PREVIOUS YEAR PAPER

SSC MTS 2023 — 13 September 2023, Shift 1

SSC MTS & Havaldar · 13 September 2023 · 9:00 AM - 11:00 AM

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

Left out of the original paper: 11 (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 13 September 2023, 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-2023-13-sep-shift-1/

Numerical and Mathematical Ability

1. By selling a calculator for ₹1,080, there is a loss of 10%, if the article is sold for ₹1,350, the net result in the transaction is:

(a)

$12\frac{1}{2}\%$ loss

(b)

12% gain

(c)

$12\frac{1}{2}\%$ gain

(d)

12% loss

Answer: (c)

2.

If the $\frac{5}{6}$ of a number is 10 less than the number itself, then $\frac{7}{5}$ of the number is _____.

(a)

72

(b)

96

(c)

60

(d)

84

Answer: (d)

3.

A boat travels upstream from B to A and downstream from A to B in 3 hours. If the speed of the boat in still water is 9 km/h and the speed of the current is 3.5 km/h, the distance between A and B is: (correct up to two decimal places)

(a)

14.46 km

(b)

13.46 km

(c)

12.46 km

(d)

11.46 km

Answer: (d)

4.

Two trains are travelling in the same direction on parallel tracks. Train A is travelling at 30 km/h and Train B is travelling at 60 km/h. If Train A is 400 m long and it takes Train B two minutes to pass Train A, what is the length of Train B?

(a)

700 m

(b)

500 m

(c)

400 m

(d)

600 m

Answer: (d)

5.

Some oranges were purchased at ₹150 per hundred and sold at ₹24 per dozen. It gave a gain of ₹1,000. How many oranges were purchased?

(a)

3000

(b)

2500

(c)

1500

(d)

2000

Answer: (d)

6.

The average weight of 20 students in a class is 55 kg. If the weight of the class teacher is included, the average is increased by 0.5 kg. The weight of the class teacher is:

(a)

67.2 kg

(b)

63.5 kg

(c)

65.5 kg

(d)

68.4 kg

Answer: (c)

7.

15 kg of ₹25 per kg wheat is mixed with 10 kg of another type of wheat to get a mixture costing ₹30 per kg. Find the price (per kg) of the costlier wheat.

(a)

₹37.5

(b)

₹32.5

(c)

₹35.5

(d)

₹30.5

Answer: (a)

8.

A and B can do a piece of work in 5 days, while C and D can do the same work in 20 days. In how many days will A, B, C and D do it together?

(a)

3

(b)

4

(c)

5

(d)

6

Answer: (b)

9.

A milk vendor has 2 vessels of milk and water. The first contains 80% milk and the rest is water. The second contains 50% milk. How much mixture (in L) should he mix from each of the vessels so as to get 9 litres of mixture such that the ratio of water to milk is 1 : 2? (Write your answer in the order of vessel 1 and vessel 2)

(a)

6, 3

(b)

4, 5

(c)

3, 6

(d)

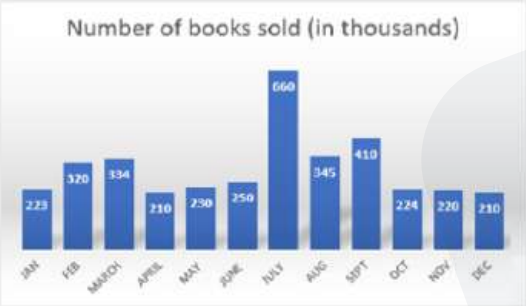
5, 4

Answer: (d)

11.

Study the given bar-graph and answer the question that follows.

The bar-graph presents the number of books sold by a bookseller during different months of a particular year.



The number of books sold in the month of December is how much less than the average number of books sold per month?

(a)

120

(b)

93

(c)

39

(d)

95

Answer: (b)

12.

The length of an edge of a cube is 3.5 cm. Find its total surface area.

(a)

$73.5\ cm^2$

(b)

$36\ cm^2$

(c)

$27\ cm^2$

(d)

$154\ cm^2$

Answer: (a)

13.

Study the given table and answer the question that follows.

The table shows the milk exported from India from 2011 to 2015.

Year	Quantity (in lakh litres)	Value (in ₹ crores)
2011	130	240
2012	115	220
2013	142	420
2014	165	550
2015	195	610

In which year is the value per litre the maximum?

(a) 2012

(b) 2014

(c) 2015

(d) 2013

Answer: (b)

15.

If $6\frac{1}{2} \times 2\frac{4}{5} \div x = \frac{7}{10}$, then find x:

(a)

26

(b)

6

(c)

32

(d)

12

Answer: (a)

16.

Two numbers are in the ratio of 13 : 15. If their HCF is 3, then what is the difference between these two numbers?

(a)

4

(b)

2

(c)

8

(d)

6

Answer: (d)

17.

A and B can complete a task in 6 and 8 days, respectively. They work on alternate days, with A starting the task on the first day. How many days will it take them to complete the task?

(a)

6

(b)

$6\frac{3}{4}$

(c)

$6\frac{1}{2}$

(d)

$6\frac{1}{4}$

Answer: (b)

18.

In how many years will ₹2,000 invested at the rate of 11% p.a. simple interest, amount to ₹3,100?

(a)

3

(b)

4

(c)

2

(d)

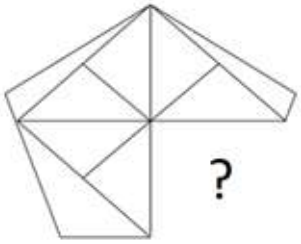
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Answer: (d)

Reasoning Ability and Problem Solving

1.

Identify the figure that completes the pattern (rotation is NOT allowed).



(a)



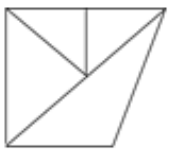
(b)



(c)



(d)



Answer: (c)

3.

What will come in the place of '?' in the following equation, if '+' and '–' are interchanged and '×' and '÷' are interchanged?
$108 \times 9 + 15 - 17 \div 2 = ?$

(a)
51

(b)
21

(c)
41

(d)
31

Answer: (d)

4.

In a certain code language, 'ENTRUST' is coded as 'FOURVTU' and 'CUSHION' is coded as 'DVTHJPO'. What is the code for 'CLEAVER' in the given code language?

(a)
DMFAWFS

(b)
DNGBWGT

(c)
ENGBWT

(d)
EMFBWGT

Answer: (a)

5.

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

2 21 97 401 1617 ?

(a)
6481

(b)
6507

(c)
6235

(d)
6493

Answer: (a)

6.

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 shoes are leather. Some leather are belts. Some belts are gold.

Conclusion I: Some shoes are belts.

Conclusion II: All belts are gold.

(a)

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

(b)

Only conclusion (I) is follow.

(c)

Only conclusion (II) is follow.

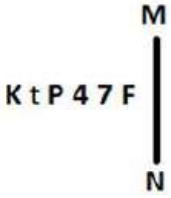
(d)

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

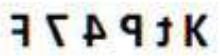
Answer: (a)

7.

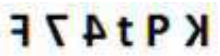
Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



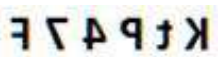
(a)



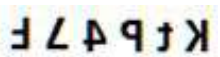
(b)



(c)



(d)



Answer: (c)

8.

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: Some leaves are old. All old are clothes. Some clothes are papers.

Conclusion I: All leaves are old.

Conclusion II: Some old are clothes.

(a)

Only conclusion (I) is follow.

(b)

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

(c)

Only conclusion (II) is follow.

(d)

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

Answer: (c)

9.

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

GAR, KEV, OIZ, SMD, ?

(a)

WPH

(b)

WQH

(c)

VRF

(d)

VPG

Answer: (b)

12.

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

18 32 60 116 228 ?

(a)
452

(b)
474

(c)
480

(d)
468

Answer: (a)

13.

If 'I' stands for '+', 'J' stands for '×', 'K' stands for '÷' and 'L' stands for '-', what will come in place of the question mark (?) in the following equation?
(48 K 8) J 4 L 15 I (12 J 3) I 20 = ?

(a)
55

(b)
65

(c)
60

(d)
70

Answer: (b)

14.

In a certain code language, 'let it be' is coded as 'sd am ht' and 'be the change' is coded as 'vn sd ek'. How is 'be' coded in the given language?

(a)
sd

(b)
ht

(c)
ek

(d)
vn

Answer: (a)

15.

TDWP is related to RBUN in a certain way based on the English alphabetical order. In the same way, FJMH is related to DHKF. To which of the following is SENP related to, following the same logic?

(a)

PDKN

(b)

QCLN

(c)

RCMN

(d)

QDKO

Answer: (b)

17.

D, E, F, G, H, I, J and K are sitting around a square table facing the center of the table. Some of them are sitting at the corners while some are sitting at the exact center of the sides. K sits third to the right of I. K sits at one of the corners. E sits second to the left of G. G sits at any of the corners. E is an immediate neighbour of I and D. F sits third to the right of J. H is the immediate neighbour of F and K.

How many people sit between I and F, when counted from the left of I?

(a)

Two

(b)

Four

(c)

One

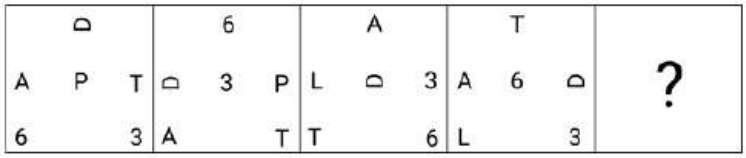
(d)

Three

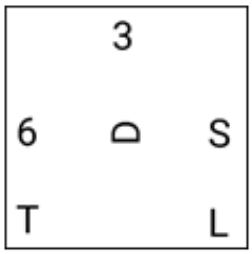
Answer: (a)

18.

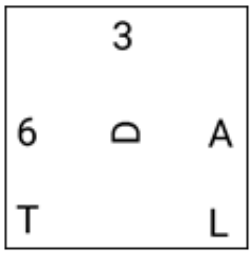
Which figure should replace the question mark (?) if the following figure series were to be continued?



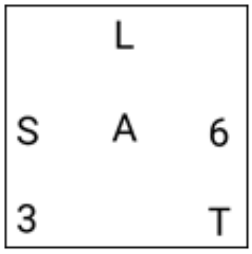
(a)



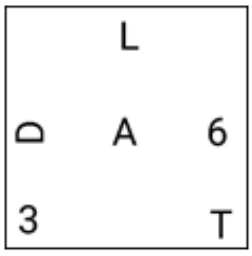
(b)



(c)



(d)



Answer: (c)

19.

If 11 December 2009 is a Friday, then what will be the day of the week on 18 December 2014?

(a)

Tuesday

(b)

Monday

(c)

Thursday

(d)

Wednesday

Answer: (c)

General Awareness

1. According to Census of India 2011, what was the total population of India (approx)?

(a) 131 Crore

(b) 121 Crore

(c) 111 Crore

(d) 101 Crore

Answer: (b)

2. Chhau is a major dance tradition of India. In whic f the following Indian states is the dance form NOT prevalent?

(a) Odisha

(b) West Bengal

(c) Jharkhand

(d) Madhya Pradesh

Answer: (d)

3. In November 2022, which state became the first North-East state to approve Mental Health and Social Care Policy?

(a) Assam

(b) Meghalaya

(c) Tripura

(d) Arunachal Pradesh

Answer: (b)

4. In which state is Vishakhapatnam Port located?

(a) Maharashtra

(b) Andhra Pradesh

(c) Odisha

(d) Gujarat

Answer: (b)

5. Who among the following is the Indian classical dancer who masters both Bharatanatyam and Odissi dancing style?

(a) Shovana Narayan

(b) Guru Bipin Singh

(c) Padma Subrahmanayam

(d) Sonal Mansingh

Answer: (d)

6. Which bacteria was discovered by Barry Marshall and Robin Warren that colonises the human stomach and causes chronic superficial gastritis ulcers?

(a) Campylobacter jejuni

(b) Helicobacter pylori

(c) Neisseria gonorrhoeae

(d) Entamoeba histolytica

Answer: (b)

7.

Which of the following states witnesses the first onset of the monsoon?

(a)

Punjab

(b)

Haryana

(c)

Kerala

(d)

Uttar Pradesh

Answer: (c)

9.

Ustad Bismillah Khan was associated with which of the following musical instruments?

(a)

Shehnai

(b)

Sarod

(c)

Sitar

(d)

Sarangi

Answer: (a)

10. The famous coal mining region ‘Korba’ is located in which state of India?

(a) Kerala
(b) Tamil Nadu
(c) Chhattisgarh
(d) Himachal Pradesh

Answer: (c)

11. What do you mean by balanced budget?

(a) Expenditure not equal to revenue
(b) Expenditure equal to revenue
(c) Expenditure more the revenue
(d) Expenditure is less than revenue

Answer: (b)

12. Rajgir Mahotsav is a beautiful representation of history, religion, art and culture. It is a three-day celebration in _____.

(a) Madhya Pradesh
(b) Uttarakhand
(c) Uttar Pradesh
(d) Bihar

Answer: (d)

13. The famous novel ‘The God Of Small Things’ is w en by _____.

(a) Shashi Tharoor
(b) Ruskin Bond
(c) Vikram Seth
(d) Arundhati Roy

Answer: (d)

14. The Men's Junior Hockey Asia Cup 2023, which was won by India, was held at _____.

(a) Saudi Arabia
(b) Oman
(c) Dubai
(d) Qatar

Answer: (b)

15. In the context of the Revolt of 1857, Mangal Pandey belonged to which Bengal native Infantry?

(a) 34
(b) 52
(c) 70
(d) 64

Answer: (a)

16. Which of the following countries did India beat in the final to win the 2021 SAFF Championship?

(a) Nepal

(b) Lebanon

(c) Maldives

(d) Kuwait

Answer: (a)

17. Vinesh Phogat became the first Indian woman wrestler to win how many medals at World Championships?

(a) 6

(b) 5

(c) 2

(d) 3

Answer: (c)

18. What is the purpose of the Cultural and Educational Rights?

(a) To promote a particular religion

(b) To protect the language, culture, and religion of the minority communities

(c) To protect the majority community

(d) To prevent exploitation

Answer: (b)

19. In optics, which term refers to the opening of the phragm of a lens that spatially limits the propagation of light?

(a) Collimator

(b) Aperture

(c) Apostilb

(d) Meniscus

Answer: (b)

20.

Lata Mangeshkar was awarded by the India's highest civilian honour 'Bharat Ratna' in the year _____.

(a)

2015

(b)

2019

(c)

2001

(d)

2009

Answer: (c)

21.

Nirmala Panikar received the Sangeet Natak Akademi Award-2019 (given in February 2023) for her contribution to _____ dance form.

(a)

Mohiniyattam

(b)

Kuchipudi

(c)

Kathak

(d)

Bharatanatyam

Answer: (a)

22. In which city is the Rajghat memorial situated?

(a) Ahmedabad

(b) Surat

(c) Delhi

(d) Agra

Answer: (c)

23. In the 1939 Tripuri Congress Presidential Election ttabhi Sitaramayya was defeated by:

(a) Mahatma Gandhi

(b) Rajendra Prasad

(c) Subhas Chandra Bose

(d) Jawaharlal Nehru

Answer: (c)

25. In which year was the Jammu and Kashmir Reorganization Act passed?

(a) 2019

(b) 2009

(c) 2015

(d) 2017

Answer: (a)

English Language and Comprehension

1. Select the most appropriate option to fill in the blank. The toddler decided to make a mess because he wanted to _____ the attention of its parents.

(a) seek

(b) elicit

(c) please

(d) extract

Answer: (a)

2. Select the most appropriate synonym of the given word. Glimpse

(a) Examine

(b) Glance

(c) Stare

(d) Observe

Answer: (b)

3. Identify the sentence that contains correct spellings in the given context.

(a) She acid the test despite being sleep-deprived from studying for nearly 24 hours straight.

(b) She acad the test desspite being sleep-deprived from studying for nearly 24 hours straight.

(c) She aced the test daspite being sleep-deprived from studying for nearly 24 hours strait.

(d) She aced the test despite being sleep-deprived from studying for nearly 24 hours straight.

Answer: (d)

4. Select the most appropriate option to fill in the blank. The teacher assured: "You have completed your homework, _____?"

(a) had you

(b) hadn't you

(c) haven't you

(d) have you

Answer: (c)

5. Select the most appropriate ANTONYM of the wor iven in brackets to fill in the blank. A _____(distinct) sense of restlessness wa othering me when I left the cemetery.

(a) terrible

(b) critical

(c) prior

(d) vague

Answer: (d)

6. 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. With cloud streaming, people can play games from a / internet-connected device, avoiding the need for pricey / dedicated hardware such as a game console.

(a) No error

(b) dedicated hardware such as a game console

(c) With cloud streaming, people can play games from a

(d) internet-connected device, avoiding the need for pricey

Answer: (c)

7. Select the most appropriate meaning of the given idiom. Keep someone at arm's length

(a) To ruin someone's plans

(b) To avoid becoming too close or friendly with someone

(c) Angry about something

(d) Having energy again after being tired

Answer: (b)

8. The following sentence has been divided into four parts. Identify the part that contains an error.
(A) This fridge /
(B) comes including /
(C) a 5-year /
(D) warranty.

(a) B

(b) C

(c) D

(d) A

Answer: (a)

9. Select the option that can be used as a one-word substitute for the given group of words. One who looks at the dark side of life

(a) Physicist

(b) Optimist

(c) Pessimist

(d) Idealist

Answer: (c)

10. Select the most appropriate option that can substitute the underlined segment in the given sentence. Many a things are used for the show.

(a) a things is

(b) a things were

(c) a thing is

(d) a thing were

Answer: (c)

11. Select the most appropriate option that can rectify the underlined segment in the given sentence. If there is no need to rectify it, select 'no rectification needed'.

This film is a non-stop riot that many cite as one of the funny films of all time.

(a) no rectification needed

(b) funniest

(c) more funny

(d) funnier

Answer: (b)

12. Select the INCORRECTLY spelt word.

(a) Essence

(b) Aggregate

(c) Transmisible

(d) Assembly

Answer: (c)

13. Select the option that can be used as a one-word substitute for the given group of words. A person who regards the whole world as his country

(a) Cosmopolitan

(b) Pacifist

(c) Contemporary

(d) Celibate

Answer: (a)

14. The following sentence has been split into four segments. Identify the segment that contains an error. The team played / really well, but / they lose the game / in the final minutes.

(a) really well, but

(b) in the final minutes

(c) they lose the game

(d) The team played

Answer: (c)

15. The following sentence has been split into four segments. Identify the segment that contains an error. The school shall reopened / after summer / vacations of / one month.

(a) one month

(b) vacations of

(c) The school shall reopened

(d) after summer

Answer: (c)

16. Select the most appropriate ANTONYM of the underlined word. They waited with <u>anxiety</u> for the final results.

(a) Shrewdness

(b) Wilderness

(c) Feebleness

(d) Calmness

Answer: (d)

17. Select the most appropriate idiom to fill in the blank. Jack took on three jobs at once but soon realised he had _____.

(a) cut corners
(b) taken it with a grain of salt
(c) bitten off more than he could chew
(d) played by the ear

Answer: (c)

18. Select the most appropriate idiom to fill in the blank. The CEO has _____ than worrying about individual customer complaints.

(a) bigger fish to fry
(b) taken a rain check
(c) thrown caution to the wind
(d) been walking on thin ice

Answer: (a)

19. Select the INCORRECTLY spelt word.

(a) Perceive
(b) Recognition
(c) Vaccum
(d) Shield

Answer: (c)

20. Select the most appropriate idiom to fill in the b' .

I know it was wrong to distract his friends, bu __.

(a) all's fair in love and war
(b) all's unfair in the world
(c) all's unfair in love and war
(d) all's fair in the world

Answer: (a)

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. (1)___ the breakfast table the next morning, there was no sign of my wife. I (2)___ she was sleeping late, but Gladolia, upon being questioned, only (3)___ her head, (4)___ something, and turned the whites of her eyes up to the ceiling. I was glad when the meal was (5)___ and hurried to the library for another try at that story.

21. Select the most appropriate option to fill in blank no. 1.

(a) On
(b) Above
(c) Upon
(d) At

Answer: (d)

22. Select the most appropriate option to fill in blank no. 2.
    (a) accepted
    (b) decided
    (c) examined
    (d) concluded
    Answer: (d)

23. Select the most appropriate option to fill in blank no. 3.
    (a) adjusted
    (b) rotated
    (c) shook
    (d) stirred
    Answer: (c)

24. Select the most appropriate option to fill in blank no. 4.
    (a) mugged
    (b) muffed
    (c) mutilated
    (d) muttered
    Answer: (d)

25. Select the most appropriate option to fill in blank no. 5.
    (a) removed
    (b) over
    (c) through
    (d) undone
    Answer: (b)

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	**(d)**	3	**(d)**	4	**(d)**	5	**(d)**	6	**(c)**
7	**(a)**	8	**(b)**	9	**(d)**	11	**(b)**	12	**(a)**	13	**(b)**
15	**(a)**	16	**(d)**	17	**(b)**	18	**(d)**				

Reasoning Ability and Problem Solving

1	**(c)**	3	**(d)**	4	**(a)**	5	**(a)**	6	**(a)**	7	**(c)**
8	**(c)**	9	**(b)**	12	**(a)**	13	**(b)**	14	**(a)**	15	**(b)**
17	**(a)**	18	**(c)**	19	**(c)**						

General Awareness

1	**(b)**	2	**(d)**	3	**(b)**	4	**(b)**	5	**(d)**	6	**(b)**
7	**(c)**	9	**(a)**	10	**(c)**	11	**(b)**	12	**(d)**	13	**(d)**
14	**(b)**	15	**(a)**	16	**(a)**	17	**(c)**	18	**(b)**	19	**(b)**
20	**(c)**	21	**(a)**	22	**(c)**	23	**(c)**	25	**(a)**		

English Language and Comprehension

1	**(a)**	2	**(b)**	3	**(d)**	4	**(c)**	5	**(d)**	6	**(c)**
7	**(b)**	8	**(a)**	9	**(c)**	10	**(c)**	11	**(b)**	12	**(c)**
13	**(a)**	14	**(c)**	15	**(c)**	16	**(d)**	17	**(c)**	18	**(a)**
19	**(c)**	20	**(a)**	21	**(d)**	22	**(d)**	23	**(c)**	24	**(d)**
25	**(b)**										