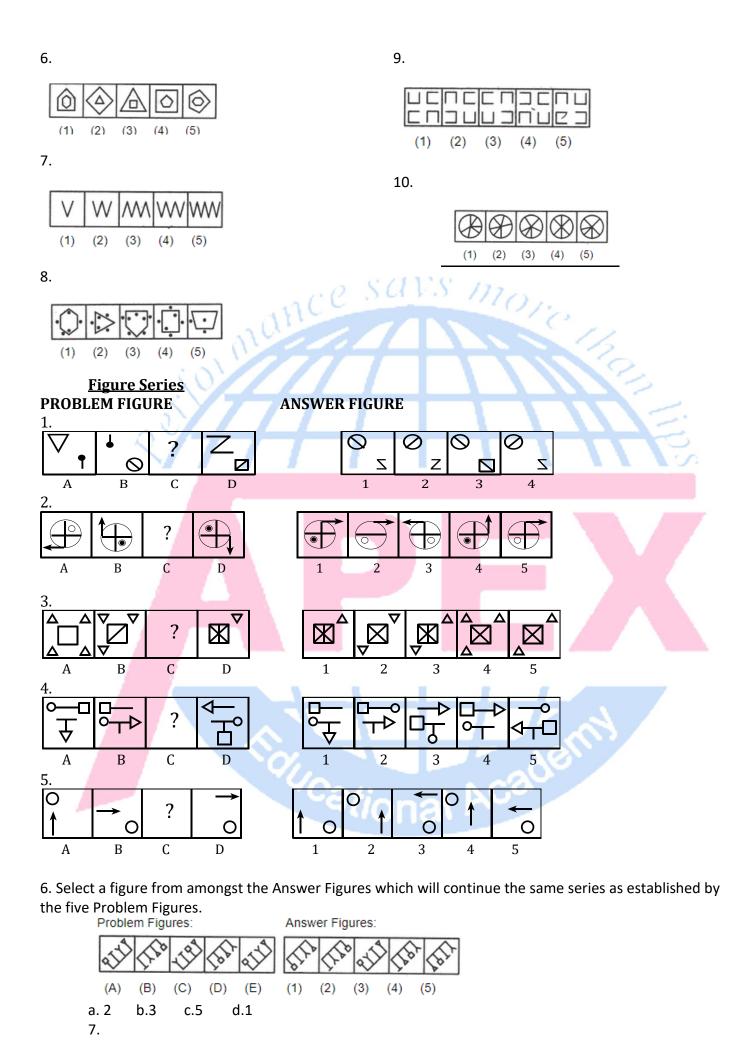
5.

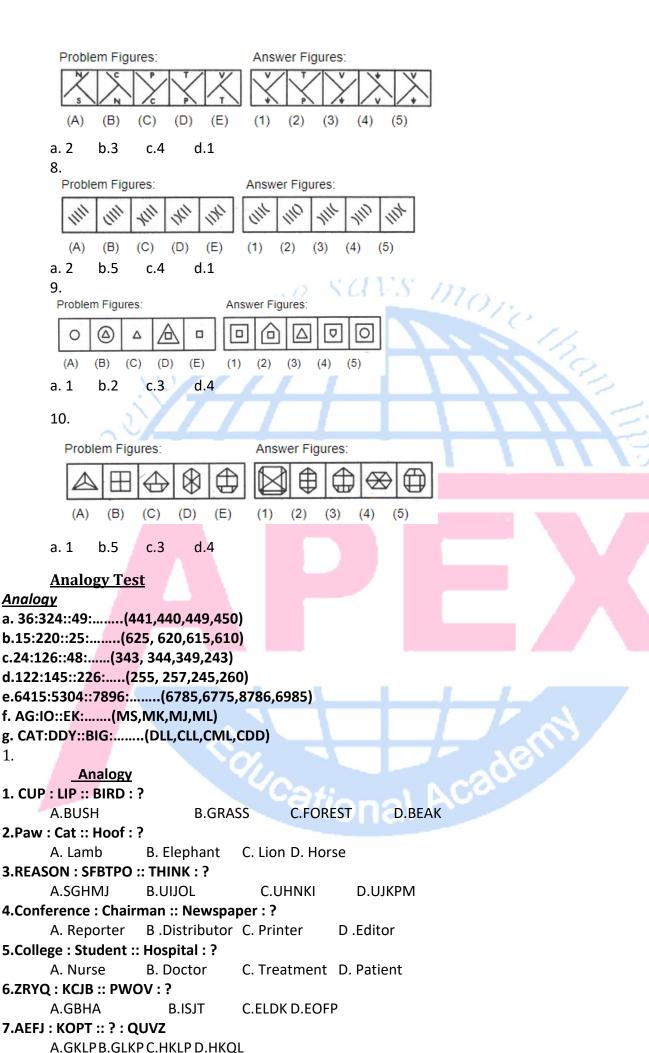


1.



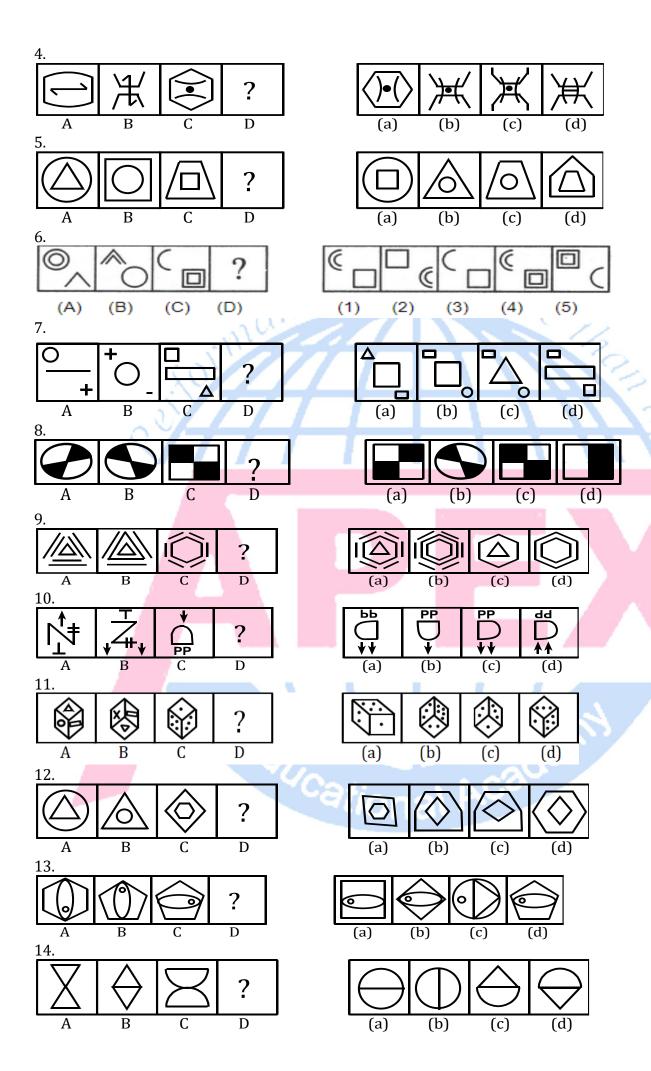
2.

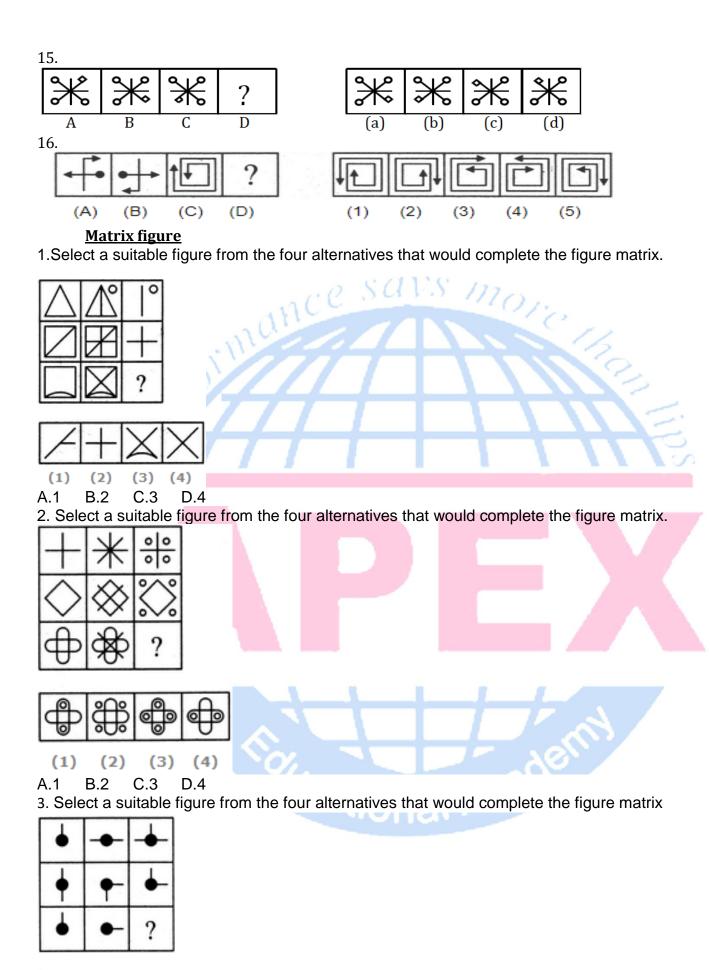




a)TOH b)tea C)COPY d)AET 9. MO: 13 15 :: HJ : ? A.19 17 B.18 16 C.8 10 D.16 18 10) 3: 12 :: 5 : ? A.25 B.35 C.30 D.15 11) MXN: 13 x 14 :: FXR : ? A.14 x 15 B.5 x 17 C.6 x 18 D.7 x 19 12.4:19::7:? **A.52** B.49 C.28 D.68 vs more 13. 144: 10 :: 169 : ? A.14 B.11 C.13D.12 14.68:130::?:350 A.220 B.224 C.222 D.226 15. 27: 125:: 64:? A.162 B.216 C.517 D.273 16. Glove: Hand A. Neck: Collar B. Tie: Shirt C. Socks: Feet D. Coat: Pocket 17. Letter: Word A. Page: Book B . Product: Factory C. Club: People D .Home work: School 18. Rectangle: Pentagon A. Side: Angle B. Diagonal: Perimeter C. Triangle: Rectangle D. Circle: Square 19. Thermometer: Temperature A. Millimeter: Scale B. Length: Breadth C. Solar Energy: Sun D. Cardiograph: Heart rate 20. Reading' is related to 'knowledge' in the same way as 'Work' is related to: B. Employment C. Experience D. Engagement A. Money 21. 'College' is related to 'Teachers' in the same way as 'Hospital' is related to: A. Doctors B. Patients C. Medicine D. Beds 22. 'Flower' is related to 'Bud' in the same way as 'Fruit' is related to: A.Seed B.Tree C.Flower D.Stem 23. 'Walk' is related to 'Run' in the same way as 'Breeze' is related to: A.Cold B.Dust C.WindD.Air 24. 'Smoke' is related to 'Pollution' in the same way as 'War' is related to: A. Victory B. Treaty C. Defeat D. Destruction 25. 'Dogs' is related to 'Bark' in the same way as 'Goats' is related to: A. Bleat B. Crow C. Grunt D. Howl Figure Analogy (B) (C) (D) (1)(2)(3)(4)(5)2. (2)(A) (B) (C) (D) (1)(3)(4)(5)D (a) (b) (c)

8. DLOC:ECI::TOH:?





(1)

A.1

(2)

B.2

(3)

C.3

(4)

D.4

4. Select a suitable figure from the four alternatives that would complete the figure matrix. 1 2 2/ (1)(2)(3)(4)A.1 B.2 C.3 D.4 5. Select a suitable figure from the four alternatives that would complete the figure matrix. (4)(1) (2)(3) A.1 **B.2** C.3 D.4 6. Select a suitable figure from the four alternatives that would complete the figure matrix. (2)(3) (4)C.3 A.1 **B.2 D.4** 7. Select a suitable figure from the four alternatives that would complete the figure matrix.

(3)

C.3

D.4

B.2

A.1

8. Select a suitable figure from the four alternatives that would complete the figure matrix.

\$ 0	\$ 00	\$000
Oo	080	O
В	В	?



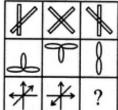
(1) (2)

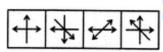
A.1

(3) (4) B.2

C.3 D.4

9. Select a suitable figure from the four alternatives that would complete the figure matrix.

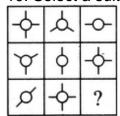


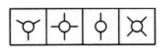


(1)

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

10. Select a suitable figure from the four alternatives that would complete the figure matrix.

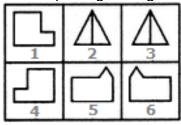




(2)(3)

A.1 B.2 C.3 D.4 **Grouping Identical Figure**

1. Group the given figures into three classes using each figure only once.



A. 1,4 ; 2,3 ; 5,6

B. 1,5; 2,6; 4,3

C. 1,6; 2,3; 4,5

2. Group the given figures into three classes using each figure only once.

	\bigoplus_{2}	O 3
	\bigoplus_{5}	\bigoplus_{6}
\Diamond_{j}	8	\bigcirc

A. 1,3,9 ; 2,5,6 ; 4,7,8

B. 1,3,9; 2,7,8; 4,5,6

C. 1,2,4 ; 3,5,7 ; 6,8,9

D. 1,3,6; 2,4,8; 5,7,9

3. Group the given figures into three classes using each figure only once.





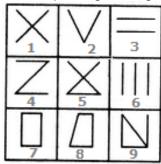
A. 7,8,9 ; 2,4,3 ; 1,5,6

B. 1,3,2; 4,5,7; 6,8,9

C. 1,6,8 ; 3,4,7 ; 2,5,9

D. 1,6,9; 3,4,7; 2,5,8

4. Group the given figures into three classes using each figure only once.



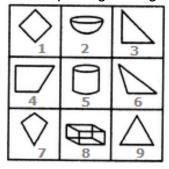
A. 1,2,3 ; 4,5,6 ; 7,8,9

B. 1,3,5; 2,4,6; 7,8,9

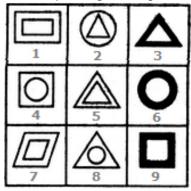
C. 1,5,9 ; 3,6,2 ; 4,7,8

D. 1,9,7; 2,8,5; 3,4,6

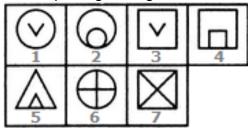
5. Group the given figures into three classes using each figure only once.



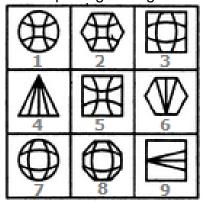
- **A.** 1,4,7; 2,5,8; 3,6,9
- **B.** 1,4,7; 2,5,9; 3,6,7
- **C.** 1,3,4 ; 2,5,8 ; 6,7,9
- **D.** 1,2,3; 4,5,6; 7,8,9
- 6. Group the given figures into three classes using each figure only once.



- **A.** 1,5,7 ; 2,4,6 ; 3,9,8
- **B.** 1,5,7; 2,4,8; 3,6,9
- **C.** 1,4,7; 2,5,8; 3,6,9
- **D.** 1,7,9; 3,5,8; 2,4,6
- 7. Group the given figures into three classes using each figure only once.

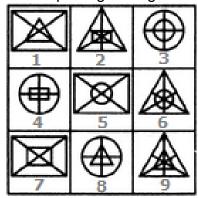


- A. 1,2,6; 3,4,7; 5
- **B.** 1,3; 2,6; 4,5,7
- **C.** 1,2,6,7; 3; 4,5
- D. 1,3; 2,4,5; 6,7
- 8. Group the given figures into three classes using each figure only once.



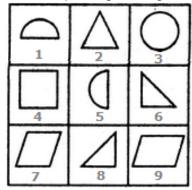
- **A.** 1,2,5 ; 3,7,8 ; 4,6,9
- **B.** 1,7,2; 3,9,6; 4,5,8
- **C.** 2,3,8 ; 4,6,9 ; 1,5,7
- **D.** 5,6,9 ; 3,4,1 ; 2,7,8

9. Group the given figures into three classes using each figure only once.



- **A.** 2,4,7; 1,8,9; 3,5,6
- **B.** 2,6,9 ; 1,5,7 ; 3,4,8
- **C.** 2,6,7 ; 1,5,8 ; 3,4,9
- **D.** 2,8,7 ; 1,5,9 ; 3,4,6

10. Group the given figures into three classes using each figure only once.



- **A.** 1,3,5 ; 2,6,9 ; 4,7,8
- **B.** 2,3,4 ; 5,6,8 ; 9,1,7
- **C.** 1,3,5 ; 2,6,8 ; 4,7,9
- **D.** 3,2,4; 6,5,8; 7,9,1

Rule Detection

Choose the set of figures which follows the given rule.

1.Rule: Closed figures losing their sides and open figures gaining their sides.









a.1 b.2 c.3 d.4

2. Choose the set of figures which follows the given rule. Rule: Any figure can be traced by a single unbroken line without retracting. (1)d.4 b.2 c.3 a.1 3. Choose the set of figures which follows the given rule. Rule: Closed figures gradually become open and open figures gradually become closed. a.1 4. Choose the set of figures which follows the given rule. Rule: Closed figures become more and more open and open figures become more and more closed. (2) (3)

a.1

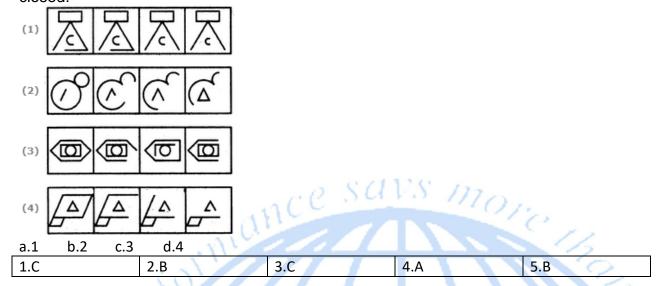
b.2

c.3

d.4

5. Choose the set of figures which follows the given rule.

Rule: Closed figures become more and more open and open figures become more and more closed.



MIRROR-IMAGES

Mirror–Image: The image of an object, as seen in a mirror, is called its mirror reflection or mirror image.

In such an image, the right side of the object appears on the left side and vice—versa. A mirror—image is therefore said to be laterally inverted and the phenomenon is called Lateral Inversion.

	MIR	ROR-IMAGES	OF CAPITAL LET	TTERS		
Letters	Mirror Images	Letters	Mirror Images	Letters	Mirror Images	
Α	A	J	L	S	S	
В	В	K	K	T	Т	
C	С	L	L	U	U	
D	D	M	M	V	V	
E	E	N	И	W	W	
F	म	400	О	X	X	
G	G	P	P	Y	Y	
Н	Н	Q	9	Z	Z	
I	I	R	Я	_	_	

Remarks: The letters which have their mirror images identical to the letter itself are:

A, H, I, M, O, T, U, V, W, X, Y

Examples: Mirror images of certain words are given below:

1	. F	UN	:	FUN
2	2. S	TOP	:	STOP
3	3. Z	EBRA	:	ZEBRA
4	. G	OLKONDA	:	GOLKONDA
5	5. X	YLOPHONE	:	XYLOPHONE
1.	Find t	nd the mirror image of	WHITE.	Exercise 1 HILE
	(a)	WHILE	(b)	MHILE
		WHITE		ETIHW
2.		the mirror image of	BRISK.	
	(a)	BRIZK	/ /	BRISK (d)
	(c)	BRISX		BRISK (b)
3.	Find t	the mirror image of	PAINTED.	
	(a)	PAINTED		PAINTED (d)
	(c)	PAINLED		PAINTAD (b)
4.	Find t	the mirror image of	NATIONAL	
	(a)	NA LIONAL	_ ~ ~ ~ ~	NATIONAL (d)
				(d) LANOITAN
	(c)	N AT ION AL	44	(d) LANOITAN
5.	Find t	the mirror image of	SUPERVISOR	e (Ional P
	(a)	SUPERVISOR		(p) SUPERVISOR
	(c)	RSOUPSERIV	1	(q) SUPERVIOSR
6.	Find t	the mirror image of	JUDGEMEN	T.
	(a)	TNEMEGDU.	J	JUDD EMENT (d)
	(c)	UDGEMENT		TNMEGDILL (b)

- 7. Find the mirror image of QUALITY.
 - (a) QUALITY

(b) YTILAUO

(c) YTIJAUQ

- QNALITY (b)
- 8. Find the mirror image of TERMINATE.
 - ETANIMRET (a)
- TERW INATE (d)
- TERMINATE (2)
- TERMINATA (b)
- 9. Find the mirror image of FIXING.
 - (a) GNIXIF

GNIXIF(d)

AXING(2)

- FIXING(b)
- 10. Find the mirror image of MALAYALAM.
 - (a)MALAYALAM
- (b) MAJAYALAM
- (c) MALAYALAM
- (d) ΜΑΓΑΥΑΓΑΜ

MIRROR IMAGE EXERCISE -1

ANSWER SHEET

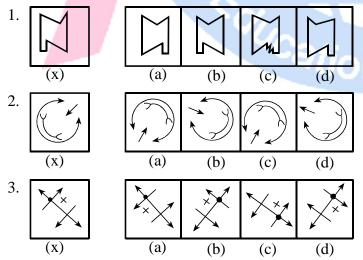
1.C	2.D	3.B	4.B	5.A	6.C	7.C	8.C	9.D	10.B
-----	-----	-----	-----	-----	-----	-----	-----	-----	------

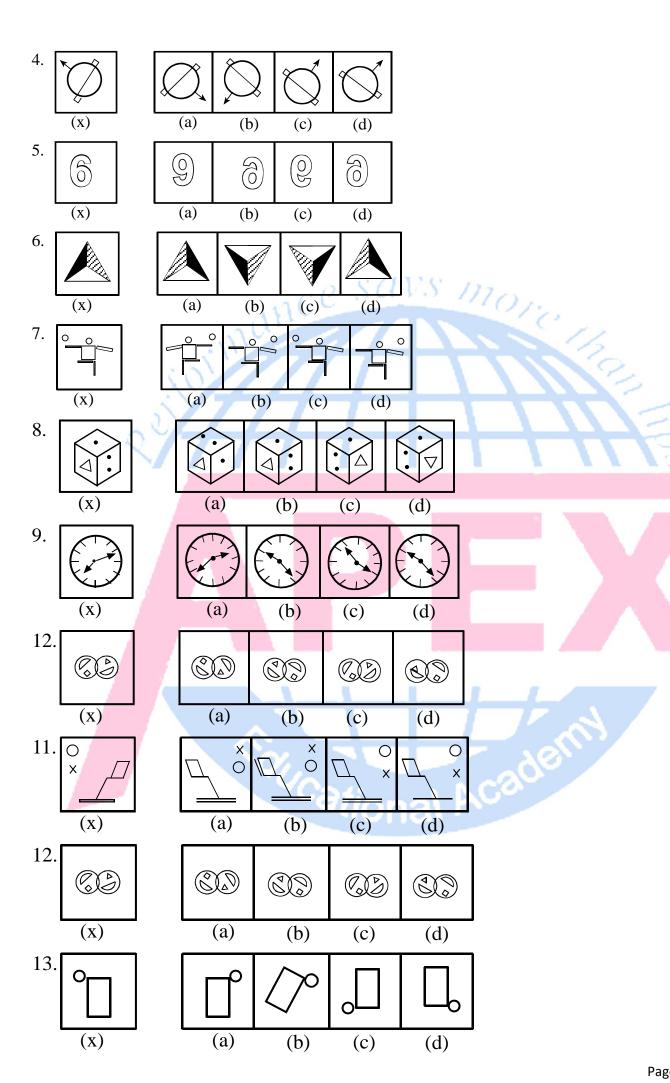
WATER IMAGES

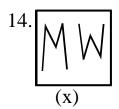
Water image: The reflection of an object, as seen in water, is called its water image. It is the inverted image obtained by turning the object upside down.

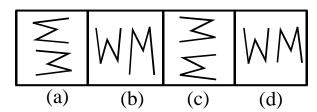
EXERCISE - 2

Find the mirror image of figure (X).







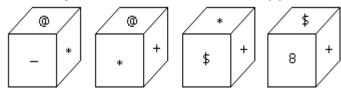


EXERCISE -2 ANSWER SHEET

1.D				5.B	6.A	7.A	8.C	9.B	10.B
11.C	12.B	13.A	14.B						

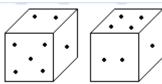
Dice

Which symbol will be on the face opposite to the face with symbol *?



@,\$,+,8

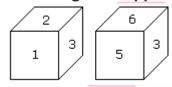
Two positions of dice are shown below. How many points will appear on the opposite to the



face containing 5 points?

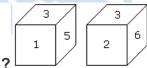
1,2,3,4

Which digit will appear on the face opposite to the face with number 4?



3,4,5,1

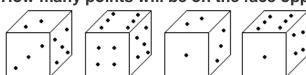
Two positions of a dice are shown below. Which number will appear on the face opposite to



the face with the number 5?

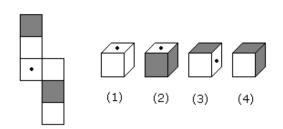
2,3,4,6

How many points will be on the face opposite to in face which contains 2 points?



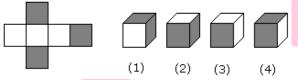
1,4,5,6

The figure given on the left hand side in each of the following questions is folded to form a box. Choose from the alternatives (1), (2), (3) and (4) the boxes that is similar to the box formed.

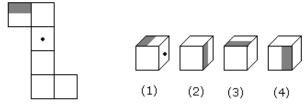


A.	2 and 3 only	B.	1, 3 and 4 only
C.	2 and 4 only	D.	1 and 4 only
	(1) (2) (3) (4)		

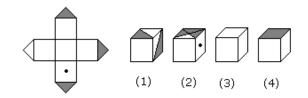
A.	1, 2 and 4 only	B.	3 and 4 only
C.	1 and 2 only	D.	1, 2 and 3 only



A.	1 and 3 only	B.	2 and 4 only
C.	2 and 3 only	D.	1, 2, 3 and 4



Α.	1 and 2 only	В.	2 and 3 only
C.	1, 2, 3 and 4	D.	2 and 4 only



A.	1 and 2 only	В.	2 and 4 only
C.	2 and 3 only	D.	1 and 4 only

ANALYTICAL REASONING

1.Straight line

2. Rectangle

3. Square

4. Triangle

5. Pentagons



N = Number of Cutting Points

N = Number of Cutting Points

N = Number of Cutting Points



 $(n+1)^2-1$



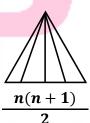
4n-3



4n

N = **Number of Triangle**

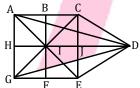
N = Number of Lines



N = Number of gaps

Example 1

What is the number of straight line in the given figure?



(a) 10 (b) 12 (c) 14 (d) 15

Solution

Clearly in this figure:

There are 3 horizontal lines homely AC, HD and GE

There are 3 vertical lines homely AG,BF and CE

There are 6 slanting lines homely AD.GD,CG,AE,CD and ED

Thus there are 3+3+6=12 straight lines in all

Hence, the answer is (B).

Example 2.

Count the number of squares in the following figure.



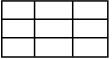
(a) 15 (b) 20 (c) 14 (d) 12

Solution.

There are 3 horizontal humber 1,2,3 or square There are 3 vertical humber 1,2,3 or square Then, at this situation we can use following formula $1^2+2^2+3^2=1+4+9=14$ thus, answer is (C)

Example 3.

How many rectangle are there in the given figure?



(a) 30 (b) 34 (c) 35 (d) 36

Solution.

There are 3 horizontal number 1.2.3 or number of row There are 3 vertical number 1,2,3 or number of column.

That's why the are of rectangle (A) = $L \times b$

L = 1 + 2 + 3 = 6, B = 1 + 2 + 3 = 6, $A = L \times b = 6 \times 6 = 36$, Thus answer is (D)

Example 4.

How many pentagons are there in the given figure



(a) 12 (b) 14 (c) 16 (d0 10

Solution.

The simplest pentagons are

EGHBD, ACHFD, AEFHC, CGFDB, DFHCB, FHBAD, HBDEF, BDFGH, AEFHC, EGCBD, GCADF and HCADF thus answer is (A)

ANALYTICAL REASONING

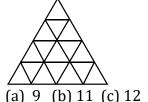
What is the number of straight lines in the following figure



(a) 16 (b) 17 (c) 18 (d) 19

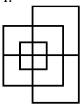


(a) 11 (b) 14 (c) 16 (d0 17



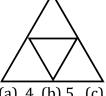
(a) 9 (b) 11 (c) 12 (d) 16

4.



(a) 13 (b) 15 (c) 17 (d) 19

5.Find the number of Traingles.



(a) 4 (b) 5 (c) 6 (d) 7

6.



(a) 5 (b) 6 (c) 8)d) 10 7.



(a) 16 (b) 13 (c) 9 (d) 7

8.



(a) 15 (b) 16 (c) 17 (d) 18



(a) 8 (b) 10 (c) 12 (d) 14



(a) 11 (b) 13 (c) 15 (d) 17

11.



(a) 16 (b) 22 (c) 28 (d) 32



(a) 36 (b) 40 (c) 44 (d) 48 13.



(a) 16 (b) 18 (c) 14 (d) 15



(a) 12 (b) 18 (c) 22 (d) 26 15.



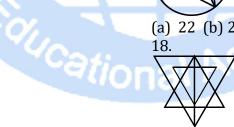
(a) 21 (b) 23 (c) 25 (d) 27 16.



(a) 8 (b) 10 (c) 12 (d) 14 17.



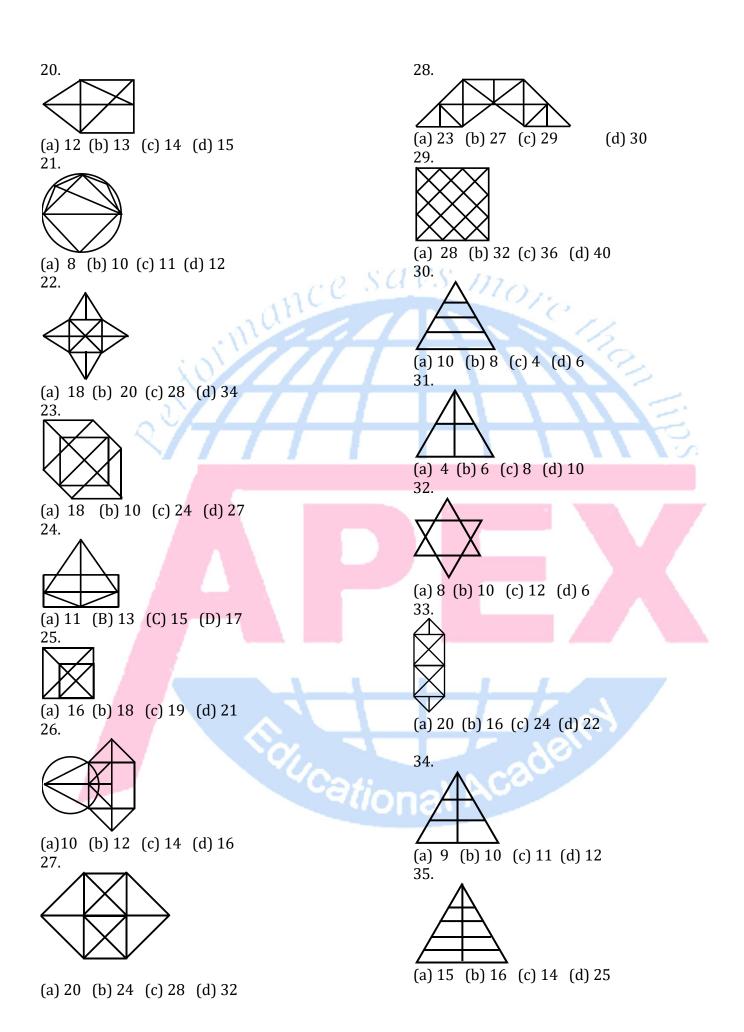
(a) 22 (b) 24 (c) 26 (d) 28

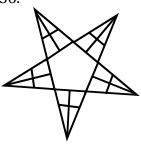


(a) 27 (b) 25 (c) 23 (d) 21 19.



(a) 10 (b) 19 (c) 21 (d) 23

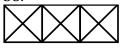




(a) 40 (b) 35 (c) 30 (d) 42 37.



(a) 12 (b) 14 (c) 16 (d) 18



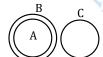
(a) 28 (b) 20 (c) 40 (d) 6

Answer Sheet

Answer	Sheet			20	Sa	VS /	772		
1. b	2. b	3. c	4. a	5. b	6. d	7. a	8. c	9. c	10. c
11. c	12. b	13. b	14. b	15. a	16. d	17. d	18. a	19. c	_ 20. d
21. c	22. c	23. c	24. c	25. d	26. c	27. c	28. c	29. c	> 30. c
31. b	32. a	33. c	34. a	35. a	36. b	37. a	38. a		0

Venn Diagrams

If one item belongs to the class of second but third item is entirely different from two the venn diagram is shown as below



Eg:Fish, Whale, Crocodile

If two separate items belongs to the class of third .They are represented by two disjoint circle inside a bigger circle as below



Eg: Family, Father, Mother

If one item belong to the class of second and the 2. third item is partly related to these two the diagram is shown as below.



Eg: women, mother, Engineers

If given three items are partly related to each other they are represented as below



Eg: Boys, Chess player, Student

If the two items are partly related to the third but are in dependent of each other they are represented by three indersecting circles in a line



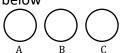
Eg: School, Boys, Girls

6.If two itemsbelongs to the class of third such that some items of each of these two group are common relationship, then the venn diageam is represented



Eg: Women, Mother, Widow

8.If the items belongs to the different groups, we repress the Venn diagram as below

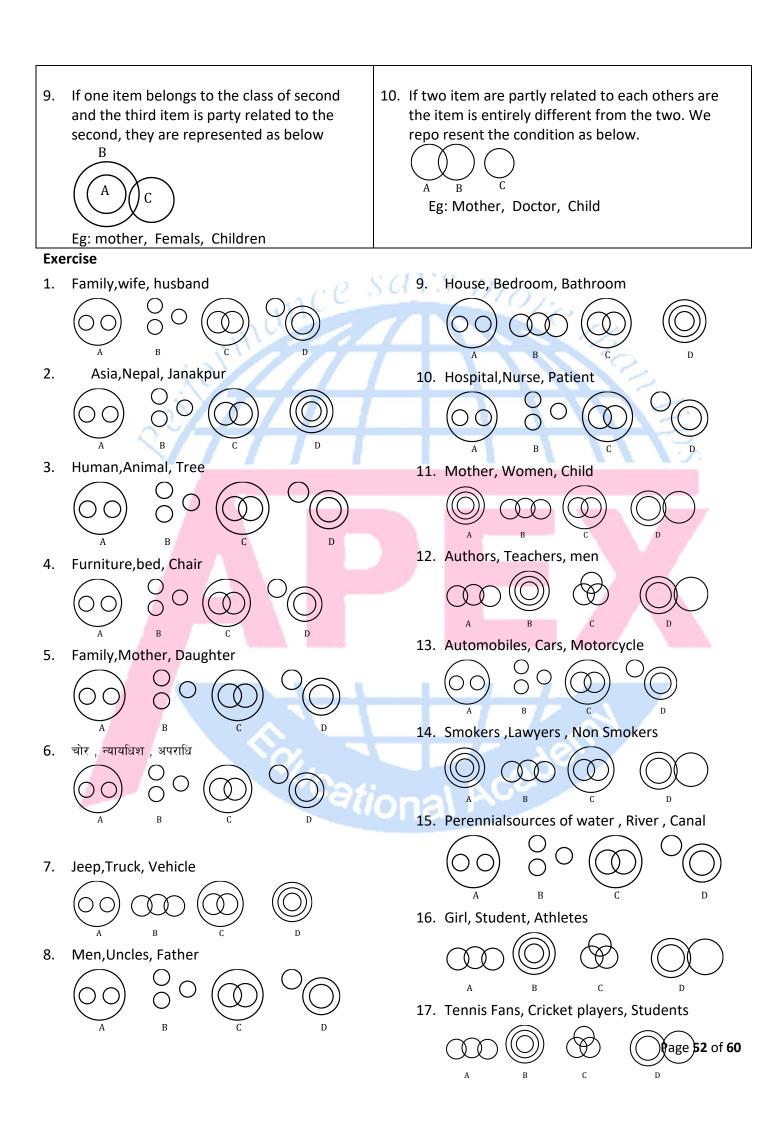


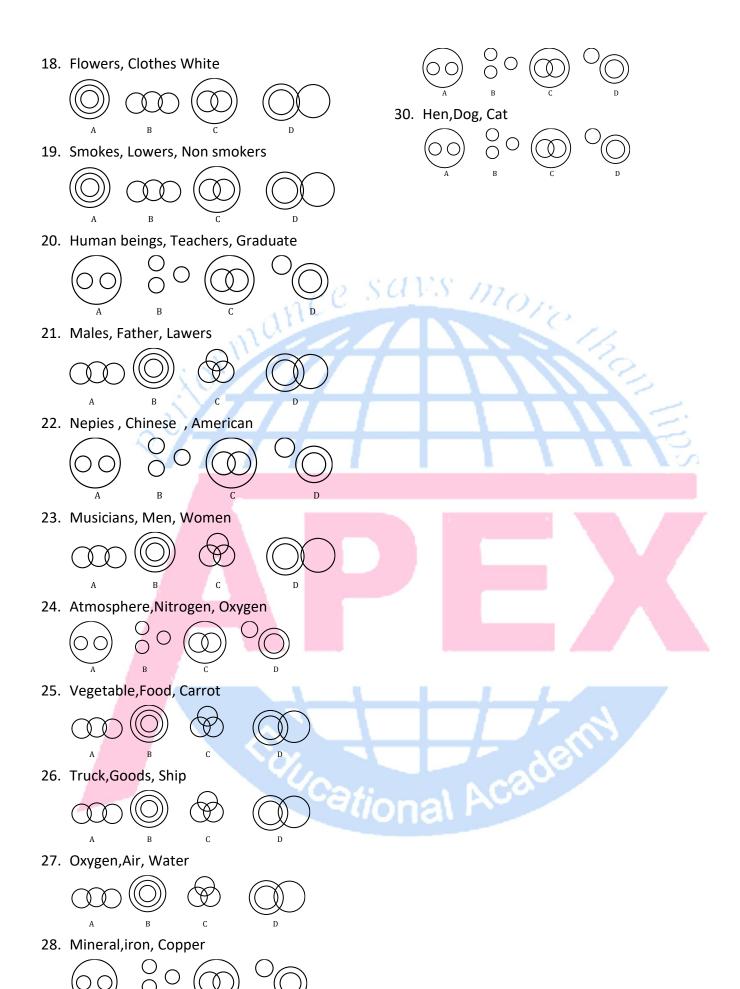
Eg: (a) Man (b) Cat (c) Fish

If one item belong to the class of second and the seers belongs to the class of third. Then we represent the Venn diagram in the form of three consent circles as veils.



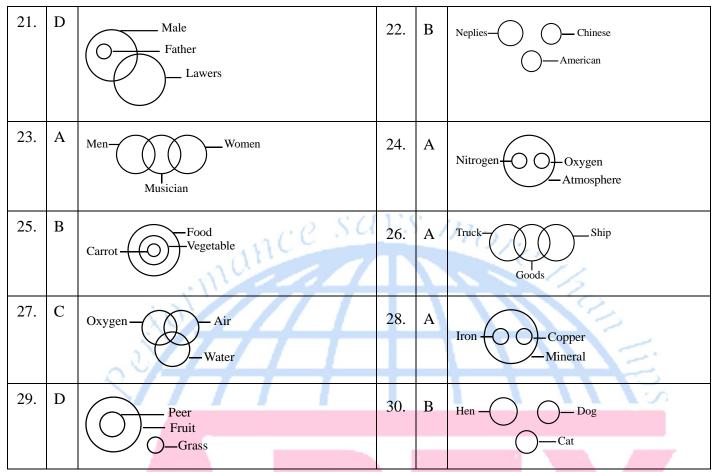
Eg: Year, month, week





29. Fruit, Pear, Grass

		Venn Diagrams: A	Answe	r Sh	eet
1.	A	wife husband family	2.	D	Janakpur————————————————————————————————————
3.	В	Human — Tree — Animal	4.	A	Bed Chair Furniture
5.	С	Mother————————————————————————————————————	6.	D	ck/fwL r fJ O— @folwz
7.	A	Jeep Vehicle Truck	8.	С	Uncles — Men Father
9.	A	Bedroom House Bathroom	10.	A	Nurse Hospital Patient
11.	D	Mother Women Child	12.	С	Authors——Teachers —Men
13.	A	Cars ——Automobile Motorcycle	14.	В	Smokers Non smokers Lawers
15.	D	river Perennial sources of water canal	16.	С	Girl — Student — Athetes
17.	С	Table tennis fan — Cricket players — Students	18.	В	Flowers — Cloths White
19.	В	smokers Non smokers Lowers	20.		Teachers — Human beings Gradute



In each of the following questions, select a figure from amongst the four alternatives, which when placed in the blank space of figure (X) would complete the pattern.

1.Identify the figure that completes the pattern.





b. 2

(1)







(2)

c. 3

d. 4

a. 1 Ans. D



2. Identify the figure that completes the pattern.



(X)



(1)

b. 2





(3)

c. 3



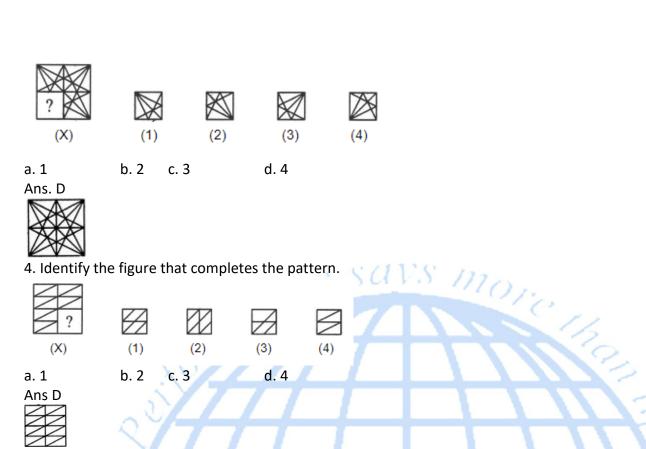
al Acade

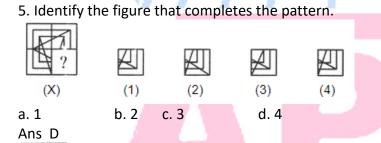
(4) d. 4

a. 1 Ans C.

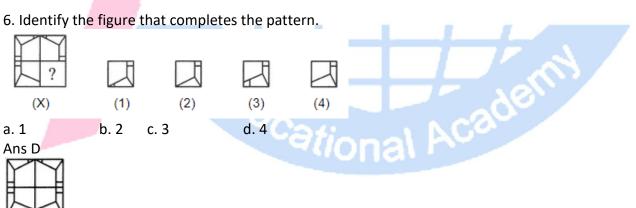


3. Identify the figure that completes the pattern.

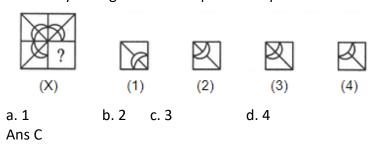








7. Identify the figure that completes the pattern.





8. Identify the figure that completes the pattern.











a. 1

b. 2

c. 3

d. 4

Ans A



9. Identify the figure that completes the pattern.















S more Bay

a. 1



c. 3

d. 4

Ans B



10. Identify the figure that completes the pattern.















c. 3

b. 2





a. 1

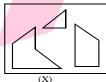
Ans B

Figure Formation and Analysis

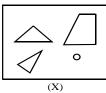
Find out which of the figures (1), (2), (3) and (4) can be formed from the pieces given in figure (X).

Exercise-1

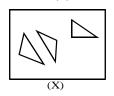


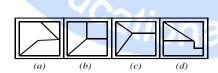


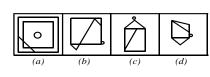
2.

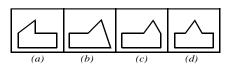


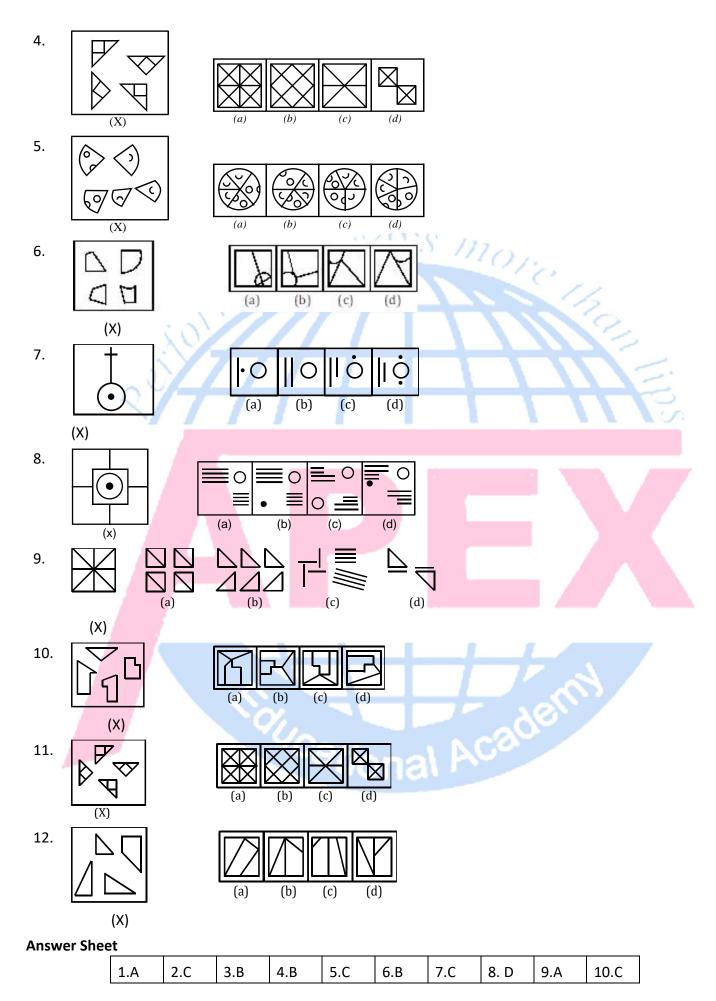
3.



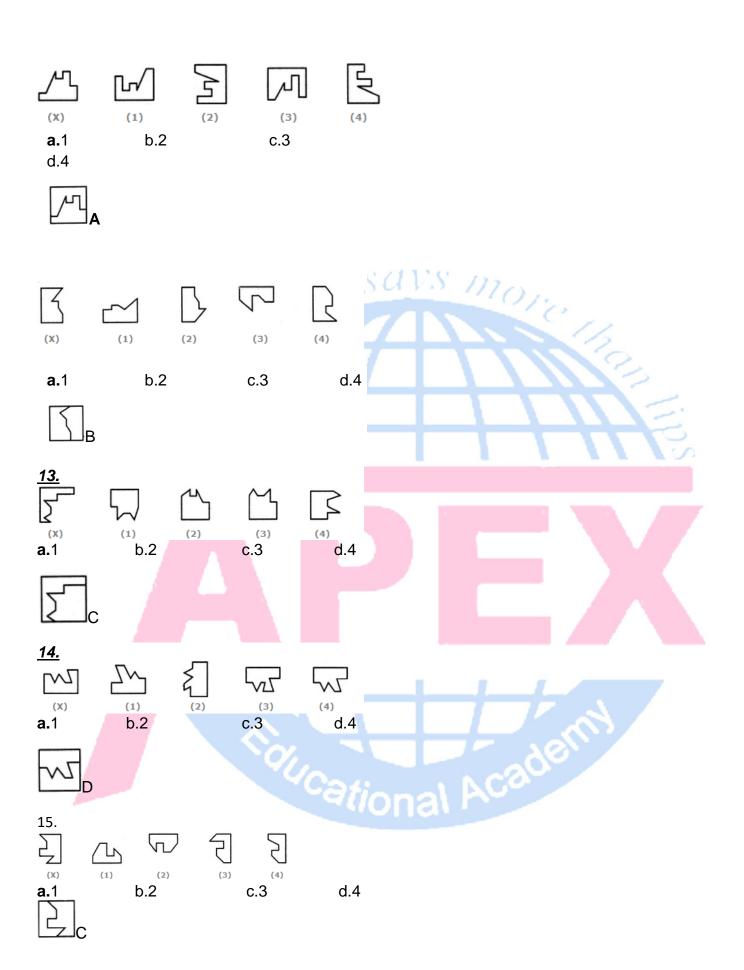








	11.B	12.B								
Construct	ions of Sc	<u>uare</u>	,	'			'	1		
Select the alternative which represents three A.134 B.345 C.234 D.135										
out of the five alternative figures which when fitted into each other would form a complete										
	each oth	ner would	torm a co	mpiete		\square c				
square			1	\sim		6.				
	abla		/</td <td></td> <td></td> <td>\wedge</td> <td></td> <td></td> <td></td> <td>Δ</td>			\wedge				Δ
(1)	(2)	(3)	(4)	(5)		\bowtie			7	•
	A.145 E	3.245 C.12	23 4.234			(1)	(2)	(3)	(4)	(5)
					0/1	A.124 B.	234 C.34	5 D.235		
		$ A_R$			301	1 1				
2.Select the alternative which represents										
three out of the five alternative figures which7.										
when		each oth		orm a		/>		57		\bigcirc
	con	nplete squ	are.	N		/	Л	\sim		
	\bigvee					(1) A 125 D	(2) 123 C.14	(3) ED 224	(4)	(5)
(1)	(2)	(3)	(4)	(5)		A. 133 B.	123 0.14	3 D.234		
A.124 B.			(4)	(3)						
						8.				
) \						O. N	1			1
	<u>D</u>						_/		17	
		native which				(1)	(2)	(3)	(4)	(5)
three out of the five alternative figures which when fitted into each other would form a A.123 B.234 C.345 D.245										
complete		acii otilei v	would form	ıı a		57				
	4	1	\wedge	\sim						
	\triangleleft					9.				
(1)	(2)	(3)	(4)	(5)		\sim	\wedge			\sim
A.124 B.	125 C.23	34 D.245						V	\vee	
						(1)	(2)	(3)	(4)	(5)
L/ZJB						A.123 B.	234 C.13	4 D.235		
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complete				۵		10.	J			
R	П	\Box	Л	\		_				
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(1)	(2)	(3)	(4)	(5)		(1)	(2)	(3)	(4	
A.123 B.	124 C.13	35 D.145					134 C.13		(4) (.
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						H				
<u>5.</u>							0			
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	ν							-	into Figure-	X to
(1)	(2)	(3)	(4)	(5)		ioiiii a cc	mplete so	_l uai c .		



BBB