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.
I expect you to complete this work before sunset.
(a)I expect you to be completed this work before sunset.
(b)I am expected you to complete this work before sunset.
(c)You are expected to complete this work before sunset.
(d)You are expected to be completed this work before sunset.

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.
Today I accomplished my task successfully.
(a)Today my task is accomplished successfully.
(b)Today my task has been accomplished successfully.
(c)Today my task accomplished successfully.
(d)Today my task was accomplished successfully.

Q3.Directions : In these questions choose the word opposite in meaning to the word given in bold.
AFFIRM
(a) refuse
(b) negate
(c) neglect
(d) avoid

Q4.Directions : In these questions choose the word opposite in meaning to the word given in bold.
SHIMMERING
(a) gloomy
(b) glimmering
(c) refreshing
(d) repining

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.
The teacher said to the student, "Why were you absent yesterday?"
(a)The teacher asked the student why had been he absent the previous day.
(b)The teacher asked the student why had he been absent the previous day.
(c)The teacher informed the student that why he had been absent the next day.
(d)The teacher asked the student why he had been absent the previous day.

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.
The mother said, "What can I do for you, my son ?"
(a)The mother said to her son what she could do for him.
(b)The mother asked her son what she did for him.
(c)The mother asked her son what she could do for him.
(d)The mother asked what she could do for him my son.

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.
John would have told(1)/you the truth (2)/ If you had asked him (3)/ No Error (4)
(a) John would have told
(b) You the truth
(c) If you had asked him
(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.
He said (1)/ that he will never(2)/ repeat the mistake (3)/ No error (4)
(a) He said
(b) that he will never
(c) repeat the mistake
(d)No error

Q9. He is indifferent _____ praise and blame
(a)in
(b)to
(c)for
(d)about

Q10. The criminal together with his associates _____ arrested
(a) are
(b)was
(c) were
(d) have

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.
I knew he had an axe to grind and turned down his offer of help.
(a)a blunt axe
(b)a sharp tongue
(c)a private interest to serve
(d)a tendency to fight

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.
In high spirits
(a)full of hope and enthusiasm
(b)under tremendous stress
(c)under the Influence of liquor
(d)mentally deranged

Q13. Directions: Out of the four alternatives, choose the one which can be **substituted** for the given words/sentence.
The first model of a new device
(a) Prototype
(b) Sculpture
(c) Icon
(d) Photograph

Q14. Directions: Out of the four alternatives, choose the one which can be **substituted** for the given words/sentence.
A tank where fish or water plants are kept
(a) Aquarium
(b) Sanatorium
(c) Nursery
(d) Aviary

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. It is far better to live for a short while
P.contribution to the world
Q.and make some significant
R.that is just idled away
S.than spend a long life
6. in gossiping and playing.
(a)RQSP
(b)SQPR
(c) Q PSR
(d) RQPS

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. The next morning I found myself somewhat refreshed but very hungry.
P.I asked him to let me help unload the vessel.
Q.I noticed I was near a large ship.
R.I went at once to the captain.
S.It was unloading a cargo of pig iron.
6. I wanted to earn money for food.

(a)PQRS
(b) QSRP
(c) PRSQ
(d) SRPQ

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.
When the Inspector of Police said this, we knew whom he was eluding.
(a)intending
(b) referring to
(c) hinting
(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.
They take their children for a drive in the charming countryside around Bangalore always.
(a)They take their children for a drive always in the charming countryside around Bangalore.
(b)They take their children always for a drive in the charming countryside around Bangalore.
(c)They always take their children for a drive in the charming countryside around Bangalore.
(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.
DOLEFUL
(a)mournful
(b)sober
(c)regretful
(d)cheerless

Q20.Directions: In the following questions out of the four alternatives, choose the one which best expresses, the meaning of the given word.
 IMPOST
(a) fertilizer
(b) dispatch
(c) tax
(d) postage

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.
Modern living has programmed outlives to a hectic monotonous schedule that we have forgotten-the gentle smile that once fleeted across the human face. Smile has the power to dissolve all worries. It has the all pervasive

ability to lift us from the abysmal depth of gloominess. We should not be cowed down by work pressure that a constant frown imprisons our face. In built confidence and positive attitude help a smile to blossom. A face bereft of smile makes us unarmed for it is the smile that is a pleasant weapon which resists all hurdles and problems that depress us. If we learn to smile in a crisis it shows that we have the forbearance and courage to face the crisis. A smile after all helps us preserve our perfect present unmindful of our past or future.

What is meant by programmed our lives ?
(a)We have set a mechanical routine.
(b)We like to become software engineers.
(c)We give various progammes.
(d)We give a set of instructions.

Q22. Which of the following statements is not hue in the context of the passage ?
(a)If we don t smile we are ruining our present.
(b)If we smile we are mad.
(c)The frown on our face is an indication of the stress.
(d)Confidence and optimism help us to be cheerful

Q23. The authors main objective in writing the passage seems to be
(a) to warn us of a dull future.
(b)to highlight the ill-effects of computers
(c) to enhance our skill of time-management.
(d)to unfold the healing powers of a gentle smile.

Q24. Smile Is referred to as a pleasant weapon because s
(a)it is harmful.
(b)it pierces the heart
(c)It helps us overcome our problems
(d)it is painful.

Q25. Choose the title most appropriate to the passage.
(a) Game of life
(b)Modern living
(c) Crisis management
(d) Effects of cheerful living

NUMERICAL APTITUDE
Q26. One type of liquid contains 20% water and the second type of liquid contains 35% of water. A glass is filled with 10 part of first liquid and 4 parts of second liquid. The water in the new mixture in the glass is:
(a) 37 %
(b) 46 %
(c) 85/7 %
(d) 170/7 %

Q27.A sum of Rs. 13360 was borrowed at 35/4% per annum compound interest and paid in two years in two equal annual installments. What was the amount of each installments?
(a) Rs. 5679
(b) Rs. 7569
(c) Rs. 7009
(d) Rs. 7500

Q28.A person can row a distance of one km upstream in ten minutes and downstream in four minutes. What is the speed of the stream ?
(a) 4.5 km/hr ,
(b) 4 km/hr
(c) 9 km/hr
(d) 5.6 km/hr

Q29. The perimeter of two similar triangles are 30cm and 20cm respectively .If one side of the first triangle is, 9 cm . Determine the corresponding side of the second triangle.
(a) 15 cm
(b) 6 cm
(c) 13.5 cm
(d) 5 cm

Q30. The product of two numbers is 396 × 576 and their LCM is 63
36. Find their HCF :
(a) 36
(b) 34
(c) 63
(d) 43

Q31. Acid and water are mixed in a vessel A in the ratio of 5:2 and in the vessel B in the ratio 8:
5. In what proportion should quantities be taken out from the two vessels so as to form a mixture in which the acid and water will be in the ratio of 9:4?
(a) 7:2
(b) 2:7
(c) 7:4
(d) 2:3

Q32.A, B and C started a business with R47,0
00. A puts in Rs. 5,000 more than B and B 3,000 more than C. The share of A out of the profit of Rs. 14,100 will be :
(a) Rs. 3,600
(b) Rs. 4,500
(c) Rs. 6,000
(d) Rs. 6,300

Q33.A cistern is normally filled in 8 hours but takes another 2 hours longer to fill because of a leak in its bottom. If the cistern is full, the leak will empty it in :
(a) 16 hours
(b)(c) 25 hours
(c)(b) 20 hours
(d) 40 hours

Q34. If $\cos^4\theta - \sin^4\theta = \frac{2}{3}$, then the value of $2\cos^2\theta - 1$ is :
(a) 0
(b) 1
(c) 2/3
(d) 3/2

Q35. $\frac{3.25 \times 3.20 - 3.20 \times 3.05}{0.064}$ is equal to:
(a) 1
(b) 1/2
(c) 1/10
(d) 10

Q36. The number which when multiplied with ($\sqrt{3}+\sqrt{2}$) gives ($\sqrt{12}+\sqrt{18}$) is
(a)$3\sqrt{2}-2\sqrt{3}$
(b) $3\sqrt{2}+2\sqrt{3}$
(c) $\sqrt{6}$
(d) $2\sqrt{3}-3\sqrt{2}$

Q37. In covering a certain distance, the speed of A and B are in the ratio of 3 :
4. A takes 30 minutes more than B to reach the destination. The time taken by A to reach the destination is:
(a) 1 hour
(b) 3/2 hours
(c) 2 hours
(d) 5/2 hours

Q38. If xy (x+y) = 1, then the value of $\frac{1}{x^3 y^3} - x^3 - y^3$ is:
(a) 0
(b) 1
(c) 3
(d) -2

Q39.A person borrows some money for 5 years and ratio of loan amount: total interest amount is 5:
2. Then find the ratio of loan amount : interest rate is equal to
(a) 2:25
(b) 2 : 1
(c) 5: 2
(d) 25:2

Q40. Three numbers are in the ratio 2 : 3 :
4. If the sum of their squares is 1856, then the numbers are:
(a) 8, 12 and 24
(b) 16 , 24 and 32
(c) 12, 18 and 24
(d) None of these.

Q41. Working 5 hours a day, A can complete a piece of work in 8 days and working 6 hours a day, B can complete the same work in 10 days. Working 8 hours, a day, they both can complete the work in:
(a) 3 days
(b) 4 days
(c) 4.5 days
(d) 5.4 days

Q42. Two items A and B are sold at a profit of 10% and 15% respectively, If the amount of profit received is the same, then the cost price of A and B may be
(a) Rs. 1,000, Rs. 1,500
(b) Rs 5,000, Rs. 2,000
(c) Rs. 3,000, Rs. 2,000
(d) Rs. 3,000, Rs. 5,000

Q43. If the height and the radius of the base of a cone are each increased by 100%, then the volume of the cone become
(a) double that of the original
(b) three times that of the original
(c) six times that of the original
(d) eight times that of the original

Q44.A rational number between 3/4 and 3/8 is :
(a) (a)7/9
(b)7/3
(c)5/9
(d)25/16

Q45. The Banker's discount on a bill due 6 months hence at 16% per annum is Rs. 2
16. The true discount is :
(a) 212
(b) 180
(c) 210
(d) 200

Q46. The volume of a sphere is $88/21 \times (14)^3$ cm³ the curved surface of the sphere is assuming $\pi = 22/7$.
(a)2424cm²
(b)2446cm²
(c)2484cm²
(d)2464cm²

Q47.A tank 40 m long, 30 m broad and 12 m deep is dug in a field 1000 m long and 30 m wide. By how much will the level of the field rise if the earth dug out of the tank is evenly spread over the field?
(a) 2 meter
(b) 1.2 meter
(c) 0.5 meter
(d) 5 meter

Q48. The value of $\frac{\sin A}{1+\cos A} + \frac{\sin A}{1-\cos A}$ is (0°<A<90°)
(a) 2 cosec A
(b) 2 sec A
(c) 2 sin A
(d) 2 cos A

(d)49 - 7 + 3 ÷ 5 × 8 = 24

Q49. If x sin 45° = y cosec 30°, then $\frac{x^4}{y^4}$ is equal to :

(a) 4^3
(b) 6^3
(c) 2^3
(d) 8^3

Q50. If the price of a commodity is decreased by 20% and its consumption is increased by 20%, what will be the increase or decrease in the expenditure on the commodity ?
(a) 4% increase
(b) 4% decrease
(c) 8% decrease
(d) 8% increase

GENERAL INTELLIGENCE & REASONING

Q51. Direction: In each of the following questions, select the related word from the given alternatives.
Paddy : Field : : Steel : ?
(a) Iron
(b) Factory
(c) Ore
(d) Mine

Q52. Choose the similar group of numbers on the basis of certain common properties they possess :
(72, 66, 96)
(a) (54, 57, 78)
(b) (24, 69, 58)
(c) (55, 66, 77)
(d) (63, 70, 86)

Q53. Direction: In each of the following questions, select the related letter from the given alternatives.
DEAD : WVZW : : FGCF : ?
(a) UTXU
(b) TUUX
(c) UXTU
(d) UUTX

Q54. P and Q are brothers. R and S are sisters. P's son is S's brother. How is Q related to R ?.
(a) Uncle
(b) Brother
(c) Father
(d) Grandfather

Q55. Direction: In The following Question you have to identify the correct response from the given premises stated according to following symbols:
If - stands for ÷, + stands for ×, ÷ stands for - and × stands for + find out which one is correct.
(a) 49 × 7 + 3 ÷ 5 - 8 = 16
(b) 49 ÷ 7 × 3 + 5 - 8 = 26
(c) 49 + 7 - 3 × 5 ÷ 8 = 20

Q56. Find the odd man out from the given responses ?
(a) Gupta dynasty
(a) Nanda dynasty
(b) Maurya dynasty
(c) Chola dynasty

Q57. Find the odd man out from the given responses ?
(a) Shoulder
(b) Decay
(c) Putrefy
(d) Decompose

Q58. Find the odd man out from the given responses ?
(a) Silver
(b) Platinum
(c) Zinc
(d) Bronze

Q59. X walks southwards and then turns right, then left and then right. In which **direction** is he moving now?
(a) South
(b) North
(c) West
(d) Southwest

Q60. A and B both are walking away from point 'X'. A walked 3 m and B walked 4 m from it, then A walked 4 m north of 'X' and B walked 5 m south of A. What is the distance between them now ?
(a) 9.5 m
(b) 9 m
(c) 16 m
(d) 11.40 m

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

264, 396, 473, 583, ?
(a) 597
(b) 673
(c) 729
(d) 792

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

2.1, 5.2, 8.4, 11.7, 15.1, ?
(a) 17.1
(b) 18.6
(c) 18.4
(d) 17.3

Q63.Direction: In the following question, increasing number of letters are skipped in between adjacent letters in a series. Which of the following series fulfils this rule ?
(a)BGMTA
(b) BGMSZ
(c) BGMTB
(d) BGLRY

Q64. If in a certain code language 'NAME' is written as '4258', then what is the code for 'MEAN'?
(a) 2458
(b)5824
(c) 8542
(d)5842

Q65. If NOIDA is Written as STNIF, how MEERUT can be written in that code?
(a) QIIVYX
(b) RJJWZV
(c)RJJWZY
(d) RIIVYX

Q66. If 'JUNE' is written as 'PQRS' an 'AUGUST' is written as 'WQFQMN'. How can 'GUEST1 be written in this same coding language?
(a) FPSMN
(b) FQSMN
(c) FQSNM
(d) FQTMN

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.
INDETERMINATE
(a)DETERMINE
(b)RETINUE
(c)REMINDER
(d)RETINA

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.
DEPRECIATE
(a) PEACE
(b)REPRIEVE
(c) CREDIT
(d)PRIDE

Q69. Identify the single letter, which when removed from the following words form new words.
MINK, LAMP, TEAM, WARM
(a) R
(b) A
(c) L
(d) M

Q70. If 'JUNE' is written as 'PQRS' an 'AUGUST' is written as 'WQFQMN'. How can 'GUEST1 be written in this same coding language?
(a) FPSMN
(b) FQSMN
(c) FQSNM
(d) FQTMN

Q71.Directions : In each of the following questions a word is represented by only one set of numbers as given in anyone of the alternatives. The sets of numbers given in the alternative are represented by two classes of alphabets as in the 2 matrices given below. The column and rows of Matrix I are numbered from 0 to 4 and that of Matrix II from 5 to 9. A letter can be represented first by its row and next by column number. For example 'C' can be represented by 02, 21 etc. 'T' can be represented by 65, 96 etc. Similarly you have to identify the correct set for the word given in each question.

Matrix-I

	0	1	2	3	4
0	D	V	C	P	M
1	P	M	D	V	C
2	V	C	P	M	D
3	M	D	V	C	P
4	C	P	M	D	V

Matrix-II

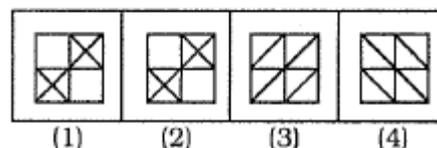|	5	6	7	8	9
5	S	A	U	T	J
6	T	J	S	A	U
7	A	U	T	J	S
8	J	S	A	U	T
9	U	T	J	S	A

PUMP
(a)03, 69, 03, 34
(b)41, 88, 23, 02
(c)10, 57, 23, 34
(d)22, 95, 43, 41

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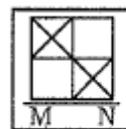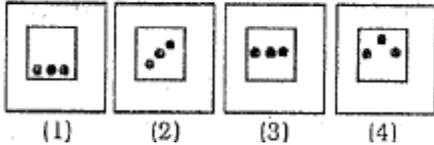

Answer Figures :

(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.
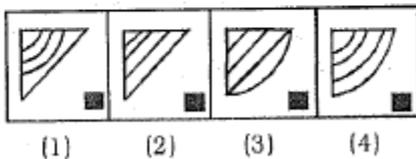
Question Figure:

Answer Figures:

(1)   (2)   (3)   (4)

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

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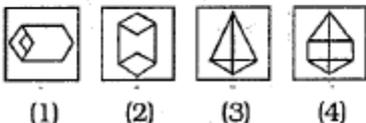
Question Figure:

Answer Figures:

(1)   (2)   (3)   (4)

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

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

Question Figure:

Answer Figures:

(1)   (2)   (3)   (4)

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

GENERAL AWARENESS

Q76. Sea water can be purified by the process of

(a) distillation
(b) evaporation
(c) filtration
(d) fractional distillation

Q77. The device that converts computer output for transmission over telephone lines is called
(a)interface
(b)interpreter
(c)modem
(d)IO port

Q78.HYV refers to
(a)Hybrid yielding variety
(b)Human yellow virus
(c)High yielding variety
(d)Human yellow vaccine

Q79. An insect catching plant is :
(a)Australian Acacia
(b)Smilax
(c)Nepenthes
(d)Nerium

Q80. Setting of plaster of Paris involves
(a) dehydration process
(b) hydration to form other hydrates
(c) oxidation process
(d) reduction process

Q81. When water itself combines chemically with some element or mineral it is called
(a) Carbonation
(b) Desilication
(c) Hydration
(d) Oxidation

Q82. Waves that are required for long distance wireless communication are
(a)infrared fays
(b) Ultraviolet rays
(c)Radio waves
(d)Microwaves

Q83. Glycolipids contain an alcohol, a fatty acid, and a
(a) Sulphate group
(b) Protein
(c) Phosphate group
(d) Carbohydrate

Q84. Enhanced growth of aquatic vegetation in respect of phytoplankton and algal blooms through eutrophication
1. disrupts natural functioning of ecosystem leading into lack of 02 needed for survival of fish and other aquatic animals
2.causes decreased biodiversity

3.causes health problems due to interference with drinking water treatment
4.disturbs levels of nitrates and phosphates
(a)1 only
(b)2,3
(c)1,2,3
(d)1,2,4

Q85. The Federation of Indian Chambers of Commerce and Industry (FICCI) was founded in 1927 by
(a) Birla and Tata
(b) Birla and Thakurdas
(c) Tata and Thakurdas
(d) None of the above

Q86. He was the most passionate exponent of the extremists point of view and the programme spelled out by him anticipated the one adopted by Gandhi some years later. The reference here is to
(a)Lala Lajpat Rai
(b)Aurobindo Ghosev
(c)B.G. Tilak
(d)none of the above

Q87. Consider the following statements: In India, a Metropolitan Planning Committee
1.Is constituted under the provisions of the Constitution of India
2.Prepares the draft development plans for metropolitan area
3.Has the sole responsibility for implementing Government sponsored schemes in the metropolitan area
Which of the statements given above is/are correct?
(a)1 and 2 only
(b)2 only
(c)1 and 3 only
(d)1,2 and 3

Q88. Naga village sites in India show an adjustment to
(a) flood prone area
(b) dry climate
(c) defense needs
(d) all the above

Q89. What was unique to Harappan civilization in comparison to Egyptian and Mesopotamian civilizations?
(a)pictographic script
(b)temples
(c)rectangular town planning
(d)drainage system

Q90. The total number of vertebrae in a human being is
(a)26
(b)30
(c)29
(d)33

Q91. Fluid part of blood devoid of corpuscles is called
(a) Tissue fluid
(b) Plasma
(c) Serum
(d) Lymph

Q92. Sardar Sarovar dam is being built on the river
(a) Tapti
(b) Maahi
(c) Chambal
(d) Narmada

Q93. Nepanagar in Madhya Pradesh has a
(a)sugar mill
(b)newsprint factory
(c)steel plant.
(d) heavy engineering plant

Q94. In which year did Gandhiji start Satyagraha Movement ?
(a)1919
(b) 1927
(c) 1934
(d) 1942

Q95. Chairman of the Eleventh Finance Commission was
(a)A.M. Khusro
(b)Vljay Kelkar
(c)Deepak Parekh
(d)Manmohan Singh

Q96. Magnetism in materials is due to
(a)electrons at rest
(b)circular motion of electrons
(c)protons at rest
(d)all neutrons at rest

Q97. A transformer works on the principle of
(a)Self induction
(b)Mutual induction
(c)Generator
(d)Inverter

Q98. The Council of Ministers does not include
(a)Cabinet Ministers
(b)Ministers of State
(c)Cabinet Secretary
(d)Ministers without Portfolio

Q99. The right for the enforcement of Fundamental Rights are issued by
(a)The Parliament
(b)The President.
(c) The Supreme Court
(d) The Election Commission

Q100. Which of the following is used in making smoke bombs?
(a) Sulphur

(b) Phosphorus
(c) Hydrogen
(d) Carbon

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