Live Leak - SSC Scientific Assistant Model Question Paper (General Aptitude) 2017

Q1. Read the sentence to find out 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. If there is no error, the answer is (4). Ignore errors of punctuation, if any.

If one studies hard consistently you will get good marks in the exam.

1. If one studies hard
2. Consistently you will get
3. Good marks in the exam
4. No error

Q2. Read the sentence to find out 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. If there is no error, the answer is (4). Ignore errors of punctuation, if any.

I kept reading pages by pages of the Science book.

1. I kept reading

2. Pages after pages

3. Of the science book

4. No error

Q3. Read the sentence to find out 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. If there is no error, the answer is (4). Ignore errors of punctuation, if any.

I will not attend his party unless I am not invited

1. I will not

2. attend his party

3. unless I am not invited

4. No error

Q4. In the question, a part of the sentence is underlined. Below are given alternatives to the underlined part (1), (2), (3) which may improve the sentence. Choose the correct alternative. In case no improvement is needed, mark your answer as (4).

The poors are not allowed to enter this shopping mall.

1. The poor is not

2. The poors is not

3. The poor are not

4. No improvement

Q5. In the question, a part of the sentence is underlined. Below are given alternatives to the underlined part (1), (2), (3) which may improve the

sentence. Choose the correct alternative. In case no improvement is needed, mark your answer as (4).

I **don't** let my kids to watch horror movies.

1. have never led my kids to watch

2. never did let my kids to watch

3. don't let my kids watch

4. No improvement

Q6. In the question, a part of the sentence is underlined. Below are given alternatives to the underlined part (1), (2), (3) which may improve the sentence. Choose the correct alternative. In case no improvement is needed, mark your answer as (4).

I didn't expect him to back off in a cowardly manner.

1. back off like a coward

2. back off in a cowardice manner

3. back out in a cowardly manner

4. No improvement

Q7. In the question, a part of the sentence is underlined. Below are given alternatives to the underlined part (1), (2), (3) which may improve the sentence. Choose the correct alternative. In case no improvement is needed, mark your answer as (4).

Rani told me the secret after Raj left the room

1. after Raj went into the room

2. after Raj left from the room

3. after raj had left the room

4. No improvement

Q8. Choose an appropriate word from the options to suitably fill the blank in the sentence below so that the sentence makes sense, both grammatically and contextually.

The patient had died _____ the doctor came.

1. Before

2. As

3. When

4. Ago

Q9. In the following sentence, a part of the sentence is underlined. Below are given alternatives to the underlined part, which may improve the sentence. Choose the correct alternative. In case no improvement is needed, choose the alternative that indicates No improvement needed.

The opposition were <u>strongly against</u> the Prime Minister's proposal to increase taxes.

1. Unworthy of

2. Defiant of

3. Scornful of

4. No improvement

Q10. Out of the four alternatives, choose the one which best expresses the opposite meaning of the given word.

Dour

1. Rising

2. Concise

3. Natural

4. Cheerful

Q11. Out of the four alternatives, choose the one which best expresses the meaning of the given word.

Titan

1. Electric

2. A storm

3. Grand

4. Static

Q12. Out of the four alternatives, choose the one which best expresses the meaning of the given word.

Allay

1. Pacify

2. Instigate

3. Sideline

4. Invite

Q13. In the following question, an idiomatic expression or a proverb is given. Select the alternative which best describes its meaning.

Far cry from

1. Being depressed.

2. Ask for help.

3. Being anti-social.

4. Different.

Q14. In the following question, an idiomatic expression or a proverb is given. Select the alternative which best describes its meaning.

Wouldn't be caught dead

1. Disliking something.

2. Escape.

3. Being simplistic.

4. Prosper.

Q15. Four words are given, out of which only one word is spelled correctly. Find the correctly spelled word.

1. Archipaelgo

2. Archipelago

3. Archipeleago

4. Archipalego

Q16. Choose the incorrectly spelt word.

1. Opulant
2. Nefarious
3. Relentless
4. Enthral

Q17. Fill in the blank with the most appropriate word out of the four alternatives suggested below each question.

The essence of Satyagraha is that it seeks to _____ antagonisms without harming the antagonists themselves, as opposed to violent resistance, which is meant to cause harm to the antagonist.

1. Dawdle
2. Protect
3. Prevent
4. Eliminate

Q18. In the following question, out of the four alternatives, choose the one which can be substituted for the given word/sentence.

One who speaks or does things without thinking first.

1. Amiable
2. Indecisive
3. Impulsive
4. Adaptable

Q19. In the following question, out of the four alternatives, choose the one which can be substituted for the given word/sentence.

To read and understand what is written even if it is difficult.

1. Decipher

2. Mull

3. Nag

4. Motivate

Q20. In the following question, out of the four alternatives, choose the one which can be substituted for the given word/sentence.

Friend of the court.

1. Habeas corpus

2. Amicus curiae

3. Wacky

4. Advocate

Q21-26. Directions: Read the following passage carefully and answer the given set of questions.

A mixed economic system is an economic system that features characteristics of both capitalism and socialism. A mixed economic system protects private property and allows a level of economic freedom in the use of capital, but also allows for governments to interfere in economic activities in order to achieve social aims. According to neoclassical theory, mixed economies are less efficient than pure free markets, but proponents of government interventions argue that the base conditions such as equal information and

rational market participants cannot be achieved in practical application.Mixed economic systems are not laissez-faire systems, because the government is involved in planning the use of some resources and can exert control over businesses in the private sector. Governments may seek to redistribute wealth by taxing the private sector, and using funds from taxes to promote social objectives. Trade protection, subsidies, targeted tax credits, fiscal stimulus and public-private partnerships are common examples of government intervention in mixed economies. These usually do not generate massive economic distortions, but instead are instruments to achieve specific goals.On the other hand socialism entails more social ownership of the means of production. Proponents of socialism believe that central planning can achieve greater good for a larger number of people. They do not trust that free market outcomes will achieve the efficiency and optimization posited by classical economists, so socialists advocate measures that can include price fixing, income redistribution and intense trade restriction. Mixed economies rarely go to this extreme, instead identifying only select instances in which intervention could achieve outcomes unlikely to be achieved in free markets.

Q21. Which one of the following economy best describes a laissez faire system?

1. An economy where trade between the states of a country is duty free

2. An economy where private sector owns the means of production

3. An economy that opposes regulation or interference by the government in economic affairs

4. An economy where only Non-Profit organisations are considered fair and beneficial for society

Q22. What would an extreme socialist economy be like?

1. Complete ban on import of refined oil and petroleum from other oil exporting countries

2. Various restrictions on the movement of goods within geographical barriers of the country

3. Intense trade restrictions, income redistribution and fixation of price by the government itself

4. Very high interest rates on loans acquired from banks and various other financial institutions

Q23. Based on the above passage what kind of economy should India be considered as?

1. Mixed economy

2. Capitalist economy

3. Socialist economy

4. Free economy

Q24. Which of the following words is similar in meaning to the word "intervention"?

1. Coinage

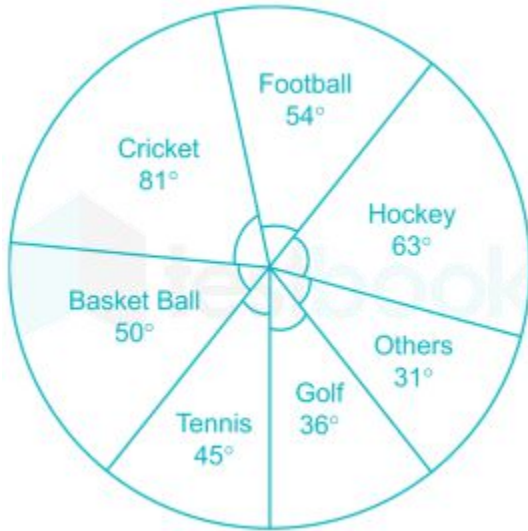2. Excerpt

3. Stagnation

4. Mediation

Q25. What characteristics of Capitalism does mixed economy feature?

1. Allowing to trade freely with other countries

2. Allows concentration of power in the hands of few

3. Protects private property and freedom in the use of capital

4. No obligation to fulfill any social responsibility

Q26-28. Directions: The Pie Chart shows the expenditure of a country on various sports during a particular year. Study the graph and answer the questions.

Q26. How much per cent less is spent on football than that on cricket?

1. $22\frac{2}{9}\%$

2. 27%

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

4. $37\frac{1}{2}\%$

Q27. How much per cent more is spent on Hockey than that on Golf?

1. 27%

2. 35%

3. 37.5%

4. 75%

Q28. If the total amount spent on cricket and hockey together is Rs. 80,000, the total amount spent on sports is

1. Rs. 1,00,000

2. Rs. 2,00,000

3. Rs. 2,50,000

4. Rs. 3,00,000

Q29. If $\cos\theta + \sin\theta = \sqrt{2}\cos\theta$, then $\cos\theta - \sin\theta$ is

1. $\sqrt{2}\tan\theta$

2. $-\sqrt{2}\cos\theta$

3. $-\sqrt{2}\sin\theta$

4. $\sqrt{2}\sin\theta$

Q30. The value of $\dfrac{1}{cosec\theta - \cot\theta} - \dfrac{1}{\sin\theta}$ is

1. 1

2. $\cot\theta$

3. $cosec\,\theta$

4. $\tan\theta$

Q31. Evaluate:

$\tan 1° \tan 2° \tan 3° \ldots\ldots\ldots\ldots \tan 89°$

1. 1
2. -1
3. 2
4. 0

Q32. The maximum value of $24\sin\theta + 7\cos\theta$ is

1. 7
2. 17
3. 24
4. 25

Q33. The length of the portion of the straight line 3x + 4y = 12 intercepted between the axes?

1. 7
2. 4
3. 3
4. 5

Q34. In triangle ABC, $\angle BAC = 75°$, $\angle ABC = 45°$, $\overline{BC}$ is produced to D. If $\angle ACD = x°$, then $\frac{x}{3}\%$ of 60° is

1. 30°

2. 48°

3. 15°

4. 24°

Q35. In two similar triangles ABC and MPN, if AB = 2.25 cm, MP = 4.5 cm and PN = 7.5 cm and m ∠ACB = m ∠MNP and m ∠ABC = m ∠MPN, then the length of side $\overline{BC}$, in cm, is

1. 4.5

2. 3.75

3. 4.75,

4. 3.5

Q36. A rectangular sheet of metal is 40 cm by 15 cm. Equal square of side 4 cm are cut off at the corners and the remainder is folded up to form an open rectangular box. The volume of the box is

1. 896 cm3

2. 986 cm^3

3. 600 cm^3

4. 916 cm^3

Q37. A copper wire is bent in the form of an equilateral triangle and has area $121\sqrt{3}$ cm². If the same wire is bent into the form of circle, the area (in cm²) enclosed by the wire is (Take $\pi = \frac{22}{7}$)

1. 364.5

2. 693.5

3. 346.5

4. 439.5

Q38. The sides of a triangle are in the ratio 2:3:4. The perimeter of the triangle is 18 cm. The area (in cm²) of the triangle is

1. 9

2. 36

3. $\sqrt{42}$

4. $3\sqrt{15}$

Q39. In a hostel of 60 boys, there are food provisions for 50 days. If 60 more boys join the hostel, the food provision will last for:

1. 30 days

2. 35 days

3. 25 days

4. 20 days

Q40. Two men A and B started a job in which A was thrice as good as B and therefore took 60 days less than B to finish the job. How many days will they take to finish the job, if they start working together?

1. 15 days

2. 20 days

3. $22\frac{1}{2} days$

4. 25 days

Q41. A bus travels at a speed of 72 km/hr for 40 minutes and then travels at a speed of 84 km/hr for 50 minutes. What distance will it cover in one and a half hour?

1. 118 km

2. 165 km

3. 125 km

4. 90 km

Q42. A trader sells 45 metres of cloth in a way such that he loses selling price of 5 metres of cloth. What is his loss percent?

1. 10%

2. 2%

3. 25%

4. 15%

Q43. A started a business investing Rs. 250000 in year 2008. In year 2009 he invested an additional amount of Rs. 100000 and B joined him with an amount of Rs. 350000. In year 2010, A invested another additional amount of Rs. 100000 and C joined them with an amount of Rs. 350000. What will be B's share in the profit of Rs. 1500000 earned at the end of three years from the start of the business in 2008?

1. Rs. 700000

2. Rs. 500000

3. Rs. 450000

4. Rs. 750000

Q44. If $x = 5 + \frac{1}{x}$, then the value of $x^4 + \frac{1}{x^4}$ is

1. 727

2. 724

3. 726

4. 728

Q45. If $x = \frac{\sqrt{3}+1}{\sqrt{3}-1}$ and $y = \frac{\sqrt{3}-1}{\sqrt{3}+1}$, then the value of $x^2 + y^2$ is

1. 14

2. 13

3. 15

4. 10

Q46. The sum of the ages of father and son is 38 years. 4 years ago the product of their ages was 4 times the father's age at that time. The present ages of the father and son are respectively –

1. 36 years, 2 years

2. 28 years, 10 years

3. 30 years, 8 years

4. 26 years, 12 years

Q47. Find the remainder when 21875 is divided by 17.

1. 7

2. 11

3. 13

4. 15

Q48. John and Peter have salaries that jointly amount to Rs. 20,000 per month. They spend the same amount monthly and then it is found that their savings are in the **ratio 6:1. Which of the following can be John's salary?**

1. 9000

2. 14000

3. 7600

4. 4600

Q49. The average of 18 observations is recorded as 124. Later it was found that two observations with values 64 and 28 were entered wrongly as 46 and 82. Find the correct average of the 18 observations.

1. $111\frac{7}{9}$

2. 122

3. 123

4. $137\frac{3}{9}$

Q50. If 30% of A is added to 40% of B, the answer is 80% of B. What percentage of A is B?

1. 30%

2. 40%

3. 70%

4. 75%

Q51. **Direction**: Choose the odd one from the given alternatives.

ATLANTA, ARIZONA, ALABAMA, ANTARCTI

1. ANTARCTIC

2. ARIZONA

3. ATLANTA

4. ALABAMA

Q52. **Direction**: In the following question, select the one which is different from the other three responses

1. Perverse – Petulant

2. Ratify – Consent

3. Redeem – Liberate

4. Scanty – Lavish

Q53. Direction: Choose the odd number among the given numbers below.

372164, 376821, 318951, 319446, 387315

1. <u>372164</u>

2. 376821

3. 318951

4. 387315

Q54. Direction: Choose the related alternative from the given alternatives.

NicK : KCiN :: Dams : ?

1. smaD

2. DAMS

3. SMad

4. smAD

Q55. Direction: Choose the related alternative from the given alternatives.

Request : Plead :: Demand : ?

1. Ask

2. Grant

3. Beg

4. Ultimatum

Q56. Direction: Choose the related alternative from the given alternatives.

Narrow : Wide :: Compel : ?

1. Thin

2. Force

3. Near

4. Obstruct

Q57. Direction: Complete the following number series.   14, 8, 9, 5.5, 12, ?

1. 6

2. 9

3. 7

4. 8

Q58. Direction: Find the missing alphabetical

term.

BMO, EOQ, _,KSU

1. RHS

2. QHS

3. HQS

4. SHQ

Q59. **Direction:** Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it. _a_b_abaa_bab_abba

1. aaabb

2. ababb

3. babab

4. babba

Q60. In a certain coding language, TARGET is written as AIYOLB, then how will you code DEFECT in that code language?

1. KMBMJM

2. KMMBJM

3. KMMMBJ

4. KMMMJB

Q61-65. **Direction:** Given below are some words in column I and their key equivalents in column II. The key letters are not necessarily in the same order as the letters in the word for they stand but the same key stand for the same letter in the words. Study carefully and answer the following:

Column I	Column II
BOAT	fyzk
TOY	xyz
HEAT	fjzs
TEETH	sjzjs
NEAT	fjzi

Q61. j is code for which letter?

1. T

2. A

3. E

4. B

Q62. s is code for which letter?

1. Y

2. H

3. N

4. O

Q63. What is the code for B?

1. k

2. y

3. f

4. z

Q64. What is the code for N?

1. z

2. j

3. i

4. f

Q65. What is the code for Y?

1. None of these

2. z

3. y

4. x

Q66. **Ram started from point 'P' and** walked 2 km towards North. He turned towards right and walked 2 km and then turned left and walked 2 km. He turned to right and walked further 2 km. Ram is in which direction with respect to its starting point?

1. North

2. South

3. North East

4. South East

Q67. Pointing **to a girl in a photograph, Jennifer said, "She is the daughter of my** grandfather's only daughter-in-law's brother.

How is Jennifer related to the person in the photograph?

1. Sister

2. Cousin

3. Mother

4. Daughter

Q68. Arrange the following words as per order in the dictionary.

1) Disbelieve

2) Disburden

3) Discern

4) Disburse

1. 3, 2, 1, 4

2. 1, 2, 4, 3

3. 1, 2, 3, 4

4. 4, 2, 1, 3

Q69. In this question, a word is represented by only one set of numbers as given in any one of alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in two matrices given below. The columns and the rows of Matrix I are numbered from 0 − 4 and that of Matrix II are numbered 5 − 9. A letter from these matrices can be represented first by it row and next by its columns, e.g., A can be represented by- 44, 56, 75 and O can be represented by- 34, 67. **Similarly you have to identify the set for "CAKE".**

Matrix I

	5	6	7	8	9
5	B	A	M	E	T
6	Q	N	O	W	J
7	A	C	V	B	N
8	D	F	G	H	U
9	Q	E	V	N	E

Matrix II

	0	1	2	3	4
0	G	B	N	E	T
1	C	F	Q	G	B
2	X	C	V	N	M
3	Q	E	U	K	O
4	X	D	U	I	A

1. 98, 59, 31, 76

2. 10, 56, 33, 99

3. 14, 24, 69, 75

4. 78, 32, 87, 85

Q70. Direction: Arrange the following in correct logical order.

1. Analysis 2. Maintenance 3. Coding 4. Testing 5. Algorithm

1. 1,5,4,3,2
2. 1,5,3,4,2
3. 1,3,5,4,2
4. 1,5,3,2,4

Q71. Name a single letter that can be deleted from body of following words to create entirely new words.

Slate

Fist

Nest

Shut

Fast

1. T
2. S
3. E
4. A

Q72. Direction: Find the missing number from the given alternatives.

5	6	3
4	3	3
7	8	11
8	2	?

1. 7

2. 9

3. 5

4. 2

Q73. Some equations have been solved on the basis of a certain system. Find the correct answer for the unsolved equation on that basis.

If $10 - 3 = 12$, $12 - 4 = 13$, $14 - 5 = 14$, then $16 - 6 = ?$

1. 10

2. 15

3. 16

4. 18

Q74. **Direction:** Select the correct set of symbols.

14 _4_20_10 = 46

1. +, -, X

2. X, -, +

3. X, +, -

4. -, +, ÷

Q75. If a mirror is placed on the line XY then which of the answer figure would be the right image?

1.

2.

3.

4.

Q76. Who won the 2017 Nobel Physics Prize?

1. F. Duncan M. Haldane, David J. Thouless and John M. Kosterlitz

2. Rainer Weiss, Barry C. Barish and Kip S. Thorne

3. Serge Haroche, David J. Wineland and François Englert

4. Charles K. Kao, Willard S. Boyle and George E. Smith

Q77. What is the theme for the 2017 International Day of Democracy?

1. Strengthening Voices for Democracy

2. Space for Civil Society

3. Engaging youth on democracy

4. Democracy and Conflict prevention

Q78. The 2017 ASEAN India Music Festival will be held in _____.

1. Khajuraho

2. New Delhi

3. Kolkata

4. Chennai

Q79. Who was the first Indian to become member of British Parliament?

1. D.N. Wacha

2. Surendranath Banerjee

3. Dadabhai Noroji

4. Firozshah Mehta

Q80. **"Tripitaka" are associated with which of the** following religions?

1. Jains

2. Buddhists

3. Sikhs

4. Hindus

Q81. Which of the following country is *not* a part of SAARC?

1. India

2. Pakisthan

3. Maldives

4. Myanmar

Q82. The organ affected by Malaria is

1. Heart

2. Lungs

3. Kidney

4. Spleen

Q83. Telephone was invented by

1. Alexander Graham Bell

2. Baird

3. Stevenson

4. Newton

Q84. The Institution of the Speaker and his role of the Indian Constitution are borrowed from the _____ constitution.

1. British

2. French

3. Irish

4. Canadian

Q85. The State of Jammu & Kashmir has been given special status under which of the following Article

1. 370

2. 371

3. 366

4. 270

Q86. Which volcano is called the Lighthouse of the Mediterranean

1. Stromboli

2. Etna

3. Barren

4. Izalco

Q87. The highest peak of Eastern ghats of India is

1. Shevroy hills

2. Mahendragiri

3. Javadi hills

4. Annaimudi

Q88. Yellow Sea is located in

1. U.S.S.R.

2. North Pacific Ocean

3. U.S.A

4. North Atlantic Ocean

Q89. Which of the following planets observes the shortest day?

1. Jupiter

2. Mercury

3. Mars

4. Venus

Q90. The biggest single-celled organism is

1. Yeast

2. Acetabularia

3. Acetobacter

4. Amoeba

Q91. Foramen Magnum is an aperture found in the

1. Ear

2. Lung

3. Girdel

4. Skull

Q92. Auxiliary bud develops into which of the following part of the plant?

1. Fruit

2. Leaf

3. Branch

4. Roots

Q93. Which acid is released when an Ant bites?

1. Hydrochloric Acid

2. Formic Acid

3. Acetic Acid

4. Phosphoric Acid

Q94. Which metal is common to the alloys brass, bronze and gunmetal?

1. Zinc

2. Tin

3. Aluminium

4. Copper

Q95. Total internal reflection can take place only if

1. Light goes from optically rarer medium to optically denser medium

2. Light goes from optically denser medium to rarer medium

3. The refractive indices of the two media are close to different

4. The refractive indices of the two media are widely different

Q96. Superconductivity means:

1. very feeble current

2. very large current

3. current without facing any resistance

4. current without facing any resistance

Q97. Web Pages are saved in which of the following format?

1. http://

2. HTML

3. DOC

4. URL

Q98. **DBMS is comprised of tables that made up of rows called .....and columns called ...**

1. Fields, records

2. Records, fields

3. Address, fields

4. Ranges, sheet

Q99. Insurance sector in India is regulated by which of the following agencies?

1. SEBI

2. IRDA

3. RBI

4. AMFI

Q100. The chairman of first national backward classes commission was?

1. Kaka kalelkar

2. B P Mandal

3. John Mathai

4. Madhu dantavate