PREVIOUS YEAR PAPER

SSC MTS 2024 — 23 October 2024, Shift 1

SSC MTS & Havaldar · 23 October 2024 · 9:00 AM - 11:00 AM

70 of the paper's 89 questions · marks per question not printed on the response sheet

Left out of the original paper: 19 (any question that needs a figure or formatting we cannot show, has no answer in the response sheet, or could not be checked against a second copy of the paper).

Questions from the Staff Selection Commission's paper of 23 October 2024, 9:00 AM - 11:00 AM. Each question is followed by its answer, and the answer key is repeated on the last page.

Take it as a timed practice test: exambharo.com/ssc-mts/previous-year-papers/ssc-mts-2024-23-oct-shift-1/

Numerical and Mathematical Ability

1. What should be added to each of the four numbers 5, 19, 7 and 25 to make them proportional?

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

Answer: (c)

2. The difference between successive discounts of 28% followed by 25% and 10% followed by 5% on the marked price of a pen is ₹63. The marked price of the pen is:

(a) ₹150
(b) ₹165
(c) ₹200
(d) ₹331

Answer: (c)

5. A hemispherical bowl with an internal radius of 27 cm is full of liquid. The liquid is to be filled into cylindrical shaped bottles of diameter 12 cm and height 13.5 cm. The number of bottles required to empty the bowl is:

(a) 27
(b) 29
(c) 21
(d) 25

Answer: (a)

6. The average weight of 11 persons is increased by 4.5 kg when one of them, whose weight is 50.5 kg, is replaced by a new person. The weight of the new person is:

(a) 98.5 kg
(b) 95.5 kg
(c) 90.5 kg
(d) 100 kg

Answer: (d)

7. The average of 41 numbers is 62. The average of the first 18 numbers is 65.5, and the average of the last 24 numbers is 61.5. If the 18th number from the beginning is excluded, then what is the average of the remaining numbers?

(a) 61.625
(b) 60.5
(c) 60.725
(d) 61.325

Answer: (c)

10. Find the simple interest (in ₹) on ₹3500 as a sum borrowed at 4% per year rate of interest for 2 years.

(a) 320
(b) 280
(c) 220
(d) 240

Answer: (b)

11. A girl spends 76% of her income. If her income increases by 18% and her expenditure increases by 25%, then what is the percentage increase or decrease in her savings? (Correct to one decimal place)

(a) Increase by 3.6%
(b) Decrease by 4.2%
(c) Decrease by 3.8%
(d) Increase by 5%

Answer: (b)

12. A train moving at the same speed passes two bridges of length 900 m and 486 m in 110 seconds and 70 seconds, respectively. The length of the train (in m) is:

(a) 225.7
(b) 283.5
(c) 238.5
(d) 253.8

Answer: (c)

13. A boat is rowed down along a river 21km in 3 hours and against a river 14km in 7 hours. Find the speed of the boat and the river.

(a) 6.4 km/h and 4.6 km/h
(b) 4.5 km/h and 2.5 km/h
(c) 3.2 km/h and 4.8 km/h
(d) 2.6 km/h and 4.8 km/h

Answer: (b)

15. The average of five numbers is 62. The average of the first two numbers is 48 and that of the last two numbers is 52. What is the third number?

(a) 95
(b) 100
(c) 110
(d) 105

Answer: (c)

16. Find the LCM of 120, 200 and 225.

(a) 1735
(b) 1200
(c) 1800
(d) 2400

Answer: (c)

17. An ice-cream cone with a lid has a total surface area equal to the area of another circle of certain radius. If the radius of the circle is equal to average of the slant height and the radius of the cone, then the ratio of the slant height of the cone to the radius of the circle is:

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

Answer: (b)

Reasoning Ability and Problem Sc

1. '4KC2' is related to '6MA4' in a certain way. In the same way, '3MN4' is related to '5OL6'. To which of the following is '5NO3' related following the same logic?

(a) 7PM5
(b) 8PL6
(c) 5OM7
(d) 6MO7

Answer: (a)

3. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion(s) logically follow(s) from the statement(s).

Statements: Some desktops are monitors. No monitor is a television.

Conclusions:
(I) Some desktops are televisions.
(II) Some monitors are desktops.

(a) Neither conclusion (I) nor (II) follows.

(b) Only conclusion (II) follows.

(c) Both conclusions (I) and (II) follow.

(d) Only conclusion (I) follows.

Answer: (b)

4. What should come in place of the question mark (?) in the following series?

800, 700, 600, 500, 400, ?

(a) 656

(b) 300

(c) 789

(d) 399

Answer: (b)

5. 4 is related to 17 following a certain logic. Following the same logic, 5 is related to 26. To which of the following is 10 related following the same logic? (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /subtracting /multiplying etc. to 13can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1and 3 is not allowed)

(a) 103

(b) 99

(c) 121

(d) 101

Answer: (d)

7. A, B, C, D, E, F, and G are sitting around a circular table, facing away from the centre (but not necessarily in the same order).Only 2 people sit between A and D when counted from the right of D.B and C are both immediate neighbours of G.F sits to the immediate left of E.Only 1 person sits between C and E when counted from the left of C. How many people are sitting between G and D when counted from the right of G?

(a) 1

(b) 4

(c) 2

(d) 3

Answer: (a)

8. What will come in place of the question mark (?) in the following equation if '+' and '−' are interchanged and '×' and '÷' are interchanged? 69 − 24 ÷ 4 × 6 + 13 = ?

(a) 68

(b) 70

(c) 72

(d) 86

Answer: (c)

9. Four number triads have been given, out of which three are alike in some manner and one is different. Select the number triad that is different from the rest. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding/subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

(a) (3, 6, 36)

(b) (8, 16, 256)

(c) (5, 10, 100)

(d) (9, 18, 320)

Answer: (d)

10. In a certain code language, 'have good food' is coded as 'ti ma ka' and 'nutritious food healthy' is coded as 'ka lu pe'. How is 'food' coded in the given language?

(a) lu

(b) ti

(c) ma

(d) ka

Answer: (d)

14. RXPL is related to OUMI in a certain way based on the English alphabetical order. In the same way, TZRN is related to QWOK. To which of the following is PVNJ related, following the same logic?

(a) SMGK

(b) MSKG

(c) SMKG

(d) MSGK

Answer: (b)

16. What should come in place of the question mark (?) in the following series based on the English alphabetical order? ISC, GPF, EMI, CJL, ?

(a) BGO

(b) AGO

(c) AGP

(d) BGP

Answer: (b)

17. Sunita, Lokesh, Babita, Isha, Akram, Alok and Kiran are sitting around a circular table facing the centre (but not necessarily in the same order). Sunita is an immediate neighbour of Babita. Lokesh sits 2 nd to the right of Babita. Isha sits 4 th to the right of Akram. Alok sits 3 rd to the right of Lokesh. Isha sits 2 nd to the left of Alok. Who sits third to the right of Babita?

(a) Isha
(b) Alok
(c) Lokesh
(d) Kiran

Answer: (a)

18. In a certain code language, 'LIVE' is coded as '2648' and 'EAST' is coded as '3215'. What is the code for 'E' in that language?

(a) 2
(b) 5
(c) 8
(d) 3

Answer: (a)

20. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts,decide which of the given conclusions logically follow(s) from the statements. Statements: All gardens are museums. All museums are parks. Conclusions:
(I) Some museums are gardens.
(II) All gardens are parks.

(a) Only conclusion II follows
(b) Only conclusion I follows
(c) Neither conclusion I nor II follows
(d) Both conclusions I and II follow

Answer: (d)

General Awareness

1. The Zaskar and the Nubra are tributaries of which river?

(a) Indus
(b) Ganga
(c) Kaveri
(d) Mahanadi

Answer: (a)

2. 'Once a Dancer' is the autobiography of _____.

(a) Sudha Chandran
(b) Audrey Hepburn
(c) Yamini Krishnamurthy
(d) Allegra Kent

Answer: (d)

3. In February 2024, who was sworn in as the first woman Chief Justice of the Uttarakhand High Court?

(a) Sujata Manohar
(b) Gyan Sudha Mishra
(c) Ranjana Desai
(d) Ritu Bahri

Answer: (d)

4. Which chronicler of the medieval age recognised that Raziyya was more able and qualified than all her brothers?

(a) Taj-ud-din
(b) Minhaj-i-Siraj
(c) Muhammad Junaidi
(d) Fakhrul-Mulk-Isami

Answer: (b)

5. In which of the following states is Aoleang Monyü celebrated, which is an ancient spring festival celebrated by all Konyaks in the month of April?

(a) Telangana
(b) Bihar
(c) Odisha
(d) Nagaland

Answer: (d)

6. Which Article of the Indian Constitution [illegible] provisions for the appointment of High Court Judges?

(a) Article 217
(b) Article 119
(c) Article 252
(d) Article 202

Answer: (a)

7. Which of the following is an example of a private sector Industry?

(a) Steel Authority of India Limited
(b) Bharat Heavy Electricals Limited
(c) Tata Iron and Steel Company
(d) Life Insurance Corporation

Answer: (c)

8. JJ Thomson is known for developing which model in 1898?

(a) Gold foil model
(b) Plum pudding model
(c) Double-slit model
(d) Oil drop model

Answer: (b)

9. ‘Dashain’ and ‘Tihar’ are popular festivals of which neighbouring country of India?

(a) Bangladesh
(b) Sri Lanka
(c) Nepal
(d) Pakistan

Answer: (c)

10. Which of the following countries won the maximum number of T20 Women's Cricket World Cup titles?

(a) India
(b) England
(c) West Indies
(d) Australia

Answer: (d)

11. Which of the following Indian tribal dances is prevalent in the Araku Valley near Visakhapatnam?

(a) Bagurumba
(b) Dhimsa
(c) Jhumur
(d) Bardo Chham

Answer: (b)

12. Which track and field event has a water jump?

(a) Hurdles running
(b) Decathlon
(c) Cross country running
(d) Steeplechase

Answer: (d)

13. If after being bitten by a mosquito, the person is detected as being malaria positive, which of the following will hold true?
A. The person did not have a balanced diet.
B. The mosquito was carrying plasmodium.
C. The mosquito was suffering from malaria.
D. The person was not vaccinated as a child.

(a) A
(b) B
(c) C
(d) D

Answer: (b)

14. Right of a prisoner to speedy trial will be categorised in which of the following Fundamental Rights?

(a) Right to Life
(b) Right against Exploitation
(c) Right to Constitutional Remedies
(d) Right to Equality

Answer: (a)

16. Epic Poem, Savitri, described by its author as 'A Legend and a Symbol', was written by _____.

(a) Aurobindo Ghosh
(b) Mahatma Phule
(c) Bal Gangadhar Tilak
(d) Baba Saheb Ambedkar

Answer: (a)

17. All natural earthquakes take place in the:

(a) Asthenosphere
(b) Biosphere
(c) Lithosphere
(d) Hydrosphere

Answer: (c)

18. Carnatic singer Bombay Jayashri has been selec for which music award in 2023?

(a) Sangeetha Choodamani
(b) Sangeetha Kalasikhamani
(c) Sangita Kalanidhi
(d) Sangeetha Kalasarathy

Answer: (c)

19. In which of the following years did Alexander invade Punjab and in which of the following years did he die?

(a) 320 BC and 323 BC
(b) 323 BC and 328 BC
(c) 326 BC and 323 BC
(d) 326 BC and 327 BC

Answer: (c)

20. Which of the following Acts provided for a system of tribunals and a ban on strikes?

(a) The Trade Disputes Act, 1929
(b) Government of India Act, 1912
(c) Indian Partnership Act, 1932
(d) Age of Consent Act, 1891

Answer: (a)

21. Who excavated the Chira Tope stupa at Taxila?
(a) James Mill
(b) Alexander Cunningham
(c) John Marshall
(d) James Princip
Answer: (c)

23. Which of the following fields is NOT covered by the National Eminence Award?
(a) Literature
(b) Dance
(c) Music of all forms and origin
(d) Theatre
Answer: (a)

24. Which specific chemical can be applied to achieve staining of chromosomes?
(a) Acetocarmine
(b) Methanol
(c) Ethanol
(d) Hydrochloric acid
Answer: (a)

25. iGOT Karmayogi is an integrated online training pl rm to provide continuous learning opportunities to _____ in order to upgrade th skills.
(a) Lawyers
(b) Journalists
(c) Individual Civil Service Officials
(d) Unorganised Workers
Answer: (c)

English Language and Comprehension

1. Select the most appropriate option that can substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

The car, with all <u>its features, were meticulously</u> designed.
(a) No substitution required
(b) its features, was meticulously
(c) it's features, were meticulously
(d) its features, have meticulously
Answer: (b)

2. The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error, mark 'No error' as your answer.

There is only one way / to have a happier marred life / and I will learn it soon.

(a) and I will learn it soon.
(b) to have a happier marred life
(c) There is only one way
(d) No error

Answer: (b)

4. Select the appropriate synonym of the underlined word.

The bride has an exquisite face.

(a) Average
(b) Plain
(c) Ugly
(d) Beautiful

Answer: (d)

5. Select the most appropriate option to fill in the blank.

The teacher encouraged students to cultivate a _____ _ attitude towards learning, embracing challenges as opportunities for growth.

(a) resilient
(b) redundant
(c) stagnant
(d) complacent

Answer: (a)

6. Select the option that rectifies the spelling of the underlined word in the given sentence.

How can one justify sending sound waves into space when they cannot travel through a vacum?

(a) vacuum
(b) vacume
(c) vaccum
(d) vaccuum

Answer: (a)

7. Select the most appropriate adjective to fill in the blank.

The Nile is the _____ river in the world.

(a) longest
(b) longer
(c) most long
(d) long

Answer: (a)

8. In the given sentence, one of the four underlined words is incorrectly spelt. Identify the INCORRECTLY spelt word.

The scientific community gave credance to the new research findings after rigorous testing and validation.

(a) rigorous
(b) community
(c) validation
(d) credance

Answer: (d)

9. Select the INCORRECTLY spelt word in the following sentence. The restaurant's specialtiy is seafood.

(a) The
(b) seafood
(c) restaurant's
(d) specialtiy

Answer: (d)

10. Select the most appropriate idiom to fill in the blank.

We hear the judges from their _____ that only CNG buses should run in Delhi.

(a) look sharp
(b) square meal
(c) melting pot
(d) ivory tower

Answer: (d)

12. Identify the sentence with an error in the use of simple present tense.

(a) We brush our teeth daily.
(b) He go to school every day.
(c) She walks every morning.
(d) You do yoga every morning.

Answer: (b)

13. In the following sentence the underlined part contains an error. Below are given alternatives to the underlined part. Select the correct alternative. Kanha National Park in MP is the dense forest in India.

(a) most dense
(b) densest
(c) denser
(d) more denser

Answer: (b)

14. In the following sentence the underlined part contains an error. Alternatives to the underlined part are given as options. Select the correct alternative. When they left for Mexico, their house was in good condition than it is now.

(a) excellent
(b) better
(c) more good
(d) best

Answer: (b)

15. Select the most appropriate meaning of the underlined word in the context of the following sentence.

The palm is a native of Malaysia. We can find them in groves.

(a) A pamphlet
(b) Inner surface of the hand
(c) A type of soil
(d) A type of tree

Answer: (d)

16. Select the most appropriate synonym of the underlined word in the given sentence.

Her fear of public speaking was a major hurdle in her career.

(a) Stimulus
(b) Support
(c) Encouragement
(d) Obstacle

Answer: (d)

18. Select the most appropriate phrase that can substitute the underlined segment in the given sentence. The question paper was very easy to complete.

(a) the last straw
(b) a snowball effect
(c) a piece of cake
(d) fair and square

Answer: (c)

19. Select the most appropriate synonym of the given word. Preserve

(a) Consume
(b) Ignore
(c) Maintain
(d) Complain

Answer: (c)

20. The following sentence has been split into four segments. Identify the segment that contains a grammatical error.

She received / an award / for her work / in a engineering field.

(a) an award
(b) in a engineering field.
(c) She received
(d) for her work

Answer: (b)

Passage — for questions 21–25

> In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each number.
>
> How environmental problems ___1____ different groups is a function of social inequality. Social status and power determine the _____2___ to which people can insulate themselves from environmental crises or overcome them. In some cases, their 'solutions' may actually worsen environmental disparities. In Kutch, Gujarat, where water is scarce, richer farmers have ___3___ in deep bore tubewells to tap groundwater to irrigate their fields and grow cash crops. When the rains fail, the earthen wells of the poorer villagers run dry and they do not even have water to drink. At such times, the moist green fields of the rich farmers seem to mock them. Certain environmental concerns sometimes appear to be universal concerns, not particular to ___4____ social groups. For instance, _____5_____ air pollution or protecting biodiversity seems to be in the public interest. A sociological analysis shows, however, that how public priorities are set and how they are pursued may not be universally beneficial.

21. Select the most appropriate option to fill in blank number 1.

(a) Effect
(b) Affect
(c) Adopt
(d) Partial

Answer: (b)

22. Select the most appropriate option to fill in blank number 2.

(a) Various
(b) Expanse
(c) Scope
(d) Extent

Answer: (d)

23. Select the most appropriate option to fill in blank number 3.
    (a) Capitalised
    (b) Provided
    (c) Invested
    (d) Licensed

    Answer: (c)

24. Select the most appropriate option to fill in blank number 4.
    (a) Restriction
    (b) Indefinitely
    (c) Exactly
    (d) Specific

    Answer: (d)

25. Select the most appropriate option to fill in blank number 5.
    (a) Manipulating
    (b) Increasing
    (c) Reducing
    (d) Abdicating

    Answer: (c)

Answer key

Answer key as marked in the Staff Selection Commission's response sheet. "—" means the sheet did not show it clearly.

Numerical and Mathematical Ability

1	**(c)**	2	**(c)**	5	**(a)**	6	**(d)**	7	**(c)**	10	**(b)**
11	**(b)**	12	**(c)**	13	**(b)**	15	**(c)**	16	**(c)**	17	**(b)**

Reasoning Ability and Problem Solving

1	**(a)**	3	**(b)**	4	**(b)**	5	**(d)**	7	**(a)**	8	**(c)**
9	**(d)**	10	**(d)**	14	**(b)**	16	**(b)**	17	**(a)**	18	**(a)**
20	**(d)**										

General Awareness

1	**(a)**	2	**(d)**	3	**(d)**	4	**(b)**	5	**(d)**	6	**(a)**
7	**(c)**	8	**(b)**	9	**(c)**	10	**(d)**	11	**(b)**	12	**(d)**
13	**(b)**	14	**(a)**	16	**(a)**	17	**(c)**	18	**(c)**	19	**(c)**
20	**(a)**	21	**(c)**	23	**(a)**	24	**(a)**	25	**(c)**		

English Language and Comprehension

1	**(b)**	2	**(b)**	4	**(d)**	5	**(a)**	6	**(a)**	7	**(a)**
8	**(d)**	9	**(d)**	10	**(d)**	12	**(b)**	13	**(b)**	14	**(b)**
15	**(d)**	16	**(d)**	18	**(c)**	19	**(c)**	20	**(b)**	21	**(b)**
22	**(d)**	23	**(c)**	24	**(d)**	25	**(c)**				