

Pro Proposition

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO.

2019

TEST BOOKLET

Time allowed: $1\frac{1}{2}$ hours

Full marks: 100

Answer all the questions.

59225 Questions are of equal value.



Serial No	Roll No.	
	Signature of the Candidate:	

INSTRUCTIONS

Candidates should read the following instructions carefully before answering the questions:

- This booklet consists of 12 pages including this front page, containing 100 questions. Verify the Page Nos. and Test Booklet series on each page and bring at once to the Invigilator's notice any discrepancy.
- 2. Answers will have to be given in the Special Answer-Sheet supplied for the purpose.
- Before you proceed to mark in the Answer-Sheet in response to various items in the Test Booklet, you have to fill in some particulars in the Answer-Sheet as per instructions sent to you in the Admit Card. Do not fold the Answer-Sheet as this will result in error in your marks.
- 4. All questions are of multiple-choice answer-type. You will find four probable answers (A), (B), (C) and (D) against each question. Find out which of the four answers appears to you to be correct or the best. Now darken the circle corresponding to the letter of the selected answer in the Answer-Sheet with Black Ball Point Pen as per instructions printed on the reverse of the Admit Card and in the Answer-Sheet.
- 5. One and only one circle is to be fully blackened for answer. Any spot in any other circle (multiple circle) or in wrong circle will be considered as wrong answer. If more than one circle is encoded for a particular answer, it will be treated as a wrong answer.
- 6. There will be negative marking of $\frac{1}{3}$ mark for each wrong answer.
- 7. There is a blank page at the end of this Booklet for Rough Work.
- The Special Answer-Sheet should be handed over to the Invigilator before leaving the Examination
 Hall. You are permitted to take away the used Test Booklet after completion of the examination.

SEA

- Find the similarity in the following common cold, ringworm, conjunctivities, whooping cough.
 - (A) All of them are non-communicable diseases
 - (B) All of them do not respond to curative treatment
 - (C) All of them are contagious
 - (D) No preventive measure is available for all of them
 - 2. Thyroid gland is situated in our
 - (A) Liver
 - (B) Neck
 - (C) Arm-pits
 - (D) None of the above
 - 3. Who discovered 'Boson' particle?
 - (A) Meghnad Saha
 - (B) Satyendra Nath Bose
 - (C) C. V. Raman
 - (D) J. C. Bose
- 4. If the length of a rectangle is increased by 20% and the breadth is reduced by 20%, what will be the effect on its area?
 - (A) 4% increase
 - (B) 6% increase
 - (C) 4% decrease
 - (D) None of the above
 - 5. Which vitamin is called 'Riboflavin'?
 - (A) Vitamin B,
 - (B) Vitamin B2
 - (C) Vitamin B₁₂
 - (D) Vitamin C

6. Identify the Synonym.

Absolve

- (A) Hate
- (B) Conspire
- (C) Pardon
- (D) Accuse
- 7. Which of the following is not an example of literature of vedic tradition?
 - (A) Vedas
 - (B) Puranas
 - (C) Vedangas
 - (D) Purvas
 - 8. What does GSM stand for?
 - (A) Geographic System for Mobility
 - (B) Global System for Mobile Communications
 - (C) Great System for Mobiles
 - (D) Grand System for Mobility
- 9. P and Q can do a work in 12 days, Q and R in 15 days, R and P in 20 days. Find in what time P will do it alone?
 - (A) 30 days
 - (B) 20 days
 - (C) 24 days
 - (D) 60 days
 - 10. One horse power is equal to
 - (A) 736 Watts
 - (B) 746 Watts
 - (C) 748 Watts
 - (D) 756 Watts

- 11. The electric bulb was invented by
 - (A) Alexander Graham Bell
 - (B) Michael Faraday
 - (C) Edison
 - (D) Benjamin Franklin
- 12. How many banks were nationalised in India in the year 1969?
 - (A) 11
 - (B) 12
 - (C) 13
 - (D) 14
- Choose the word that does not belong to the group.
 - (A) Gainsay
 - (B) Deny
 - (C) Aver
 - (D) Rebuff
- 14. Which of the following award is associated with Agriculture?
 - (A) Bor Lang Award
 - (B) Shanti Swaroop Bhatnagar
 - (C) Arjun Award
 - (D) Vyas Samman
- 15. The 44th amendment in the Constitution of India removed which one of the following rights from the category of Fundamental Rights?
 - (A) Freedom of Speech
 - (B) Equality before Law
 - (C) Right to Property
 - (D) Freedom of Religion

- Fertile black soil, most suitable for the cultivation of cotton is known as
 - (A) Bhangar
 - (B) Bhabar
 - (C) Lom
 - (D) Regur
 - 17. The 'Sepoy Mutiny' first started in
 - (A) Mirat
 - (B) Barrackpur
 - (C) Bihar
 - (D) Nagpur
- 18. Which of the following is not an alloy of copper?
 - (A) Bronze
 - (B) Brass
 - (C) Solder
 - (D) Gun metal
 - 19. If 4 = 104, 5 = 105, then 12 = ?
 - (A) 1012
 - (B) 1011
 - (C) 9012
 - (D) 1021
- 20. Which of the following is not a commercial crop?
 - (A) Jute
 - (B) Cotton
 - (C) Tea
 - (D) Wheat

21. Meth	ylated	spirit	is a	mixture o	f
THE COLUMN TWO IS NOT THE OWNER,	J. Constant	argonal and	A107 MI	THIN CHILL C	ır.

- (A) Methyl alcohol and acetic acid
- (B) Methyl alcohol and ethyl alcohol
- (C) Ethyl alcohol and pyridine
- (D) Methyl alcohol and Pyridine

22. The 'Khetri Project' in Rajasthan is famous for the production of

- (A) Zinc
- (B) Steel
- (C) Copper
- (D) Aluminium
- 23. If 10% of an electricity bill is deducted, Rs. 45 is still to be paid. How much was the Bill?
 - (A) Rs. 55
 - (B) Rs. 50
 - (C) Rs. 45
 - (D) Rs. 40
- 24. Gautam Buddha spread his religion in the language of
 - (A) Sanskrit
 - (B) Magadhi
 - (C) Pali
 - (D) Sauraseni
- 25. Gasoline is obtained from crude petroleum by
 - (A) fractional distillation
 - (B) fractional crystallisation
 - (C) sublimation
 - (D) evaporation

26. Complete the sentence:

Although adolescent maturational and developmental states occur in an orderly sequence, their timing ______ with regard to onset and duration.

- (A) lasts
- (B) varies
- (C) falters
- (D) accelerates
- 27. Out of the following remains excavated in Indus Valley, which one indicates the commercial and economic development?
 - (A) Pottery
 - (B) Seals
 - (C) Boats
 - (D) Houses
- 28. Mixture of Calcium Aluminate and Calcium Silicate is called
 - (A) Glass
 - (B) Cement
 - (C) Mortar
 - (D) Concrete
- HCF and LCM of two numbers are 16 and 240 respectively. If one of the number is 48, the other number is
 - (A) 32
 - (B) 64
 - (C) 80
 - (D) 160
 - 30. Identify the Synonym.

Abate

- (A) Confusing
- (B) Forget
- (C) Decrease
- (D) Abase

- 31. The working of the human eye is like that of a
 - (A) Camera
 - (B) Telescope
 - (C) Microscope
 - (D) Periscope
 - 32. Isobars are lines displaying areas of equal
 - (A) humidity
 - (B) temperature
 - (C) rainfall
 - (D) atomospheric pressure
- 33. Which country is the largest trading partner of India?
 - (A) USA
 - (B) Japan
 - (C) China
 - (D) England
- 34. If p, q, r, s and t are five consequitive odd numbers, their average is
 - (A) 5(p+4)
 - (B) $\frac{9(p+4)}{5}$
 - (C) p + 4
 - (D) $\frac{p+t}{4}$
- 35. Which of the following cities is spread over two continents?
 - (A) Cairo
 - (B) Istanbul
 - (C) Tripoli
 - (D) Jerusalem

- 36. What is 'Mixed Farming'?
 - (A) Growing rabi as well as Kharif crops
 - (B) Growing several crops
 - (C) Growing several crops and also raising livestock
 - (D) Growing sugarcane as well as cereal
- 37. The first gasoline-run car engine was developed by
 - (A) Henry Ford
 - (B) Carl Benz
 - (C) Hugh Chalmers
 - (D) Horace Elgin Dodge

38. Complete the sentence:

_____, shy dogs tend to live much longer than bold, aggressive dogs.

- (A) Febrile
- (B) Captivated
- (C) Docile
- (D) Ferocious

39. Complete the sentence:

New research suggests that as threatening as they may feel, ______ relationships can often enhance social and emotional development more than they impede it.

- (A) illicit
- (B) harmonious
- (C) cosmic
- (D) cross-cultural
- 40. A man purchases two watches at Rs. 560. He sells one at 15% profit and other at 10% loss. Then he neither gains nor lose. The cost price of each watch is
 - (A) Rs. 224, Rs. 336
 - (B) Rs. 220, Rs. 340
 - (C) Rs. 234, Rs. 326
 - (D) Rs. 244, Rs. 316

- 41. All taxes come under
 - (A) Revenue Receipt
 - (B) Capital Gains
 - (C) Public Borrowing
 - (D) Both (A) and (B)
- 42. The full name for LAN associated with computer networking is
 - (A) Land Area Network
 - (B) Local Area Network
 - (C) Local and non-local
 - (D) Land and Network
- 43. Who amongst the following Englishmen, first translated 'Bhagvad Gita' into English?
 - (A) William Jones
 - (B) Charles Wilkins
 - (C) Alexander Cunningham
 - (D) John Marshall
- 44. Choose the word that does not belong to the group.
 - (A) Puzzle
 - (B) Nuzzle
 - (C) Enigma
 - (D) Riddle
- 45. By selling an article for Rs. 450, a man loses 25%. At what price he will sell in order to gain 25%?
 - (A) Rs. 600
 - (B) Rs. 650
 - (C) Rs. 700
 - (D) Rs. 750

- 46. Who wrote 'The autobiography of an unknown Indian'?
 - (A) Mahatma Gandhi
 - (B) Nirad C. Chaudhuri
 - (C) Salman Rushdie
 - (D) R. K. Narayan
- 47. In what time Rs. 2,400 will amount to Rs. 2,646 at 5% p.a. compounded annually?
 - (A) 2 years
 - (B) 3 years
 - (C) 4 years
 - (D) 5 years
- 48. At what rate of interest per annum will a sum double itselft in 8 years?
 - (A) 12 1 %
 - (B) $17\frac{1}{2}\%$ (C) $22\frac{1}{2}\%$

 - (D) 27¹/₂%
- 49. Kalpakkam in Tamil Nadu is famous for
 - (A) Oil refinery
 - (B) Atomic power station
 - (C) Rice production
 - (D) Hydel power station
- 50. What did Dmitri Mendeleev formulate?
 - (A) Chaos theory
 - (B) The Periodic Table of Chemical elements
 - (C) The Alpha Effect
 - (D) Nuclear Shell Model

- The material used in the manufacture of lead pencil is
 - (A) Graphite
 - (B) Lead
 - (C) Mica
 - (D) Carbon
- 52. Which of the following has not contributed in India's growth?
 - (A) Technological Research
 - (B) Population Growth
 - (C) Diversification of Industries
 - (D) Increase in Savings
- 53. From which part of the plant is turmeric obtained?
 - (A) Root
 - (B) Fruit
 - (C) Seed
 - (D) Stem
- 54. Who was the first Indian Governor-General of free India?
 - (A) C. Rajagopalachari
 - (B) Maulana Azad
 - (C) Sardar Patel
 - (D) Rajendra Prasad
- A prescribed set of well-defined instructions for solving mathematical problems is called
 - (A) A compiler
 - (B) A code
 - (C) A description
 - (D) An algorithm

- 56. The progress in increase of fish production was called
 - (A) Yellow revolution
 - (B) White revolution
 - (C) Brown revolution
 - (D) Blue revolution
- 57. The velocity of light in vacuum and in other medium is C and V respectively, the refractive index of the medium
 - (A) $\mu = CV$
 - (B) $\mu = \frac{1}{CV}$
 - (C) $\mu = C/V$
 - (D) $\mu = \frac{V}{C}$
 - 58. The powerhouse of a cell is the
 - (A) Plastid
 - (B) Chloroplasts
 - (C) Golgi body
 - (D) Mitochondria
 - 59. Identify the Synonym.

Adamant

- (A) Awkward
- (B) Stable
- (C) Stubborn
- (D) Pleasant
- 60. In which year was Rowlatt Act passed?
 - (A) 1919
 - (B) 1921
 - (C) 1929
 - (D) 1916

- 61. Where is the 'Headquarter' of Tea Board located?
 - (A) Bangalore
 - (B) Kochi
 - (C) Kolkata
 - (D) Darjeeling
 - 62. Identify the Antonym.

Immaculate

- (A) Spotless
- (B) Defective
- (C) Dirty
- (D) Arrogant
- 63. Gypsum is an ore of
 - (A) iron
 - (B) calcium
 - (C) sodium
 - (D) magnesium
- 64. Who invented the medicine of black fever/ kalajor?
 - (A) Upendra Nath Roy
 - (B) Upendra Nath Brahmachari
 - (C) Upendra Nath Chowdhury
 - (D) J. C. Bose
- 65. Which of the following is not a Kharif crop?
 - (A) Rice
 - (B) Maize
 - (C) Cotton
 - (D) Barley

- 66. Find the missing term of the series:
 - 12, 20, 30, 7, 56
 - (A) 40
 - (B) 42
 - (C) 43
 - (D) 46
- 67. Tropic of Cancer does not pass through
 - (A) Gujarat
 - (B) Odisha
 - (C) Tripura
 - (D) West Bengal
- 68. A man is walking at a speed of 10 km/hour. After every kilometre, he takes rest for 5 min. How much time will be taken to cover a distance of 5 km.?
 - (A) 45 minutes
 - (B) 50 minutes
 - (C) 55 minutes
 - (D) I hour
- 69. The ratio of two numbers is 15: 11. If their HCF is 13, then the numbers are
 - (A) 75,55
 - (B) 42, 22
 - (C) 104, 44
 - (D) 195, 143
- 70. If $7 \times 6 \times 9 = 976$, $5 \times 9 \times 4 = 459$, then $6 \times 3 \times 8 = ?$
 - (A) 638
 - (B) 368
 - (C) 144
 - (D) 863

- A man can swim downstream at 8 km/hour and upstream at 2 km/hour. The speed of the current is
 - (A) 3 km/hour
 - (B) 4 km/hour
 - (C) 5 km/hour
 - (D) 6 km/hour
- 72. Which state launched 24 hours free power supply for farmers from 1st January 2018 and claimed to have became the first in India to launch such initiative in India?
 - (A) Arunachal Pradesh
 - (B) Telangana
 - (C) Uttarakhand
 - (D) Goa
- 73. If the average of a, b, c be M and ab + bc = -ca, then the average of a^2 , b^2 , c^2 is
 - (A) M2
 - (B) 3M²
 - (C) 9M²
 - (D) 27M²
- 74. If a pendulum clock is taken to moon from the earth, the clock will
 - (A) run slow
 - (B) run fast
 - (C) no change
 - (D) stop working
- 75. Hiuen Tsang visited India during the reign of
 - (A) Kanishk
 - (B) Harshavardhan
 - (C) Chandragupta
 - (D) Skandgupta

- 76. Protein-energy malnutrition causes
 - (A) Marasmus
 - (B) Rickets
 - (C) Beriberi
 - (D) Pellagra
- 77. Basic, Cobol, C++ are different types of
 - (A) computer languages
 - (B) machine languages
 - (C) sign languages
 - (D) assembly languages
- 78. What was the immediate reason of withdrawal of non-co-operation movement?
 - (A) Chauri-Chaura Incidence
 - (B) Withdrawal of Muslims from the movement
 - (C) Suppression by British Government
 - (D) None of the above
- 79. Three years ago the population of a town was 2,50,000. If it had increased by 3%, 4% and 6% in the last three years, the present population of the town is
 - (A) 2,83,268
 - (B) 2.83,468
 - (C) 2,83,668
 - (D) 2,83,868
 - 80. Major plantation of rubber is found in
 - (A) Malaysia
 - (B) Canada
 - (C) Alaska
 - (D) Mexico

81. 'Bande Mataram' was first composed in	81.	'Bande	Mataram'	was first	composed in	i
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- (A) 1870
- (B) 1872
- (C) 1875
- (D) 1876

82. Bile juice is secreted by

- (A) Pancreas
- (B) Liver
- (C) Spleen
- (D) Gall bladder

83. If PALE is coded as 2134, EARTH is coded as 41590, how is PEARL coded in that code?

- (A) 29530
- (B) 24153
- (C) 25413
- (D) 25430
- 84. P, Q and R start a business. P invests 3 time as much as Q invests and Q invests $\frac{2}{3}$ of what R invests. If the total profit is Rs. 1320, then the share of P will be
 - (A) Rs. 760
 - (B) Rs. 720
 - (C) Rs. 600
 - (D) Rs. 660
- 85. If the cost price of 25 articles is equal to the selling price of 20 articles, the gain % is
 - (A) 20
 - (B) 25
 - (C) 30
 - (D) 45

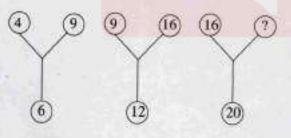
- 86. Who proved experimentally the existence of electromagnetic waves?
 - (A) J. C. Bose
 - (B) Maxwell
 - (C) Marconi
 - (D) Hertz
 - 87. What is the function of lens in our eyes?
 - (A) Lower the eyes
 - (B) Send message of image to brain
 - (C) Change the focal distance of the eye
 - (D) Protect eyes from injury
- 88. A bag contains an equal number of one rupee, 50 paise and 25 paise coins respectively. If the total value is Rs. 35, how many coins of each type are there?
 - (A) 70
 - (B) 50
 - (C) 30
 - (D) 20
 - 89. The longest bone in the human body is
 - (A) Stirrup
 - (B) Back bone
 - (C) Thigh bone
 - (D) Gullet

90. Identify the Antonym.

Inclement

- (A) Confused
- (B) Stormy
- (C) Definite
- (D) Vivid

- 91. Which of the following is nonbiodegradable?
 - (A) Animal Bones
 - (B) Nylon
 - (C) Tea leaves
 - (D) Wool
- 92. The part of the brain which is responsible for intelligence is
 - (A) cerebrum
 - (B) cerebellum
 - (C) olfactory lobe
 - (D) cochlea
- 93. A person distributes his pens among four friends A, B, C and D in the ratio $\frac{1}{3}:\frac{1}{4}:\frac{1}{5}:\frac{1}{6}$. What is the minimum number of pens that the person should have?
 - (A) 19
 - (B) 38
 - (C) 57
 - (D) 58
- 94. If PEN = 123, HELF = 4278, COW = 956, then PEOPLE = ?
 - (A) 125172
 - (B) 1217253
 - (C) 125127
 - (D) 125721
 - 95. Find the missing number:



- (A) 21
- (B) 25
- (C) 50
- (D) 60

- 96. A water tap can fill a cistern in 20 minutes and another can fill in 30 minutes. If both are opened simultaneously, the cistern will be full in
 - (A) 12 minutes
 - (B) 10 minutes
 - (C) 25 minutes
 - (D) 60 minutes
- 97. The sectors are classified into public and private sector on the basis of
 - (A) employment condition.
 - (B) the nature of economic activity.
 - (C) ownership of enterprises.
 - (D) number of worker employed in the enterprise.
- **98.** If 90% of A = 30% of B and B = x% of A, then the value of x is
 - (A) 600
 - (B) 800
 - (C) 900
 - (D) 300
 - 99. 'Raman Effect' was discovered in 1928 by
 - (A) J. C. Bose
 - (B) C. V. Raman
 - (C) R. J. Raman
 - (D) Taraknath Palit
- 100. The density of water is maximum at
 - (A) 32°F
 - (B) 42°F
 - (C) 39-2°F
 - (D) 4°F

SCI/19

A-12

Space for Rough Work

