



SSC CHSL- MODEL PAPER

ENGLISH COMPREHENSION

Q1.Directions: In these questions the sentences have been given in **Active/ Passive Voice**. From the given alternatives choose the one which best expresses the given sentence in Passive/Active Voice.

The principal kept the staff members waiting

- (a)The staff members are kept waiting for the principal.
- (b)The staff members were kept waiting by the principal.
- (c)The staff members were waiting for the principal.
- (d)The staff members were being kept waiting by the principal.

Q2.Directions: In these questions the sentences have been given in **Active/ Passive Voice**. From the given alternatives choose the one which best expresses the given sentence in Passive/Active Voice.

A lion does not eat grass however hungry he may be.

- (a)Grass is not eaten by a lion however hungry he may be.
- (b)Grass is not being eaten by a lion however hungry he may be.
- (c)Grass is eaten not by a lion however hungry he may be.
- (d)Grass is being not eaten by a lion however hungry he may be.

Q3.Directions : In these questions choose the word opposite in meaning to the word given in bold.

ALTERCATION

- (a) explanation
- (b) challenge
- (c) compromise
- (d) opposition

Q4.Directions : In these questions choose the word opposite in meaning to the word given in bold.

IN TOTO

- (a)bluntly
- (b) partially
- (c) entirety
- (d)strongly

Q5.Directions: In the following questions, a sentence has been given in **Direct/Indirect Speech**. Out of the four alternatives suggested, select the one which best expresses the same sentence in Indirect/Direct Speech.

He said, "Let Hari come with us, mother. I'll take care of him"

- (a)He requested his mother to let Hari come with them as he will take care of him.
- (b)He informed his mother to let Hari come with them as he would take care of him.
- (c)He told his mother to let Hari come with them as he would take care of him.

(d)He told to his mother let Hari come with us as he would take care of him.

Q6.Directions: In the following questions, a sentence has been given in **Direct/Indirect Speech**. Out of the four alternatives suggested, select the one which best expresses the same sentence in Indirect/Direct Speech.

She said to me, "What can I do for you?"

- (a)She asked me what she could do for me.
- (b)She asked me what can she do for me.
- (c)She asked me what she can do for me.
- (d)She asked me whether she can do anything for me

Q7. Directions : In each questions read each sentence to find out the whether there is **any error** in it. The error if any will be in one part of the sentence. The number of that part is the answer. Ignore the errors of punctuations if any.

Based on the newspaper reports (1)/ we can conclude that (2)/ many accidents caused by reckless driving (3)/ No error (4)

- (a) Based on the newspaper reports
- (b) we can conclude that
- (c) many accidents caused by reckless driving
- (d)No error

Q8. Directions : In each questions read each sentence to find out the whether there is **any error** in it. The error if any will be in one part of the sentence. The number of that part is the answer. Ignore the errors of punctuations if any.

Unless you do not give (1)/ the keys of the safe (2)/you will be shot (3)/ No error (4)

- (a) Unless you do not give
- (b) the keys of the safe
- (c) you will be shot
- (d)No error

Q9.The lame boy tried to climb up the staircase without _____ help

- (a)little
- (b)any
- (c) some
- (d) many

Q10.The girl was very pleased _____ herself

- (a)In
- (b)on
- (c)over
- (d)with

Q11.Directions: In the following questions, four alternatives are given for the **Idiom/Phrase** printed in bold in the sentence. Choose the alternative which best expresses the meaning of the Idiom/ Phrase.

The effort to trace the culprit was a wild goose chase.

- (a) fruitful hunting
- (b)futile search



- (c)ideal seeking
(d)genuine effort

Q12.Directions: In the following questions, four alternatives are given for the **Idiom/Phrase** printed in bold in the sentence. Choose the alternative which best expresses the meaning of the Idiom/ Phrase.

He is accused of sitting on the fence.

- (a)observing the scene
(b)resting on fence
(c)hesitating which side to take
(d)sitting back and enjoying the fun

Q13. Directions: Out of the four alternatives, choose the one which can be **substituted** for the given words/sentence.

To cut something Into two pieces.

- (a)Severe
(b) Sever
(c) Sewer
(d) Sow

Q14. Directions: Out of the four alternatives, choose the one which can be **substituted** for the given words/sentence.

The sound of the funeral bell

- (a)Knell
(b)Spell
(c)Dong
(d)Ding-dong

Q15. Directions : In these questions, the first and last sentence of the passage are numbered 1 and 6. The rest of the passage is split into four parts and named P,Q,R,S . These four parts are not given in proper order. Read the sentences and find out which of the four combinations is correct.

1. Agriculture
P. cotton for our clothes
Q.raw materials like jute
R.and sugarcane for our industries
S.gives us food
6. and food for cattle.

- (a) SRQP
(b)RQPS
(c) QPRS
(d)SPQR

Q16. Directions : In these questions, the first and last sentence of the passage are numbered 1 and 6. The rest of the passage is split into four parts and named P,Q,R,S . These four parts are not given in proper order. Read the sentences and find out which of the four combinations is correct.

- (1) Creating and modifying a school timetable is a complex task.
(P)'T Plus' closely models the real world timetable creation tasks.

(Q)So is the job of computerizing it.

(R)All timetables can be viewed on the screen before they are actually printed.

(S)It has a comprehensive manual and useful glossary of terms.

(6) It relieves you of the anxiety to get it all right.

- (a) QPSR
(b) RPS0
(c) SPRQ
(d) PQSR

Q17.Directions: In the following questions, a sentence/ part of the sentence is printed in bold. Below are given alternatives which may **improve the bold part**. Choose the correct alternative. In case no improvement is needed, your answer is No Improvement.

I prefer to ride than to walk.

- (a) riding to walking
(b)ride to walk
(c) riding than walking
(d) No Improvement

Q18.Directions: In the following questions, a sentence/ part of the sentence is printed in bold. Below are given alternatives which may **improve the bold part**. Choose the correct alternative. In case no improvement is needed, your answer is No Improvement.

The struggle for independence is gaining movement every day.

- (a)motion
(b)movement
(c)momentum
(d)No improvement

Q19.Directions: In the following questions out of the four alternatives, choose the one which best expresses, the meaning of the given word.

DILIGENT

- (a)industrious
(b) indifferent
(c) intelligent
(d) energetic

Q20.Directions: In the following questions out of the four alternatives, choose the one which best expresses, the meaning of the given word.

FLABBERGASTED

- (a)scared
(b)embarrassed
(c)dumbfounded
(d)humiliated

Q21. DIRECTIONS : YOU HAVE ONE BRIEF PASSAGE WITH LIVE QUESTIONS. READ THE PASSAGE CAREFULLY AND CHOOSE THE BEST ANSWER TO EACH QUESTION OUT OF THE FOUR ALTERNATIVES.

John had never thought much about the origin of wealth or inequalities in life. It was his firm belief that if this



world was not good the next would be good and this faith sustained him. He was not like some others whom he knew who would sell their souls to the devil. He always thought of God before doing anything. He lived the life of an honest man. He had not married but did not desire another man's wife. He believed that women weakened men as was described in the story of Samson and Delilah.

To sell one's soul to the devil" means

- (a) suppressing one's conscience.
- (b) giving up goodness in exchange for evil.
- (c) giving up one's honesty for the sake of monetary benefits.
- (d) to sell oneself to earn livelihood.

Q22. John thought that women weakened men because

- (a) he thought that women were evil.
- (b) he believed that a woman was a fancy devil.
- (c) he thought that a woman would spoil his life.
- (d) he was convinced that what the story of Samson and Delilah illustrates is correct.

Q23. It was John's belief that

- (a) one can be happy Only by remaining a bachelor.
- (b) the world is a happy place.
- (c) there is no other world.
- (d) one must lead an honest life.

Q24. By not desiring another man's wife John showed that

- (a) he wanted to get married.
- (b) he was a man of principles.
- (c) he felt sorry for other men.
- (d) he had no desire for another's wealth.

Q25. From the above passage we understand that John was

- (a) not highly educated.
- (b) a man of simple faith
- (c) a deeply pessimistic man.
- (d) a scholar of scriptures.

NUMERICAL APTITUDE

Q26. The value of a property decreases every year at the rate of 5%, if its present value is Rs. 411540, what was its value 3 years ago?

- (a) 450000
- (b) 460000
- (c) 475000
- (d) 480000

Q27. A sum of money placed at compound interest doubles itself in 15 years. In how many years, it would amount to eight times of itself at the same rate of interest ?

- (a) 30 years

- (b) 45 years
- (c) 21 years
- (d) 60 years

Q28. A man goes downstream with a boat to some destination and returns upstream to his original place in 5 hours. If the speed of the boat in still water and the stream are 10 km/hr and 4 km/hr respectively, the distance of the destination from the starting place is :

- (a) 16 km
- (b) 18 km
- (c) 21 km
- (d) 25 km

Q29. The area of the triangle formed by the graphs of the equations $x = 0$, $2x + 3y = 6$ and $x + y = 3$ is;

- (a) 1 sq. unit
- (b) 3 sq. units
- (c) $9/2$ sq. units
- (d) $3/2$ sq. units

Q30. The largest 4-digit number exactly divisible by each of 12, 15, 18 and 27 is:

- (a) 9690
- (b) 9720
- (c) 9930
- (d) 9960

Q31. The milk and water in a mixture are in the ratio 7:

5. When 15 litres of water are added to it. The ratio of milk and water in the new mixture becomes 7:8. The total quantity of water in the new mixture is

- (a) 35 litres
- (b) 35 litres
- (c) 40 litres
- (d) 45 litres

Q32. Four milkmen rented a pasture. M put to graze 16 cows for 3 months and N 42 cows for 4 months, O 18 cows for 6 months and P 42 cows for 2 months. If M's share of rent be Rs. 2400, the rent paid by O is.

- (a) Rs. 3200
- (b) Rs. 4200 18.
- (c) Rs. 4000
- (d) Rs. 5400

Q33. Two pipes can fill a tank in 15 hours and 20 hours respectively, while the third pipe can empty it in 30 hours. If all the pipes are opened simultaneously the empty tank will be filled in

- (a) 10 hours
- (b) 12 hours
- (c) 15 hours
- (d) $31/2$ hours

Q34. ABC is a right angle triangle and right angle at B and $\angle A = 60^\circ$ and $AB = 20$ cm, then the ratio of sides BC and CA is :



- (a) $\sqrt{3} : 1$
(b) $1 : \sqrt{3}$
(c) $\sqrt{3} : \sqrt{2}$
(d) $\sqrt{3} : 2$

Q35. If * represent a number, then the value of * in

$$5^{\frac{3}{*}} \times 3^{\frac{1}{2}} = 19$$

- (a) 7
(b) 4
(c) 6
(d) 2

Q36. Given that $\sqrt{5} = 2.24$, then the value of $\frac{3\sqrt{5}}{2\sqrt{5}-0.48}$ is

- (a) 0.168
(b) 1.68
(c) 16.8
(d) 168

Q37. A train running at the speed of 84 km/hr passes a man walking in opposite **direction** at the speed of 6 km/hr in 4 seconds. What is the length of train (in meter) ?

- (a) 150
(b) 120
(c) 100
(d) 90

Q38. One of the factors of the expression $4\sqrt{3}x^2 + 5x - 2\sqrt{3}$ is:

- (a) $4x + \sqrt{3}$
(b) $4x + 3$
(c) $4x - 3$
(d) $4x - \sqrt{3}$

Q39. A sum of Rs. 1500 was lent partly at 5% and partly 8% simple interest. The total interest received after 3 years is Rs. 3

Q0. The ratio of money lent at 5% to that at 8% is:

- (a) 5:8
(b) 8:5
(c) 31:6
(d) 16:15

Q40. In two types of stainless steel the ratio of chromium and steel are 2 :11 and 5: 21 respectively. In what proportion should the two types be mixed so that the ratio of chromium to steel in the mixed type becomes 7: 32 ?

- (a) 2: 3
(b) 3: 4
(c) 1 : 2
(d) 1 :3

Q41. A and B together can do a piece of work in 10 days. A alone can do it in 30 days. The time in which B alone can do it is :

- (a) 10 days

- (b) 12 days
(c) 15 days
(d) 20 days

Q42. A merchant buys an article for Rs. 27 and sells it at a profit of 10% of selling price. The selling price of the article is :

- (a) Rs. 29.70
(b) Rs. 30
(c) Rs. 37
(d) Rs. 32

Q43. A sphere and a cylinder have equal volume and equal radius. The ratio of the curved surface area of the cylinder to that of the sphere is

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

Q44. The last digit of 3^{40} is

- (a) 1
(b) 3
(c) 7
(d) 9

Q45. A trader allows two successive discounts of 30% and 15% on selling an article. If he gets Rs. 476 for that article, find its marked price.

- (a) 700
(b) 400
(c) 900
(d) 800

Q46. Three cubes of sides 6cm, 8cm, 1cm are melted to form a new cube. The surface area of the new cube is:

- (a) 486cm^2
(b) 496cm^2
(c) 256cm^2
(d) 658cm^2

Q47. The number of spherical bullets that can be made out of solid cube of lead whose edge measures 44 cm each bullet being of 4 cm diameter is (take $\pi = 22/7$)

- (a) 2541
(b) 2451
(c) 2514
(d) 2415

Q48. If θ be an acute angle and $7 \sin^2\theta + 3 \cos^2\theta = 4$, then the value of $\tan \theta$ is :

- (a) $\sqrt{3}$
(b) $1/\sqrt{3}$
(c) 1
(d) 0

Q49. If $\cos 20^\circ = m$ and $\cos 70^\circ = n$ then the value of $m^2 + n^2$ is :



- (a) $1/2$
- (b) 1
- (c) $3/2$
- (d) $1/\sqrt{2}$

Q50. In a village 30% of the population is literate. If the total population of the village is 6,600, then the number of literate is:

- (a) 1980
- (b) 4620
- (c) 2200
- (d) 3280

GENERAL INTELLIGENCE & REASONING

Q51.Direction: In each of the following questions, select the related word from the given alternatives.

Botany : Plants :: Entomology : ?

- (a) Birds
- (b) Plants
- (c) Insects
- (d) Snakes

Q52.Direction: From among the given alternatives select the one in which the set of numbers is most like the set of numbers given in the question.

Given set : (3, 4, 5)

- (a) (6, 8, 10)
- (b) (9, 12, 15)
- (c) (6, 7, 8)
- (d) (12, 16, 20)

Q53.Direction: In each of the following questions, select the related letter from the given alternatives.

RED : EFS :: BLUE : ?

- (a) FVMC
- (b) DTKA
- (c) FUNC
- (d) GVND

Q54. A is B's brother. C is A's father. D is C's sister and E is D's mother. How is B related to E?

- (a) Granddaughter
- (b) Great-granddaughter
- (c) Grandaunt
- (d) Daughter

Q55.Direction: In The following Question you have to identify the correct response from the given premises stated according to following symbols:

In the following question you have to identify the correct response from the given premises stated according to following symbols. If '+' means '÷', '-' means '×', '÷' means '+' and × means '-', then

$$63 \times 24 + 8 \div 4 + 2 - 3 = ?$$

- (a) 54
- (b) 66
- (c) 186

- (d) 48

Q56. Find the odd man out from the given responses ?

- (a) Sociologist
- (b) Economist
- (c) Neurologist
- (d) Educationist

Q57. Find the odd man out from the given responses ?

- (a) Sari
- (b) Frock
- (c) Skirt
- (d) Turban

Q58. Find the odd man out from the given responses ?

- (a) Hinduism
- (b) Communism
- (c) Buddhism
- (d) Jainism

Q59. A child walks 25 feet towards North, turns right and walks 40 feet, turns right again and walks 45 feet. He then turns left and walks 20 feet. He turns left again walks 20 feet. Finally, he turns to his left to walk another 20 feet. In which **direction** is the child from his starting point?

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

Q60. Rana travels 10km North, turns left and travels 4 km and then again turns right and covers another 5 km. He then turns to right-hand side and travels another 4 km. How far is he from the point of starting of his journey?

- (a) 5 km
- (b) 4 km
- (c) 15 km
- (d) 10 km

Q61.Directions: In each of the following questions a series is given with one term missing. Choose the correct alternative from the given ones that will complete the series

3, 15, 35, 63, ?

- (a) 77
- (b) 84
- (c) 99
- (d) 98

Q62.Directions: In each of the following questions a series is given with one term missing. Choose the correct alternative from the given ones that will complete the series

22, 28, 25, 31, 28, ?

- (a)25
- (b)34
- (c)36
- (d)39

Q63. Direction: Which one set of letters when sequentially placed at the gaps in the given letters series shall complete .

- _bbm_amb_m_a_bbm
- (a)mbabm
 - (b) ambbm
 - (c) mabam
 - (d) abmab

Q64.If BROTHER is coded as 2456784. SISTER is coded as 919684, what is the code for ROBBERS?

- (a)18, 15, 22, 5, 18, 19
- (b)4562 684
- (c)9245 784
- (d)4522849

Q65.If "GIVE" is coded as "5137" and "BAT" is coded as "924", how will "GATE" be coded in the same code ?

- (a) 2547
- (b)5427
- (c)5724
- (d)5247

Q66.If CLOCK is written as KCOLC, how STEPS can be written in that code ?

- (a) SPEST
- (b) SEPTS
- (c) SPETS
- (d) SPSET

Q67.Direction: In the following questions a word is followed by four other words one of which cannot be formed by using the letter of the given word. Find this word.

- BLANDISHMENT
- (a)BOARD
 - (b) METAL
 - (c) SHAPE
 - (d) CRASH

Q68.Direction:In the following questions a word is followed by four other words one of which cannot be formed by using the letter of the given word. Find this word.

- THOROUGHLY
- (a)Rough
 - (b) Glory
 - (c) Thorny
 - (d) Though

Q69.Two words are given. Using the letters contained in these two words, which one of the following words can be formed?

- (A) LEADER (B) CLIMB
- (a) MINUTE
- (b) BLEAK
- (c) DEBATE
- (d) MIRACLE

Q70.If CLOCK is written as KCOLC, how STEPS can be written in that code ?

- (a) SPEST
- (b) SEPTS
- (c) SPETS
- (d) SPSET

Q71.Directions : Given below are two Matrices of 25 cells each containing two classes of alphabets. The columns and rows of Matrix I are numbered from 0 to 4 and those of Matrix II from 5 to 9. A letter from these matrices can be represented first by its row number and next by its column number. For example, 'B' can be represented as 00,14 etc. Similarly 'M' can be represented by 55, 67 etc. In each of the following questions (92 to 96) identify one set of number pair out of 1, 2, 3 and 4 which represents the given word.

Matrix-I

	0	1	2	3	4
0	B	D	E	T	O
1	D	E	T	O	B
2	E	B	O	D	T
3	T	O	B	E	D
4	O	T	D	B	E

Matrix-II

	5	6	7	8	9
5	M	U	I	L	R
6	U	L	M	R	I
7	I	M	R	U	L
8	L	R	U	I	M
9	R	I	L	M	U

Cell numbers:43, 96, 30, 11

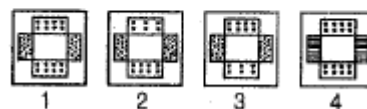
- (a)DIRE
- (b) BILE
- (c) BIDE
- (d) BITE

Q72.Directions: which of the answer figures is exactly the mirror image of the given figure?

Question Figure :



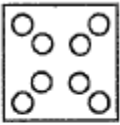
Answer Figures :



- (1)
- (2)
- (3)
- (4)
- (a)[1]
- (b)[2]
- (c)[3]
- (d)[4]

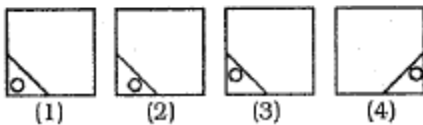
Q73.Directions: A piece of paper is folded and cut as shown below. How will it appear when opened? Select your response from the answer figures.

Question Figure :



Find out the manner in which the paper is folded and punch is made from the responses given :

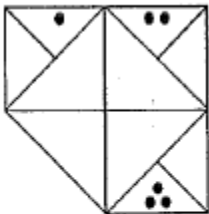
Question Figure :



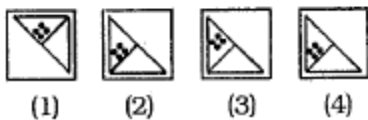
- (a)[1]
- (b)[2]
- (c)[3]
- (d)[4]

Q74.Directions: Which answer figure will complete the question figure?

Question Figure :



Answer Figures :



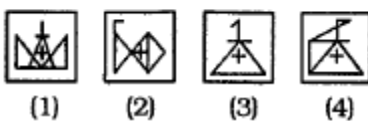
- (a)[1]
- (b)[2]
- (c)[3]
- (d)[4]

Q75.Directions: In which answer figure is the given figure embedded?

Given Figure :



Answer Figures :



- (a)[1]
- (b)[2]
- (c)[3]

(d)[4]

GENERAL AWARENESS

Q76.The southernmost point of India is

- (a) Kanyakumari
- (b) Rameswaram
- (c) Dhanushkodi
- (d) Indira Point

Q77.Which State possesses biggest coal reserve ?

- (a) Bihar
- (b) Jharkhand
- (c) Madhya Pradesh
- (d) Orissa

Q78. Mahatma Gandhi was first arrested during Satyagrah in the year

- (a) 1906
- (b) 1908
- (c) 1913
- (d) 1917

Q79. Which is not the objective of Public Procurement and Distribution system followed by Indian Government ?

- (a) Maintain price stability through creation of buffer stocks
- (b) Protect the interests of both consumers and poor farmers
- (c) Control the production of food grains
- (d) Reduce personal and regional inequality in the distribution

Q80. A passenger standing in a bus is thrown outward when the bus takes a sudden turn happens due to

- (a) Outward pull on him
- (b) Inertia of motion
- (c) Change in momentum
- (d) Change in acceleration

Q81. ATM stands for

- (a) Automatic Teller Machine
- (b) Automated Teller Machine
- (c) Automatic Tally Machine
- (d) Automated Tally Mechanism

Q82. According to the Indian Constitution the vacancy in the office of the President of India shall be filled within :

- (a) 1 month
- (b) 6 months
- (c) 3 months
- (d) 1 year

Q83. Which of the following countries has introduced "direct democracy"?

- (a) Russia
- (b) India
- (c) France



(d) Switzerland

Q84. Which of the following is a natural dye ?

- (a) Crystal violet
- (b) Aniline blue
- (c) Alizarin
- (d) Phenolphthalein

Q85. Gunpowder consist of a mixture of

- (a) sand and TNT
- (b) TNT and charcoal
- (c) nitre Sulphur and charcoal
- (d) Sulphur sand and charcoal

Q86. A is a high speed network that connect local networks in a city or town

- (a) LAN
- (b) MAN
- (c) WAN
- (d) TAN

Q87. The expansion for AIDS is

- (a) Active Immuno Deficiency Syndrome
- (b) Acquired Individual Disease Syndrome
- (c) Acquired Immuno Deficiency Syndrome
- (d) Acquired Immuno Disease Syndrome

Q88. Columba livia is the scientific name of

- (a) Pigeon
- (b) Snake
- (c) Rabbit
- (d) Shark

Q89. Sea weeds are important source of

- (a) iron
- (b) chlorine
- (c) bromine
- (d) iodine

Q90. The chemical behaviour of an atom depends upon

- (a) the number of protons in its nucleus
- (b) the number of neutrons in the nucleus
- (c) the number of electrons orbiting around the nucleus
- (d) the number of nucleons in the nucleus

Q91. If a copper wire is increased to double its length its resistance will become

- (a) four times
- (b) one fourth
- (c) double
- (d) half

Q92. Too much consumption of tea or coffee can result in deficiency of

- (a) Calcium
- (b) Vitamin C
- (c) Albumin
- (d) Vitamin B-12

Q93. The greatest threat to organisms and biodiversity is

- (a) process of habitat loss
- (b) Species extinction all over the world
- (c) Reduced carrying capacity of the habitat
- (d) Biodiversity hotspots.

Q94. The Headquarters of the Gadar party was at

- (a) Moscow
- (b) Berlin
- (c) San Francisco
- (d) Karachi

Q95. What is not true about the Government of India Act of 1919?

- (a) it is also known as the Montague Chelmsford Reforms
- (b) it paved the way for federalism by clearly separating the responsibilities of the Centre from the Provinces
- (c) it made the Central Executive responsible to the Legislature
- (d) it extended the practice of communal representation

Q96. The following is the head who looks after the welfare of the Persons with Disabilities:

- (a) Commissioner
- (b) Director
- (c) Director-General
- (d) Chief Commissioner

Q97. What is meant by fallowing?

- (a) shifting cultivation
- (b) leaving land, uncultivated
- (c) intensive farming
- (d) market gardening

Q98. What was not known to the Harappan people?

- (a) potter's wheel
- (b) fire
- (c) iron
- (d) wheat

Q99. Which of the following food crops has the maximum content of proteins ?

- (a) Cassava
- (b) Soyabean
- (c) Wheat
- (d) Maize

Q100. An antibiotic is

- (a) a chemical synthesized by a human cell against a microorganism
- (b) a chemical synthesized by a micro-organism against another micro-organism
- (c) a substance produced by blood cells against bacteria
- (d) a substance produced by blood cells against infection.



1b	2a	3c	4b	5c	6a
7c	8a	9b	10d	11b	12c
13b	14a	15d	16a	17a	18c
19a	20c	21c	22d	23d	24b
25b	26d	27b	28c	29d	30b
31b	32d	33b	34d	35a	36b
37c	38d	39d	40c	41c	42b
43b	44a	45d	46a	47a	48b
49b	50a	51c	52c	53a	54a
55b	56c	57d	58b	59d	60c
61c	62b	63a	64d	65d	66c
67b	68c	69d	70c	71d	72c
73a	74d	75d	76d	77b	78b
79c	80b	81a	82b	83d	84c
85c	86b	87c	88a	89d	90c
91c	92a	93a	94c	95c	96d
97b	98c	99b	100b		