



Roll Number

STATE COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

STATE LEVEL NATIONAL TALENT SEARCH EXAMINATION – 2016 Class – X

Part - II

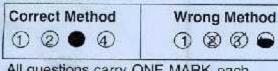
MENTAL ABILITY TEST (MAT) AND LANGUAGE TEST

Time: 90 Minutes

INSTRUCTIONS TO CANDIDATES :

Read the following instructions before you answer the questions. Answers are to be given in a SEPARATE OMR ANSWER SHEET provided inside this booklet. Break the seal and start answering the questions once asked to do so.

- Please write your Roll Number very clearly (only one digit in one block) as given in your Admission Card.
- 2. You have to answer 100 questions in this test.
- This test has two Parts namely Mental Ability Test (MAT) and Language Test. You have to answer 50 MAT questions. In the Language Test you have to attempt only one language. That is either Malayalam (51 to 100 questions) or English (101 to 150 questions).
- Select the most suitable answer for each question and completely darken the circle corresponding to the correct alternative as shown below.



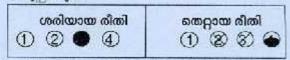
- 5. All questions carry ONE MARK each.
- There is no negative mark. Every correct answer will be awarded one mark.
- Do not write your name on any part of the question booklet or the answer sheet.
- Rough Work can be done in the space provided at the end of this booklet.

Maximum Marks : 100

പരീക്ഷാർത്ഥികൾക്കുള്ള നിർദ്ദേശങ്ങൾ :

ചോദ്യങ്ങൾക്ക് ഉത്തരം എഴുതാൻ തുടങ്ങുന്നതിന് മുമ്പ് താഴെ കൊടുത്തിരിക്കുന്ന നിർദ്ദേശങ്ങൾ സശ്രദ്ധം വായിക്കുക. ഉത്തരം നൽകേണ്ടത് ഒരു പ്രത്യേക OMR ഉത്തരക്കലോസിൽ ആണ്. നിർദ്ദേശത്തിനു ശേഷം മാത്രതെ സീൽ തുറക്കുവാനും, ഉത്തരം എഴുതുവാനും പാട്യുള്ള

- നിങ്ങളുടെ റോൾ നമ്പർ (ഒരു കള്ളിയിൽ ഒരു അക്കം മാത്രം) വ്യക്തമായി നിങ്ങളുടെ പ്രവേശന പത്രത്തിൽ തന്നിരിക്കുന്നതു പോലെ എഴുതുക.
- 2. 100 ചോദ്യങ്ങൾക്ക് ഉത്തരമെഴുതിയാൽ മതി.
- ഈ ടെസ്റ്റിന് രണ്ട് പാർട്ടുകൾ ഉണ്ട് മെന്റൽ എബിലിറ്റി ടെസ്റ്റ് (MAT) ഉം ഭാഷാടെസ്റ്റും MATംന്റ 50 ചോദ്യങ്ങൾക്കും ഉത്തരം എഴുതണം. എന്നാൽ ഭാഷാ ടെസ്റ്റിലെ ചോദ്യങ്ങളിൽ ഒന്നുകിൽ മലയാളം (51-100 വരെയേ) അല്ലെങ്കിൽ ഇംഗ്ലീഷ് (101-150 വരെയോ) മാത്രം ഉത്തരം എഴുതിയാൽ മതി.
- ഓരോ ചോദ്യത്തിനും ഉചിതമായ ഉത്തരം തെരഞ്ഞെ ടുത്ത് ശരിയായ ഉത്തരഞ്ഞെ സൂചിപ്പിക്കുന്ന വൃത്തം മാത്രം താഴെ കൊടുത്തിരിക്കുന്ന പ്രകാരം പൂർണ്ണമായി കറുപിക്കുക.



- എല്ലാ പോദ്യങ്ങൾക്കും ഒരു മാർക്ക് വിതം.
- ന്യൂന മാർക്ക് ഇല്ല. ഓരോ ശരി ഉത്തരത്തിനും ഒരു മാർക്ക് വീതം ലഭിക്കും.
- നിങ്ങളുടെ പേര് ചോദ്യ പുസ്തകത്തിന്റെയോ ഉത്തരക്കടലാസിന്റെയോ ഒരു ഭാഗത്തും എഴുതു വാൻ പാടില്ല_______
- പാടില്ല. 8. റഫ് വര്ക്കിനുവേണ്ടി ഈ ബുക്ക്ലെറ്റിന്റെ അവസാന ഭാഗം ഉപയോഗിക്കാവുന്നതാണ്.

SCERT 2016

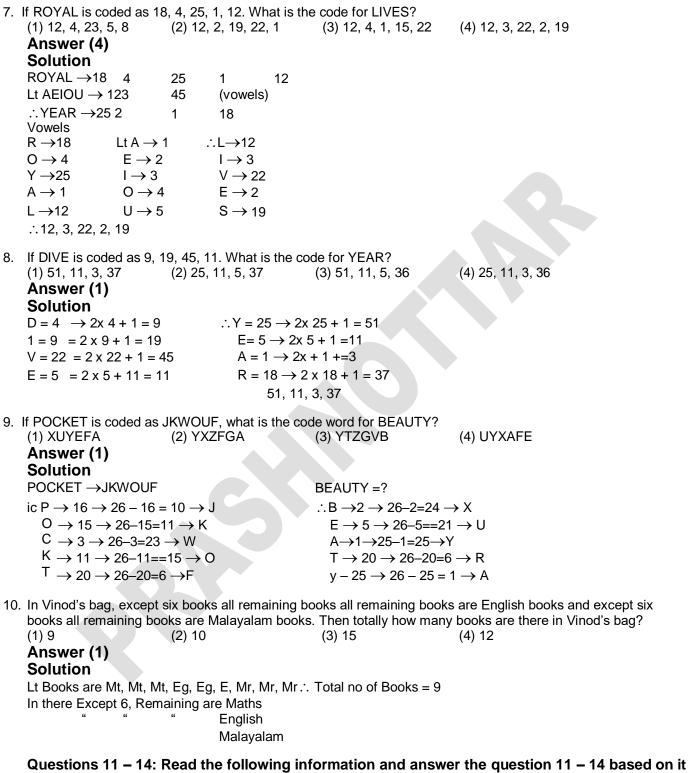
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State Level National Talent Search Examination – 2016 Mental Ability Test

1.	ab - cc - abb - cc - bbc - (1) abcca Answer (4) Solution ab - cc - abb - cc - bb b c c a	(2) bccba	(3) bcaba	(4) bccac
2.	- xyx - xxy - xxx - xxy - y (1) xyxyx Answer (3) Solution - xy x - x xy - xxx - xxy x x y x	(2) xxyyy 7 - y	(3) xxyxy	(4) уууух
3.	M–MN–MNNN–NNN–MI (1) NNMN Answer (1) Solution M–MN–MNN–MNN–MN	(2) MMNN	(3) NNNN	(4) MNMN
4.	 (1) Hormones Answer (2) Solution Histology y → study of 		(3) Bones	to (4) Histology
	Questions 5- 6: Find	I the missing number	in the given series	
5.	17, 33, 70, 131, 278? (1) 581 Answer (2) Solution 17, 33, 70, 131, 278 17 \rightarrow 17x 2 - 1 ² = 34 - 33 \rightarrow 33x2 + 2 ² = 66 + 70 \rightarrow 70x2 - 3 ² = 131 131 \rightarrow 131x2 + 4 ² = 2	- 4 = 70	(3) 541	(4) 575
6.	5, 25, 61, 113, 181? (1) 265 Answer (1) Solution 5, 25, 61, 113, 181? $\lor \lor \lor \lor \lor$ 20 36 52 16 \therefore 68 16=81	(2) 375	(3) 275	(4) 365

Questions 7 – 9



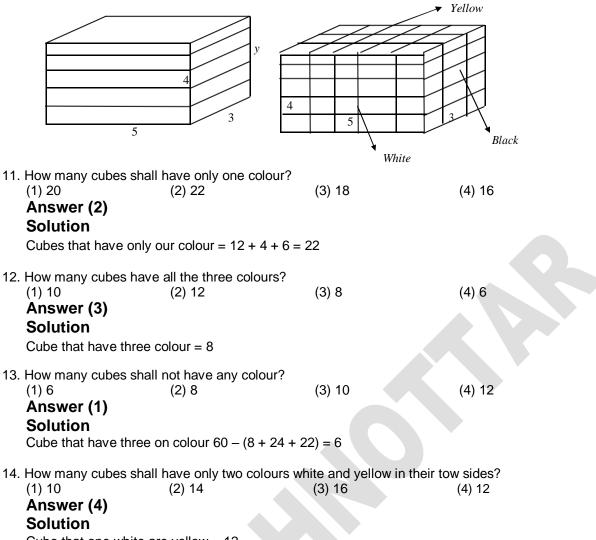
(i) The length, breadth and height of a rectangular piece of wood are 4 cm, 3 cm are 5 cm respectively

(ii) Opposite sides of 5 cm x 4 cm are coloured in white

(iii) Opposite sides of 4 cm x 3 cm are coloured in black

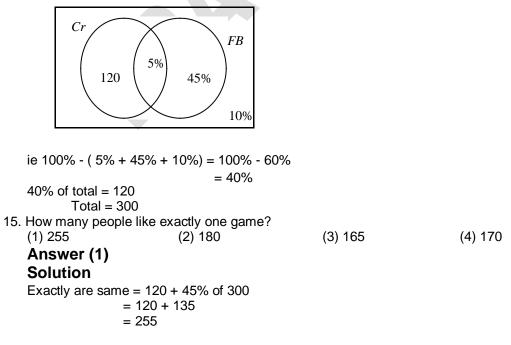
(iv) Rest 5 cm x3 cm are coloured in yellow in both sides

(v) Now the places are cut in such a way that a cube 1 cm x 1 cm x 1 cm will be made



Cube that one white are yellow = 12

Questions 15 – 17: In a region, it was observed that 120 people liked only cricket 45% of the people liked only football 5% of the people liked both cricket and football. 10% of the people liked neither cricket nor football

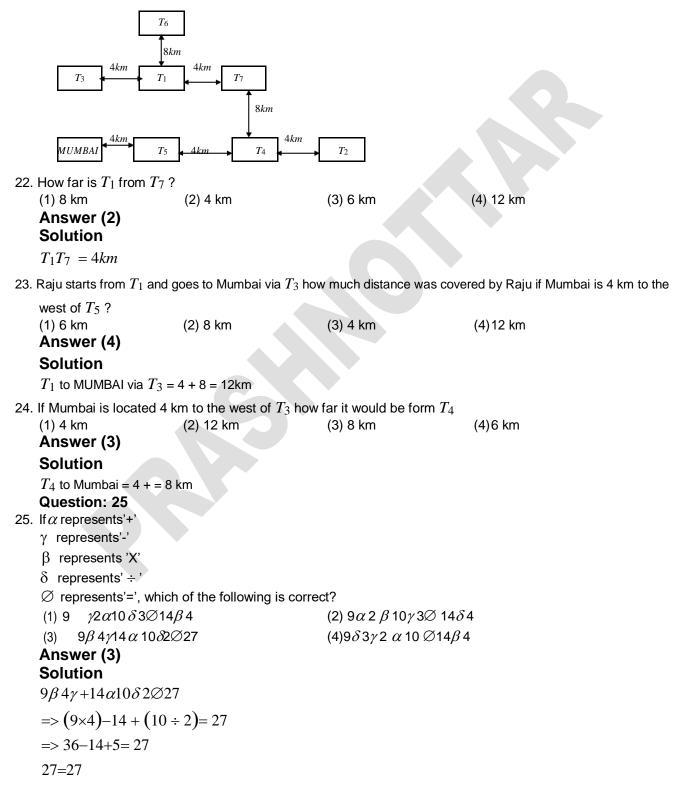


 (1) 10 Answer (3) Solution Do not like any sa 17. How many people (1) 100 Answer (2) Solution 	le do not like any of the tw (2) 20 ame = 10T of total = 10% of 300 = 30 e like only football? (2) 135 $5\% = \frac{45}{2} \times 300 = 135$	o games? (3) 30 (3) 145	(4) 40 (4) 155	
	$\frac{100}{100}$ x 800 - 100			
Questions 18 -	19: Given below is a s	series of letters, nu	umbers and symbols. Study the ser	ries
carefully and a	nswer the questions A	$\Delta \varnothing B 3C 8 FKW #$	*\6\N^5* AAPAA/7-B445Q6AB	
L=A,B,C,F,K,W,N	l,P,Q=9			
		mbers in the series? I	f a letter or number has been used more	then
once, it is to be co (1) 2: 1	(2) 5: 3	(3) 4: 3	(4) 3: 2	
Answer (4) Solution				
Number = 3, 8, 6, 9:6=3:2	5, 7, 4 = 6			
	have symbols on their left (2) 2	as well as on their rig (3) 3	ght? (4) 4	
Answer (1) Solution	ζ,			
Conceptual				
	21: Which of the follo	wing will come in t	the position of (?)	
20. 4A, 10D, 22G, 46 (1) 168N	J, 94M? (2) 128P	(3) 190P	(4) 156L	
Answer (3) Solution				
4A, 10D, 224, 46 4, 10, 22, 46, 94	5, 94M A,D,G,J,M			
4x2 + 2 = 10 10x 2 x 2 = 22	1471013 ∴13+3=16			
22x 2 + 2 = 46 46 x 2 + 2 = 94	= P			
$94 \times 2 + 2 = 190$	∴Answer = 190P			
21. 2Z57Y714X923W (1) 45U14 Answer (2) Solution 2Z5, 7Y7, 14 x 9,	(2) 47U15	(3) 27W24	(4) 47V14	
2 5=9 5 7+9=14 7				
14+9=23 9				
34+13=47 1	3 V 5 U			
∴ 47U15				

Questions 22 -24: Seven towns T_1 , T_2 , T_3 , T_4 , T_5 , T_6 and T_7 are situated as follows

- T_5 is 8 km to the west of T_2
- T_6 is 8 km to the north of T_1
- T_4 is 8 km to the south of T_7
- T_7 is 8 km to the east of T_3
- T_3 is 4 km to the west of T_1

 T_4 is exactly in the middle of T_2 and T_5



Question: 26 Read the information and answer the question No 26

Find friends R, S, T, U and X wore shirts of brown, yellow, green, pink and blue colours and shorts of white, black, grey, blue and yellow colours

Nobody wore shirt and shorts of same colour

T wore yellow shorts and U wore blue shirt

The one who wore yellow shirt wore white shorts and one who wore blue shots wore pink shirt

R wore black shorts and brown shirt

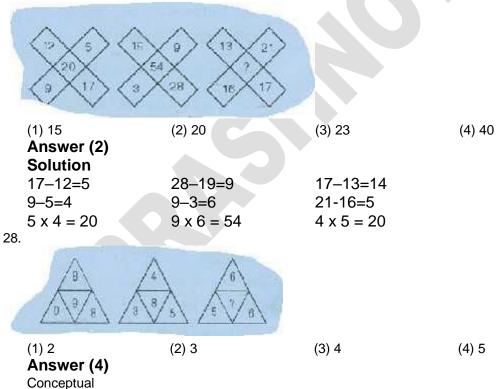
X did not water pink shirt

26. Who wore blue shorts?

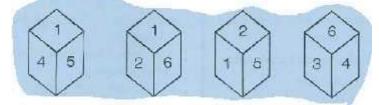
(1) T	enerte :	(2) U	(3) S	(4)
Answer (3) Solution				
Shirts \rightarrow Br.	Yel	$Grn \rightarrow X$	$Pink \to No X$	Blue \rightarrow T
$Short \rightarrow Wht$	Blk	Grey	$Blue \to S$	Yellow

Questions 27- 28: The numerals are given on the basis of some rule and one space is marked by (?). Find the correct answer from the four alterative to replace the question mark



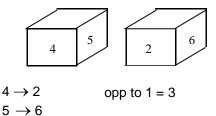


Question 29: is bases on various faces of a cube. Six sides of cube are numbered 1 to 6. Study the faces and answer the questions



29. Which number is on opposite of 1? (1) 3 (2) 4 (3) 5 (4) 6 **Answer (3)**

Solution



- $5 \rightarrow 6$
- $1 \rightarrow 3$

30. What letter should replace the question mark?

(1) U new	/er (:	3)		(2)	Ą		(3) K
	Х	F	V	G	U	J	?	
	R	Κ	F	Ι	Ν	F	J	
	F	J	Ρ	L	G	Ρ	K	

Solution

001	ation					
\oplus	-	\oplus	-	\oplus	-	\oplus
6	10	16	12	7		11
F	5	Р	2	4	Р	K
18R	4D	6F	91	14N	F	J 10
+24X	6F	22V	3C	21U	,	? 21
		-	-	-		

 $\therefore 21 \rightarrow U$

Question 31

2400		<u> </u>								
Ī	0	1	2	3	4	5	6	7	8	9
0	А	Q	E	R	С	X	0	N	E	Н
1	D	G	В	F	Q	Р	D	Y	K	М
2	Х	Μ	L	М	К	Р	C	J	W	V
3	Ν	Р	U	S	В	Q	1	G	В	F
4	0	С	L	G	W	Y	Н	Т	U	А
5	Н	Ι	Y	K	R	S	L	F		E
6	Z	N	0	V	J	А	G	J	Z	D

The columns of the matrix are numbered from 0 to 9 and rows are numbered form 0 to 6. A letters form this matrix can be represented first by its row and next by its column. For example, N can be represented by 30 or 61 etc. Now find the answer for the following question

(4) 1

31. Identify the set of numbers corresponding to the word MATCH

(1) 23, 10, 43, 40, 56 (2) 21, 49, 43, 41, 64 (3) 21, 65, 47, 26, 50 (4) 19, 46, 47, 04, 46 Answer (3)

Solution

MATCH → 21, 65, 47, 26, 50

32.

Question 32: In the following question two statements are followed by four conclusions numbered I, II, III and IV. You have to take the two given statements to be true even if they seem to be at variance form commonly known facts. Read all the conclusions together and then decided which of the given conclusions logically follows form the two given statements

Statements

(a) All red are green

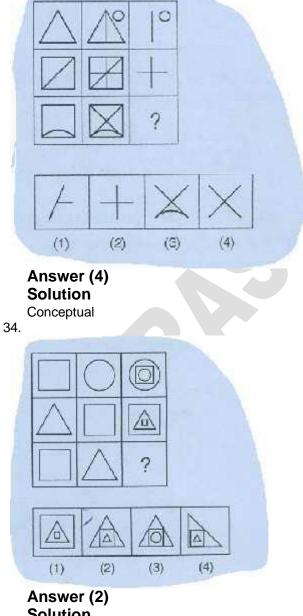
(b) All green are white

Conclusions

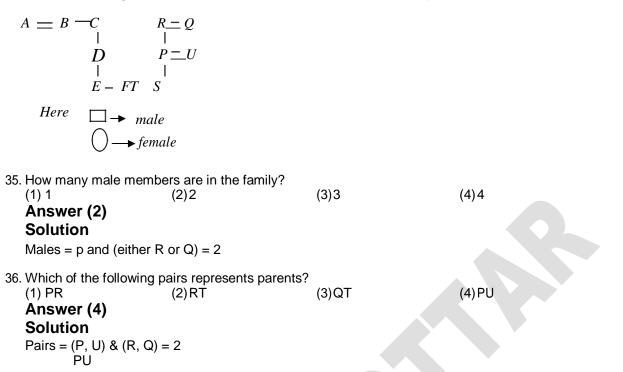
(i) Some green are red
(ii) Some white are red
(iii) Some red are not white
(iv) All white are green
(1) Only I and II follows

(2) Only II and III follows
(3) Only I and IV follows
(4) Only I and IV follows
Answer (1)
Solution
Conceptual

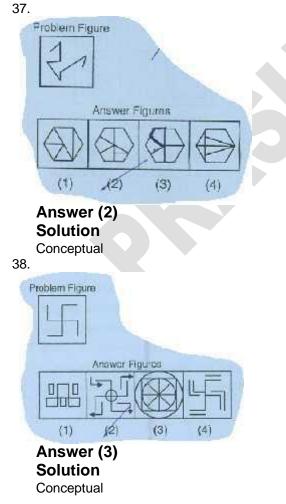
Questions 33 – 34: Each of the items 33-34 consists of a square of 9 cells in three rows and three columns. The designs in each row or column follow the same rule. Choose the correct answers form among the given alternatives to suit the cell indicated by the question mark 33.



Solution Conceptual Questions 35 – 36: P, Q, R, S, T, U are six members of a family. P is son of R and T is the daughter of P, S is the daughter of U, who is the mother of T, Q is the spouses of R

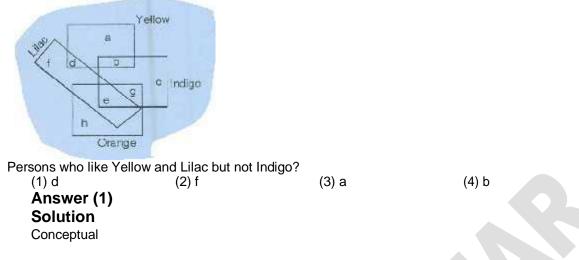


Questions 37 – 38: in each of the questions a problem figure is followed by four answer figures. The problem figure is embedded in one of the answer figures. Find out that answer figure

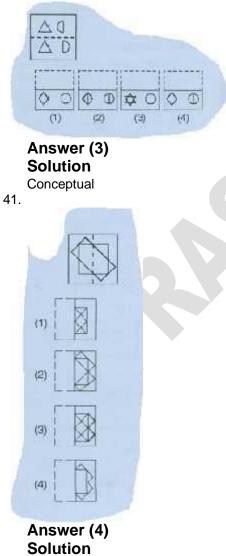


39.

Question 39: In the following diagram, there are four rectangles labeled as Liac, Yellow, Indigo and Orange. Rectangle 'Lilac' represents the persons who like Lilac, 'Yellow' for those who like Yellow, 'Indigo' for those who like Indigo and 'Orange' for those who like Orange. Study the diagram and carefully answer the question



Questions 10 – 41: In each of the questions a transparent sheet with a pattern is given. Find out from among the given alternatives as to how the pattern would appear when the transparent sheet is folded along the dotted line 40.



Solution Conceptual

Questions 42: Read the information carefully and answer the question 42

- P \square Q means P is the brother of Q P \triangle Q means P is the father of Q P + Q means P is the mother of Q P \notin Q means P is the husband of Q
- P Q means P is the sister of Q

 \boldsymbol{F}

42. Four statements 1, 2, 3, 4 are given which statement is correct form the

Answer (3) Solution

 $A \notin B - C\Delta + E = F$

$$A \longrightarrow B \longrightarrow C$$

$$? \qquad | \\ D \\ | \\ E -$$

∴ B is aunt of D

Expression

A∉B–C∆+E ⊔⊫

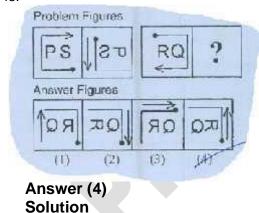
Statements

(1) C is the father or E

(2) D is the grandmother of F

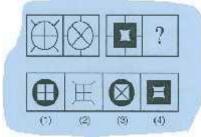
(3) B is the aunt of D (4) A is the father of D

Questions 43 – 45: In the problem figures in each question there is a definite relationship between the first tow figures. From the set of the four answer figures given, find the figure that would establish the same relationship between the next tow figures 43.

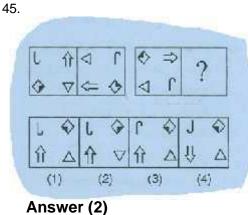


Conceptual

44.

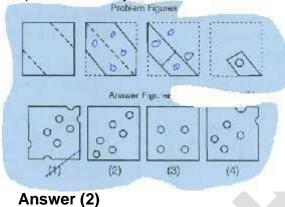


Answer (4) Solution Conceptual



Answer (2) Solution Conceptual

46. A piece of paper is folded and punched as shown below in the problem figures. How will it appear when opened? Choose your answer from the answer figures



Solution

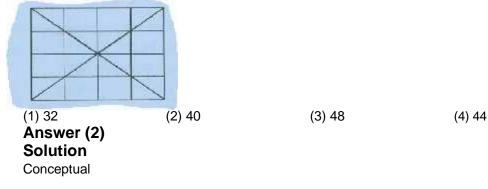
Conceptual

47. Find the mirror image of the word 'PIONEER;

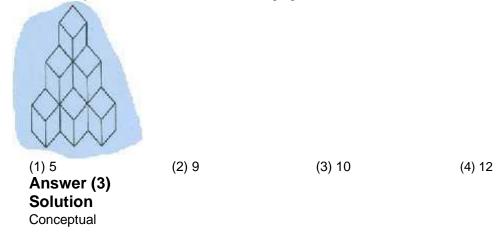
(1) REENIOL	PIONEER (2)
(3) REENIOP	(4) 90INEER

Answer (2) Solution Conceptual

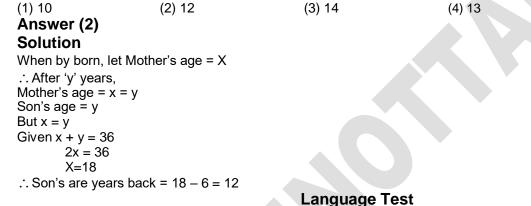
48. Find the number of triangles in the figure



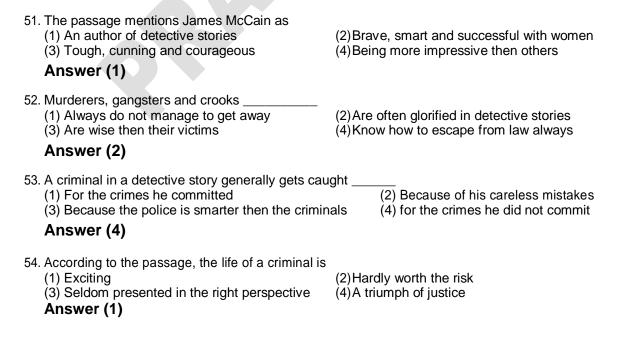
49. How many cubes are there in the following figure?



50. A mother said to her son "I was as old as you are at preset ant the time of your birth". If the mother's age is 36 years now the son's age 6 years back was



Questions (51 – 55): Read the following passage and choose the correct option from those given below to answer the questions. Detective stories tend to glorify crime murders, gangsters and crooks of all kinds who are described as tough, cunning and courageous individuals who know how the take care of themselves and how to get what they want. In James Mc Cain's the postman Always Rings Twice, for instance, the villain is much more impressive than his victim. He is casual, brave, smart and successful with women. It is true that he finally gets caught. But he is punished for a crime that h did not commit, so that his conviction is hardly a triumph of justice. Besides, looking back over the exciting life of the criminal, the reader might conclude that it was worth the risk



55. The passage tells that detective stories
(1) Make interesting reading
(3) Encourage readers to condemn crimes
Answer (4)

(2) Are hardly worth reading(4) Tend to create wrong notion about crime and punishment

Questions 56 – 60: Read the following poem and answer the questions given after it. The Eagle He clasps the crag with crooked hands. Close to the sun in lonely lands. Ringed with the azure world he stands. The wrinkled sea beneath him crawls. He watches form this mountain walls. And like a thunderbolt he falls

56.	 6. What is the eagle doing in the poem? (1) Dying of old age (3) Learning joyfully to fly Answer (2) 		(2) Hunting the prey(4) Keeping watch over the young ones		
57.	What does 'azure world (1) Forest Answer (2)	' refer to? (2) The sky	(3) The cliff	(4) Nature	
58.	'The wrinkled sea benea (1) The movement of the (3) The clasping of the p Answer (1)	e waves	es the poet mean by 'cra (2) The roaring of the se (4) the fight of the bird		
59.	The rhyme scheme follo (1) ab ab ab Answer (3)	owed in the poem is (2) ba ba ba	(3) aaa bbb	(4) bbb aaa	
60.	"He clasps the crag with (1) Rhyming words Answer (4)	n crooked hands". The lir (2) Assonance	ne is an example for (3) Simile	(4) Alliteration	
61.			The first and the last sent In the paragraph to make	ences are given. Find the order in it a meaningful one	
S1.	In 1739, Nadir Shah, the	e mighty king of Iran, inva	aded India		
S2.			<u> </u>		
S3.			-		
S4.			-		
S5.			-		
S6.	The Peacock throne bui	ilt by Shah Jahan was als	so taken away by him		
Ρ-	\rightarrow After a stay of two mo	nths, the went back to Ira	an		
Q -	\rightarrow He defeated the Mugh	nal army in the bate of ka	arnal		
R -	\rightarrow He took with him imm	ense wealth as well as th	ne Kohinoor diamond		

S → This was followed by the cruel massacre and reckless plunder of Delhi
 (1) SPRQ
 (2) QPSR
 (3) RQPS
 (4) QSPR
 Answer (4)

Question 63 – 64: Choose the word which best fills the blank from the four options given

62. The state in which the few govern the may is (1) Monarchy (2) Oligarchy (3) Plutocracy (4) Autocracy **Answer (2)**

	Air pollution can (1) Alleviate Answer (4)	(2)Alienate	(3) Abdicate	(4) Aggravate			
	identify the set of words (1) Pompous, ridiculous, (3) Analysis, philosophy, Answer (3)	photography	(2) Penance, science, p (4) Poisonous, vocalize,				
65.			· · · · · · · ·	uisitive mind made him an person (4) Erudite			
	The survival of mankind (1) Regularization Answer (3)						
	Mary was attacked by a (1) Swarm Answer (1)	(2)Herd	(3)Troop	(4) Crowd			
	"Meet me at the new bui (1) Sight Answer (3)	lding at noon", the (2)Cite	e architect said (3) Site	(4) Seat			
69.	That which cannot be co (1) Incomprehensible Answer (4)		(3) Illegible	(4) Incorrigible			
mos clea hon	Question 70 – 74: In the following passage there are some blanks that are numbered. Fill in the blanks by selecting the most appropriate word from the given options. The body were (120) (121) after months of cleaning and packing, they were moving into their new home. Boxes lay in a neat (122) in the hall of their old home, full of their clothes, toys and books. When the removal van arrived, they helped to big and (123) movers carry the light boxes to the van. Their new house was just (124) blocks away from their school						
70.	(1) Annoyed Answer (3)	(2) Worried	(3) Excited	(4) Horrified			
71.	(1) Finally Answer (1)	(2) Firstly	(3) Hardly	(4) Rarely			
	(1) Bunch Answer (4)	(2) Bundle	(3)Pack	(4) Pile			
	(1) Scrawny Answer (4)	(2) Weedy	(3)Lanky	(4) Burly			
	(1) Few Answer (2)	(2) A few	(3)Many	(4) Less			
Qu	estions 75 – 76: Select	the meaning of the give	ven phrase/idioms				
	A						

75. A man of straw	
(1) A man gifted with talents	(2) A greedy man
(3) A man of little worth	(4) A common man
Answer (3)	

76.	To set one's face agains (1)To judge by appeara (3)To get out of difficult Answer (4)	nce (2)	To look at one steadily to oppose with determination	on		
Qu	estions 77 – 78: Iden	tity the part in the	e following sentences t	hat is incorrect		
77.	No sooner did the bell ra (1)	ng then there was/ a (2) (3)	a scramble for/ getting out c (4)	of the class		
	Answer (1)					
78.	Though senior in age/ h (1)	is father is/ junior the (2) (3	en/ may father in service			
	Answer (3)					
Qu	estions 79 – 81: Sele	ct the word which	h means the opposite o	of the given word/ underlined word		
79.	Humility (1) Integrity Answer (4)	(2) Disgrace	(3)Modesty	(4) Pride		
80.	Relinquish (1) Abandon Answer ()	(2) Accept	(3)Resign	(4) Renounce		
81.	Harish eats cakes with g (1) Craze Answer (3)	great relish but he ha (2)Appetite	as a for wine (3)Distaste	(4) Hunger		
82.	Rema's mother scolded (1) Innocent Answer (2)	her for being indoler (2)Lazy	nt. The word 'indolent' mear (3)Energetic	ns (4) Angry		
83.	Our school's efficacious (1) Unavailing Answer (4)	dance fest raised fu (2)Bootless	nds for charity. The word 'e (3)Abortive	fficacious' means (4) Effectual		
Qu	estions 84 – 85: Iden	tify the word corr	rectly spelt from the op	tions given		
84.	(1) Randezvus Answer (3)	(2)Randezvous	(3)Rendezvous	(4) Rendezvus		
85.	(1) Treacherous Answer (1)	(2) Tracherus	(3)Treacherous	(4) Tracherous		
Questions 86 – 88: Choose the most appropriate phrasal verbs to complete the sentences						
	(1) Contrasts between Answer (1)	(2)Contrasts off	nmeasurable the lig (3)Contrasts with	ghter and the darker side of life (4)Contrasts among		
87.	How did the accident(1) Come by Answer (2)	? (2)Come about	(3)Come across	(4)Come over		
88.	The host was easily (1) Taken after Answer (4)	by sweet wo (2)Taken off	ords (3)Taken up	(4)Taken in		

scolded at school 89. I often ____ (1) Would get (2) Get (3) Will get (4) Got Answer (2) 90. There are various activities for us to in our leisure time (2) Inspire (4) Contribute (1) Pursue (3) Utilise Answer (1) 91. "Mind your own business" he said (1) Meekly (4) Hardly (2) Sharply (3) Softly Answer (2) 92. We cannot the educational policy as a panacea to all academic illness (1) Look after (2) Look down (3) Look into (4) Look upon Answer (4) early, I will meet her 93. If I _____ (1) Had gone (2) Went (3) Go (4) were gone Answer (3) 94. You never call me (2) Did you (1) Do you (3) Don't you (4) had you Answer (1) 95. The play Macbeth is a tragedy of a man who was with great qualities (1) Empowered (3) Privileged (2) Obsessed (4) Endowed Answer (4) 96. It was the most dreadful accident I ever (3) Will, seen (1) Have, seen (2) has, seen (4) had, seen Answer (4) 97. I have been studying hard to may examinations (1) Get up (2) Get around (3) Get along (4) Get through Answer (4) 98. Let's play the game of chess (1) Will we (3) Shall we (4) Shouldn't we (2) Won't we Answer (3) 99. The council threatened to launch an indefinite strike form next mother to their demands (1) Has, press (2) had, press (3) Did, get (4) Had, get Answer (1) 100. A short piece of writing on a tomb is know as (1) Epitome (2) Epistle (3) Epilogue (4) Epitaph Answer (4)

Questions 89 – 100: Choose the most appropriate answer from the options given