PREVIOUS YEAR PAPER

SSC MTS 2023 — 4 September 2023, Shift 2

SSC MTS & Havaldar · 4 September 2023 · 12:30 PM - 2:30 PM

77 of the paper's 90 questions · marks per question not printed on the response sheet

Left out of the original paper: 13 (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 4 September 2023, 12:30 PM - 2:30 PM. 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-2023-4-sep-shift-2/

Numerical and Mathematical Ability

1. A sum invested at the rate of 6% simple interest per annum grows to ₹1,13,880 in 5 years. What is the simple interest, If the same amount is invested for 8 years at the rate of 9% per annum?

(a) ₹63,072

(b) ₹60,565

(c) ₹65,392

(d) ₹58,050

Answer: (a)

2.

Find the compound interest (Compounded annually) on ₹2,000 $2\frac{1}{2}$ years at 10% per annum.

(a)

₹ 561

(b)

₹ 500

(c)

₹ 521

(d)

₹ 541

Answer: (d)

3. Study the given table and answer the question that follows. The table shows the number of voters in four different villages P, Q, R, S.

Villages	Total number of registered voters	Percentage of people who voted (Out of the total number of registered voters)
P	1100	68
Q	1450	62
R	1200	73
S	1124	87

The number of people who did not vote in village P is what percentage more than that who did not vote in village R?

(a)

$6\frac{52}{81}\%$

(b)

$8\frac{52}{81}\%$

(c)

$7\frac{52}{81}\%$

(d)

$9\frac{52}{81}\%$

Answer: (b)

4.

Find the total surface area of a cuboid whose dimensions are 18 m, 6 m and 3 m.

(a)

$90\ m^2$

(b)

$180\ m^2$

(c)

$324\ m^2$

(d)

$360\ m^2$

Answer: (d)

5.

Yug covers a certain distance with a speed of 56 km/h in $\frac{3}{2}$ hours. If he wants to cover the same distance in 7 hours, what would be his speed (in km/h)?

(a)

16

(b)

20

(c)

14

(d)

12

Answer: (d)

8.

A grocery seller mixes two varieties of tea costing ₹300 per kg and ₹160 per kg in such a ratio that by selling this mixture at the rate of ₹187 per kg the shopkeeper earns 10% profit. In what respective ratio does the grocery seller mix the two varieties of tea?

(a) 2 : 13

(b) 13 : 3

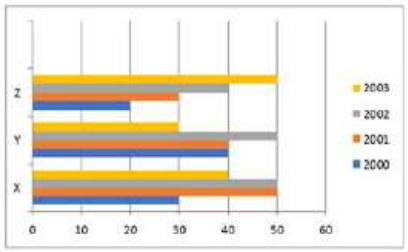
(c) 13 : 2

(d) 1 : 13

Answer: (d)

9.

The following bar graph indicates the production of cement by ... and Z during the years 2000 - 2003. The quantity is in lakh bags. Study the bar graph carefully ... question.



What is the ratio of the average production of company X during the period 2000 – 2003 to the production of company Y during the same period (in lakh bags).

(a)

17 : 16

(b)

8 : 7

(c)

12 : 17

(d)

10 : 7

Answer: (a)

10.

The least common multiple (LCM) of p and q is r. The LCM of p^2q and pq^2 is _____.

(a)

pqr^3

(b)

pqr

(c)

pq

(d)

pqr^2

Answer: (b)

11.

Two trains started from a station, at the same time in the same direction, at speeds of 90 km/h and 80 km/h. What will be the distance between the two trains after 5 hours?

(a)

55 km

(b)

50 km

(c)

45 km

(d)

40 km

Answer: (b)

15.

The average weight of 17 men is 63 kg and the average weight of 36 women is 54 kg. What is the average weight (in kg) of all the men and women together? (Rounded off to the nearest integer)

(a)

59

(b)

62

(c)

57

(d)

52

Answer: (c)

16.

A vessel contains liquid A and liquid B in the ratio 4 : 9. If 8 litres of liquid A is added to the vessel, the new ratio becomes 8 : 9. Find the quantity of liquid A (in litres) in the original mixture.

(a)

12

(b)

9

(c)

8

(d)

6

Answer: (c)

17.

Which of the following expressions has value equal to 0?

(a)

$\left(2\times 3+5-\left(1-2(3-2\times 2)\right)\right)$

(b)

$\left(2\times 3-5-\left(1+2(3-2\times 2)\right)\right)$

(c)

$\left(2\times 3-5+\left(1+2(3-2\times 2\right)\right)$

(d)

$\left(2\times 3-5-\left(1-2(3-2\times 2)\right)\right)$

Answer: (c)

19.

A, B and C can complete a work in 10, 15 and 20 days, respectively. They work on alternate days such that 1st day A, 2nd day B and 3rd day C. Again 4th day A, 5th day B and so on. If they work in the same way, in how many days will the work be completed?

(a)

$13\frac{1}{4}$

(b)

15

(c)

14

(d)

$13\frac{1}{2}$

Answer: (d)

20.

A grocer purchased 50 kg of sugar at ₹40 per kg and mixed with 70 kg of sugar at ₹30 per kg. At what rate should he sell the mixture (per kg) to gain 20%?

(a)

₹60

(b)

₹20

(c)

₹35

(d)

₹41

Answer: (d)

Reasoning Ability and Problem Solving

1.

2 is related to 40 following a certain logic. Following the same logic, 5 is related to 250. To which of the following is 7 related to, following the same logic?

(a)

470

(b)

490

(c)

450

(d)

400

Answer: (b)

2.

Select the combination of letters that when sequentially placed in the blanks of the given series, will complete the series.

R _ _ RT _ R _ R _ TR

(a)
RTRRT

(b)
TTTRR

(c)
TRRTR

(d)
RTTTR

Answer: (c)

3.

J, K, P, Q, R and M are sitting around a circular table facing the centre.
J is sitting to the immediate left of M. R is sitting 2nd to the left of J. K is sitting 3rd to the right of J. P sits to the immediate right of R.
Who sits 2nd to the left of K?

(a)
R

(b)
Q

(c)
M

(d)
P

Answer: (c)

4.

What should come in place of '?' in the given series?

3 20 54 ? 258 530 1074

(a)
122

(b)
128

(c)
118

(d)
124

Answer: (a)

5.

Read the given statements and conclusions carefully. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. You have to decide which conclusion/s logically follow/s from the given statements.

Statements: All crows are sparrows. Some sparrows are parrots. All parrots are yellow.

Conclusion I: Some crows are parrots.

Conclusion II: Some yellow are parrots.

(a)

Only conclusion (II) is follow.

(b)

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

(c)

Only conclusion (I) is follow.

(d)

Neither conclusion (I) nor (II) is follow.

Answer: (a)

6.

The position of how many letters will remain unchanged if each of the letter in the word 'CATEGORY' is arranged in alphabetical order?

(a)

Three

(b)

Two

(c)

None

(d)

One

Answer: (d)

8.

What should come in place of ? in the given series based on the English alphabetical order?

ETM, AWO, WZQ, SCS, ?

(a)

MEU

(b)

NFV

(c)

OFU

(d)

MEV

Answer: (c)

9.

In a certain code language, 'YJM' is coded as '26-11-14' and 'SOP' is coded as '20-16-17'. What is the code for 'BTX' in the given code language?

(a)

3-21-25

(b)

5-22-24

(c)

5-23-25

(d)

4-22-24

Answer: (a)

10.

If G means '−', D means '×', A means '÷', B means '+', then what will come in place of the question mark (?) in the following equation?

19 D 6 B 34 A 2 G 27 = ?

(a)

126

(b)

104

(c)

65

(d)

83

Answer: (b)

11.

In a certain code language, 'LIAR' is coded as '5148' and 'REAL' is coded as '1582'. What is the code for 'E' in the given code language?

(a)
5

(b)
8

(c)
2

(d)
1

Answer: (c)

12.

Select the combination of letters that when sequentially placed in the blanks of the given series will make it logically complete.

KC_OK_PO_YSOKWV_ K_YO

(a)
MDHTV

(b)
LJMST

(c)
KJNVL

(d)
MAKOU

Answer: (d)

14.

What should come in place of '?' in the given series?

13 52 169 520 1573 ?

(a)
4781

(b)
4732

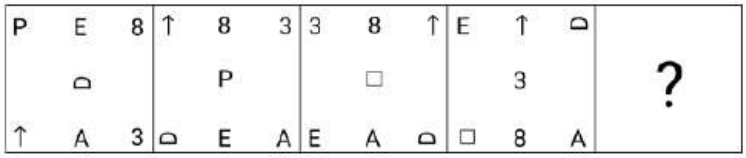
(c)
4895

(d)
4863

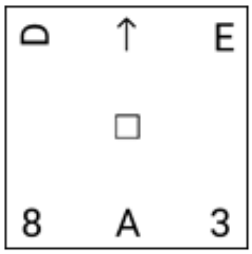
Answer: (b)

15.

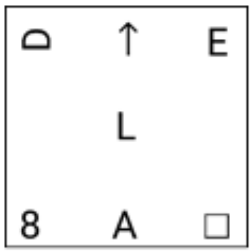
Which figure should replace the question mark (?) if the following figure series were to be continued?



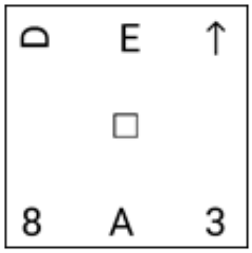
(a)



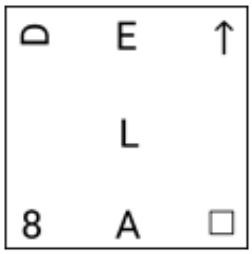
(b)



(c)



(d)



Answer: (b)

17.

Read the given statement(s) 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 statement(s).

Statements: All the actors are girls. All the girls are beautiful.

Conclusions:

(I) All the actors are beautiful.

(II) Some girls are actors.

(a)

Both conclusions (I) and (II) are follows.

(b)

Only conclusion (II) is follows.

(c)

Only conclusion (I) is follows.

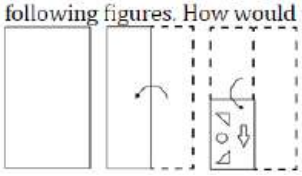
(d)

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

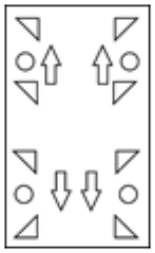
Answer: (a)

18.

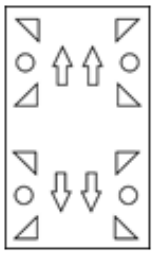
The sequence of folding a piece of paper and the manner in which the folded paper is cut is shown in the following figures. How would this paper look when unfolded?



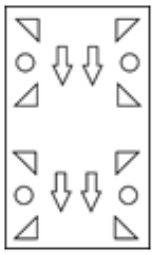
(a)



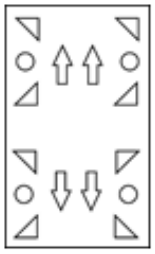
(b)



(c)



(d)



Answer: (b)

19.

What will come in place of '?' in the following equation, if '+' and '×' are interchanged and '−' and '÷' are interchanged?

$18 - 9 \div 4 \times 3 + 5 = ?$

(a)

17

(b)

13

(c)

18

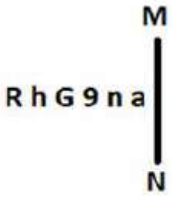
(d)

19

Answer: (b)

20.

Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



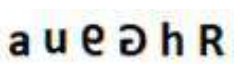
(a)



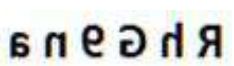
(b)



(c)



(d)



Answer: (d)

General Awareness

1. The Gua and Noamundi mines are located in with state of India?

(a) Assam

(b) Haryana

(c) Rajasthan

(d) Jharkhand

Answer: (d)

2. What is a fiscal year?

(a) A year that represents the financial reporting period for the government

(b) A year with a surplus in government revenue

(c) A year with a deficit in government revenue

(d) A year in which tax rates are increased

Answer: (a)

3. The Constitution (Scheduled Castes and Scheduled Tribes) Order (Second Amendment) Bill, 2022, was passed in December 2022 and is related to which state?

(a) Bihar

(b) Uttarakhand

(c) Uttar Pradesh

(d) Karnataka

Answer: (c)

5. Buddha Purnima is marked on a full moon day in the Hindu month of _____.

(a) Vaisakh

(b) Jyaistha

(c) Bhadra

(d) Ashadha

Answer: (a)

6. Which of the following is the official language of A anistan?

(a) Sinhala

(b) Burmese

(c) Dari

(d) Dzongkha

Answer: (c)

7. Who started the temple entry movement in 1927?

(a) Mahadev Govind Ranade

(b) Bhimrao Ambedkar

(c) Mahatma Gandhi

(d) Annie Besant

Answer: (b)

8. In which state is Gobind Sagar (Bhakra Nangal Project) located?

(a) Himachal Pradesh

(b) Gujarat

(c) Rajasthan

(d) Punjab

Answer: (a)

9. Pandit Ravi Shankar is known worldwide for playing which of the following musical instruments?
   (a) Mohan Veena
   (b) Sarod
   (c) Been
   (d) Sitar
   Answer: (d)

10.
The Arabian Sea is an extension of which of the following oceans?
   (a)
   Pacific Ocean
   (b)
   Southern Ocean
   (c)
   Arctic Ocean
   (d)
   Indian ocean
   Answer: (d)

11. Which of the following is a dimension of microfinar institutions (MFIs) in India?
   (a) Outreach to rural areas
   (b) Loan interest rates
   (c) Investment in the stock market
   (d) Availability of credit cards
   Answer: (a)

12. Shambhu Maharaj was a renowned guru of which of the following Gharanas of Kathak?
   (a) Lucknow
   (b) Jaipur
   (c) Raigarh
   (d) Banaras
   Answer: (a)

13. Which is the oldest Stupa of the Buddhist Period?
   (a) Dhamek Stupa
   (b) Mahabodhi Stupa
   (c) Kesariya Stupa
   (d) Sanchi Stupa
   Answer: (d)

14. Who conducts elections for both the houses of Parliament in India?

(a) Ministry of Parliamentary Affairs
(b) Election Commission
(c) President
(d) Prime Minister

Answer: (b)

15. The third battle of Panipat was fought in which of the following years?

(a) 1761
(b) 1707
(c) 1786
(d) 1751

Answer: (a)

17. Which dance form is associated with Natwari Dance?

(a) Kathak
(b) Kuchipudi
(c) Odissi
(d) Kathakali

Answer: (a)

18. Birsa Munda hockey stadium is one of the India's l est hockey stadium. In which state is this stadium situated?

(a) Madhya Pradesh
(b) Bihar
(c) Odisha
(d) Chhattisgarh

Answer: (c)

19. The directive principles are largely classified into three broad categories. Which of the following is NOT the part of this classification?

(a) Liberal
(b) Socialistic
(c) Gandhian
(d) Authoritative

Answer: (d)

20. Which of the following countries did India defeat to clinch its maiden Women's Junior Hockey Asia Cup title?

(a) Japan
(b) Chinese Taipei
(c) Malaysia
(d) South Korea

Answer: (d)

21.

Who among the following is the author of the book 'Sita: An Illustrated Retelling of the Ramayana'?

(a)

Ravinder Singh

(b)

Devdutt Pattanaik

(c)

Amish Tripathi

(d)

Durjoy Datta

Answer: (b)

22. Which soft metal in group 1 of the periodic table tarnishes within a few seconds of exposure to air?

(a) Barium

(b) Sodium

(c) Strontium

(d) Francium

Answer: (b)

23. The 'Ka Shad Mastieh' or victory dance of the_____ tribe of Meghalaya is an ancient war dance performed during the prominent festival of th ibe.

(a) Bhoi

(b) War

(c) Khasi

(d) Jaintia

Answer: (c)

24. What is the weight of the ball in handball for men?

(a) 425 to 475 gm

(b) 325 to 375 gm

(c) 525 to 575 gm

(d) 225 to 275 gm

Answer: (a)

25. Which vitamin is needed for a healthy immune system, low-light vision, and healthy skin?

(a) Vitamin K

(b) Vitamin B2

(c) Vitamin B9

(d) Vitamin A

Answer: (d)

English Language and Comprehension

1. Select the option that can be used as a one-word substitute for the given group of words. Study of sound and sound waves

(a) Botany
(b) Physics
(c) Demography
(d) Acoustics

Answer: (d)

2. Select the most appropriate option to fill in the blank. The students of class 7 gave their teacher a gift, which was _____ to her.

(a) revealing
(b) shocking
(c) confusing
(d) surprising

Answer: (d)

3. Select the most appropriate synonym of the given word. Obsession

(a) Discrimination
(b) Fascination
(c) Unconcern
(d) Sympathy

Answer: (b)

5. Select the most appropriate option that c .ute the underlined segment in the given sentence.

They would find someone drive the wagon back across the desert.

(a) in drive in the
(b) to drive
(c) to drive the
(d) in driving

Answer: (c)

6. The following sentence has been split into four segments. Identify the segment that contains a grammatical error. The ball / I kicked / went highly / in the sky.

(a) The ball
(b) went highly
(c) in the sky
(d) I kicked

Answer: (b)

7. Select the most appropriate idiom to fill in the blank. Rajat is known for his notorious nature. He will be friendly to your face but likes _____.

(a) to blow his trumpet
(b) to stab you in the back
(c) to paint the whole town red
(d) to get all bent out of the shape

Answer: (b)

8. Select the most appropriate meaning of the given idiom. Barking up the wrong tree

(a) Provoke trouble
(b) To make a bad situation worse
(c) Getting a good start is important
(d) To be mistaken, to be looking for solutions in the wrong place

Answer: (d)

9. Select the option that can be used as a one-word substitute for the given group of words. A creature which depends on others

(a) Microbes
(b) Virus
(c) Parasite
(d) Bacteria

Answer: (c)

10. Select the most appropriate idiom to fill in the bl .. The play I saw last night was a _____.

(a) hit the road
(b) hit the hay
(c) smash hit
(d) hit the roof

Answer: (c)

11. Select the most appropriate option to fill in the blank. He is _____ of many chain snatching cases in Dariyaganj.

(a) ackused
(b) acxused
(c) akused
(d) accused

Answer: (d)

13. Select the option that correctly rectifies the spelling error that is underlined. The <u>questionaire</u> used by the researcher was of top quality.

(a) quesstionnaire
(b) questionnaire
(c) questionnairre
(d) questionnairee

Answer: (b)

14. The given sentence contains an error. Select the option that correctly rectifies the error. That career competition was the difficultest exam he had ever given.

(a) That career competition was the difficultest exam than any he had ever given.

(b) That career competition was the most difficult exam than any he had ever given.

(c) That career competition was the most difficultest exam he had ever given.

(d) That career competition was the most difficult exam he had ever given.

Answer: (d)

15. Select the most appropriate idiom for the following sentence. Shweta organises the sale of handmade pottery at a cheap rate.

(a) Hush money

(b) Go for a song

(c) Having one's cake and eating it too

(d) Making a fuss out of something

Answer: (b)

16. Select the most appropriate ANTONYM of the given word. Guilty

(a) Responsible

(b) Innocent

(c) Criminal

(d) Patient

Answer: (b)

17. Identify the INCORRECTLY spelt word in the follo ıg sentence and select its correct spelling from the given options. The colours of the ·ıbow emed to shine through the trianguler prism as the sun hit the object.

(a) rainbouw

(b) son

(c) triangular

(d) object

Answer: (c)

18. Select the most appropriate option that can substitute the underlined segment in the given sentence.

The intrepid group of adventurers climbed the mountain <u>despite of</u> bad weather and road closures.

(a) despite

(b) in spite

(c) in view of

(d) due to

Answer: (a)

19. Select the most appropriate option that can substitute the underlined segment in the given sentence.

The airplane flowed over the mountains, offering the passengers a breath-taking view of the majestic peaks below.

(a) flew beyond
(b) flew over
(c) flowed above
(d) flowed beyond

Answer: (b)

20. Select the most appropriate ANTONYM of the given word. Ecstasy

(a) Euphoria
(b) Coarse
(c) Natural
(d) Despair

Answer: (d)

Passage — for questions 21–25

> In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. As a boy, I was always exploring lonely places—neglected gardens and orchards, unoccupied houses, patches of scrub or wasteland, the fields outside the town, the fringes of the forest. On one of my rambles (1)_____ the bungalow, I pushed my way through a thicket of lantana bushes and stumbled over a thick stone slab, twisting my ankle slightly as I fell. For some time, I sat on the grass massaging my foot. When the pain eased, I looked more (2)_____ at the stone slab and was surprised to find that it was a gravestone. It was almost entirely covered by ivy; obviously no one had been near it for years. I pulled at the ivy and some of it came away in my hands. There was some (3)_____ lettering on the grave, half-obscured by grass and moss. I could make out a name—Rose—but little more. I sat there for some time, (4)_____ over my discovery. I was wondering why 'Rose' should have been buried at so lonely a spot when there was a (5)_____ not far away.

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

(a) before
(b) behind
(c) by dint of
(d) below

Answer: (b)

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

(a) closely
(b) emptily
(c) frankly
(d) lawfully

Answer: (a)

23. Select the most appropriate option to fill in blank number 3.
    (a) idiotic
    (b) sturdy
    (c) blurred
    (d) nomadic

    Answer: (c)

24. Select the most appropriate option to fill in blank number 4.
    (a) sleeping
    (b) pondering
    (c) being
    (d) pulling

    Answer: (b)

25. Select the most appropriate option to fill in blank number 5.
    (a) dormitory
    (b) kennel
    (c) sanctuary
    (d) cemetery

    Answer: (d)

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	**(a)**	2	**(d)**	3	**(b)**	4	**(d)**	5	**(d)**	8	**(d)**
9	**(a)**	10	**(b)**	11	**(b)**	15	**(c)**	16	**(c)**	17	**(c)**
19	**(d)**	20	**(d)**								

Reasoning Ability and Problem Solving

1	**(b)**	2	**(c)**	3	**(c)**	4	**(a)**	5	**(a)**	6	**(d)**
8	**(c)**	9	**(a)**	10	**(b)**	11	**(c)**	12	**(d)**	14	**(b)**
15	**(b)**	17	**(a)**	18	**(b)**	19	**(b)**	20	**(d)**		

General Awareness

1	**(d)**	2	**(a)**	3	**(c)**	5	**(a)**	6	**(c)**	7	**(b)**
8	**(a)**	9	**(d)**	10	**(d)**	11	**(a)**	12	**(a)**	13	**(d)**
14	**(b)**	15	**(a)**	17	**(a)**	18	**(c)**	19	**(d)**	20	**(d)**
21	**(b)**	22	**(b)**	23	**(c)**	24	**(a)**	25	**(d)**		

English Language and Comprehension

1	**(d)**	2	**(d)**	3	**(b)**	5	**(c)**	6	**(b)**	7	**(b)**
8	**(d)**	9	**(c)**	10	**(c)**	11	**(d)**	13	**(b)**	14	**(d)**
15	**(b)**	16	**(b)**	17	**(c)**	18	**(a)**	19	**(b)**	20	**(d)**
21	**(b)**	22	**(a)**	[illegible]	**(c)**	24	**(b)**	25	**(d)**		