PREVIOUS YEAR PAPER

SSC MTS 2023 — 13 September 2023, Shift 3

SSC MTS & Havaldar · 13 September 2023 · 4:00 PM - 6:00 PM

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

Left out of the original paper: 10 (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, 4:00 PM - 6:00 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-2023-13-sep-shift-3/

Numerical and Mathematical Ability

1.

A microwave and a dish washing machine were sold for ₹27,000 each. If the microwave was sold at a gain of 25% and the dish washing machine at a loss of 25%. What is the overall profit% or loss% on the entire transaction?

(a)
5.50% loss

(b)
7.75% profit

(c)
6.25% loss

(d)
8.25% profit

Answer: (c)

2.

A, B and C started a business. A's capital is 7 times the capital of C and B's capital is 2 times the capital of A. If the profit is ₹7,920, then find the share of C (in ₹).

(a)
350

(b)
360

(c)
365

(d)
355

Answer: (b)

3.

The average expenditure of 32 persons is ₹6,000 and that of another 40 persons is ₹3,300. The average expenditure of the whole group is:

(a)

₹4,800

(b)

₹4,500

(c)

₹4,650

(d)

₹4,162

Answer: (b)

4.

A person invests ₹5,000 at a simple interest rate of 5% per annum for 5 years. At the end of 5 years, she reinvests the entire amount at the same rate of interest for another 3 years. What will be the total interest earned by the person at the end of 8 years?

(a)

₹2,156.50

(b)

₹2,256.50

(c)

₹2,323.50

(d)

₹2,187.50

Answer: (d)

5. A shopkeeper bought an oven for ₹25,000 and sold it for ₹29,500. He spent ₹1,500 as overheads. What is his loss or gain percentage (rounded off to the nearest integer)?

(a) Loss by 11%

(b) Gain by 13%

(c) Loss by 13%

(d) Gain by 11%

Answer: (d)

6.

A motorboat travelling at some speed can cover 28 km upstream and 40 km downstream in 11 hours. At the same speed it can travel 30 km downstream and 16 km upstream in 7 hours, then the speed of the stream is:

(a)

2 km/h

(b)

4 km/h

(c)

3 km/h

(d)

1 km/h

Answer: (c)

7.

The longest diagonal of a cube is $6\sqrt{3}$ cm. Find the total surface area of the cube.

(a)

$648\ \text{cm}^2$

(b)

$216\ \text{cm}^2$

(c)

$36\ \text{cm}^2$

(d)

$324\ \text{cm}^2$

Answer: (b)

8.

The following table gives the national income and the population of a country for the years 1984-85 to 1989-90.

Year	National Income (in crores)	Population (In crore)
1984-85	₹229.225	74.0
1985-86	₹261.174	75.0
1986-87	₹291.556	77.0
1987-88	₹329.200	78.5
1988-89	₹389.500	80.0
1989-90	₹434.500	81.5

What was the average national income (in crores) for the years 1987-88, 1988-89 and 1989-90?

(a)

₹392.4

(b)

₹384.4

(c)

₹398.2

(d)

₹396.2

Answer: (b)

9.

Find a fourth proportional to the ·mb· s 3, 9, 8.

(a)

10

(b)

12

(c)

20

(d)

24

Answer: (d)

10. What is the average of natural numbers from 1 to 73?

(a)

28

(b)

37

(c)

30

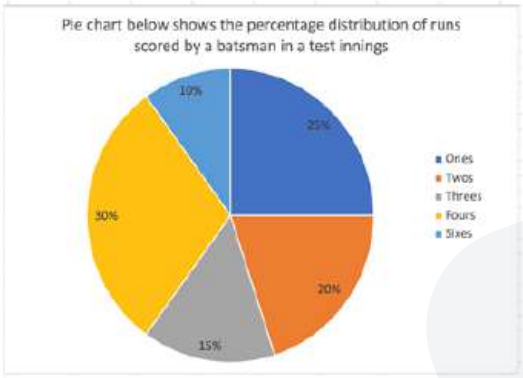
(d)

34

Answer: (b)

11.

The following Pie chart shows the percentage distribution of runs scored by a batsman in a test innings.



If the batsman has scored a total of 360 runs, how many 4's and 6 [illegible] he hit?

(a)

30 and 3

(b)

31 and 2

(c)

27 and 6

(d)

25 and 8

Answer: (c)

12.

The Value of $[\{2^4(20 \times 5 + 10) \div 11\} - (2^3 \times 15 \div 20) - (9 \times 16)]$ is:

(a)

8

(b)

16

(c)

10

(d)

12

Answer: (c)

13.

A can complete a task in 10 days. He worked for 4 days and then stopped. B completed the remaining work in 9 days. In how many days can A and B together complete the task?

(a)

6 days

(b)

5 days

(c)

4 days

(d)

7 days

Answer: (a)

15.

A solid metallic cuboid of length 11 cm, breadth 8 cm and height 6 cm is melted and reshaped to form a cone of height 14 cm. What is the radius of the cone thus formed?

(a)

6 cm

(b)

9 cm

(c)

7 cm

(d)

8 cm

Answer: (a)

16.

P can complete $\frac{1}{5}$ of a work in 12 days and Q can complete $\frac{1}{6}$ of a work in 8 days. In how many days can both P and Q together complete the work?

(a)

$26\frac{2}{3}$

(b)

$24\frac{2}{3}$

(c)

$25\frac{4}{5}$

(d)

$22\frac{4}{5}$

Answer: (a)

17.

A bike crosses a bridge with a speed of 75 km/h. What will be the length (in km) of the bridge, if the bike takes 20 minutes to cross the bridge?

(a)

30

(b)

25

(c)

45

(d)

20

Answer: (b)

20. A car covers 60 km at a speed of 84 km/h. If the average speed for the whole journey is 72 km/h, then the speed of the car for the next 60 km of the journey is:

(a) 63 km/h

(b) 68 km/h

(c) 78 km/h

(d) 75 km/h

Answer: (a)

Reasoning Ability and Problem Solving

1.

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

14 43 130 391 1174 ?

(a)
3519

(b)
2476

(c)
3416

(d)
3523

Answer: (d)

2.

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

22 24 28 30 34 ?

(a)
38

(b)
40

(c)
42

(d)
36

Answer: (d)

3.

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



(a)



(b)



(c)



(d)



Answer: (b)

4.

Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.

(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)

Horse : Mare

(a)

Fox : Vixen

(b)

Duck : Geese

(c)

Donkey : Pony

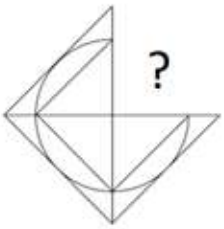
(d)

Dog : Puppy

Answer: (a)

5.

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



(a)



(b)



(c)



(d)



Answer: (c)

6.

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

PVC, SUF, VTI, YSL, ?

(a)

CQR

(b)

DRP

(c)

CSP

(d)

BRO

Answer: (d)

8.

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

$12 + 6 \times 5 - 7 \div 2 = ?$

(a)

-13

(b)

-14

(c)

-31

(d)

-46

Answer: (c)

9.

4 is related to 14 following a certain logic. Following the same logic, 7 is related to 26. To which of the following is 9 related to, following the same logic?

(a)

37

(b)

36

(c)

34

(d)

35

Answer: (c)

10.

If 15 July 2010 is a Thursday, then what will be the day of the week on 5 June 2022?

(a)

Wednesday

(b)

Tuesday

(c)

Monday

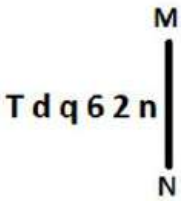
(d)

Sunday

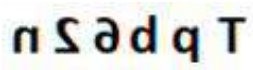
Answer: (d)

12.

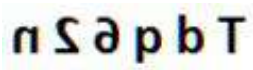
Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



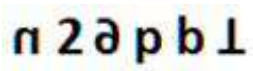
(a)



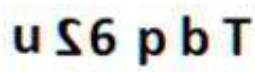
(b)



(c)



(d)



Answer: (b)

13.

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

WAP, VEO, UIN, TMM, ?

(a)

RPM

(b)

QPN

(c)

SQL

(d)

QSN

Answer: (c)

14.

In a certain code language, 'TUNE' is coded as '4368' and 'UNIT' is coded as '8423'. What is the code for 'I' in the given code language?

(a)

4

(b)

3

(c)

2

(d)

8

Answer: (c)

15.

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 laptops are pencils. Some pencils are rulers. All rulers are white.

Conclusion I: Some pencils are laptops.

Conclusion II: All rulers are pencils.

(a)

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

(b)

Only conclusion (I) is follow.

(c)

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

(d)

Only conclusion (II) is follow.

Answer: (b)

16.

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

28 B 72 F 6 D 8 C 4 − ?

(a)

14

(b)

26

(c)

18

(d)

8

Answer: (d)

17. Seven people, W, D, J, S, H, G and Y are sitting in a straight line, facing south. G sits second to the left of S. G is the immediate neighbour of D and H. Y sits third to the right of D. Only two people sit to the right of W.

Who sits at the extreme right end of the line?

(a) W

(b) Y

(c) J

(d) G

Answer: (c)

18.

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 bananas. Some bananas are pink. All pink are white.

Conclusion I: Some crows are bananas.

Conclusion II: All bananas are pink.

(a)

Only conclusion (II) is follow.

(b)

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

(c)

Only conclusion (I) is follow.

(d)

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

Answer: (c)

19.

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

11 91 811 ? 65611 590491 5314411

(a)

7129

(b)

7291

(c)

7921

(d)

7912

Answer: (b)

20.

In a certain code language, 'people talk about' is written as 'ki li ni' and 'let them talk' is written as 'si ki hi'. How is 'talk' written in the given language?

(a)
li

(b)
ki

(c)
hi

(d)
ni

Answer: (b)

General Awareness

1. In which year was the Pradhan Mantri Rojgar Protsahan Yojana (PMRPY) launched?

(a) 2018
(b) 2015
(c) 2016
(d) 2022

Answer: (c)

2. The film based on which of the following novels by Amrita Pritam won the National Film Award?

(a) Nagmani
(b) Raseedi Ticket
(c) Village No.36
(d) Pinjar

Answer: (d)

3.

Which Indian Musician was awarded with the Bharat Ratna in 2001?

(a)
Shivkumar Sharma

(b)
Bhimsen Joshi

(c)
Bismillah Khan

(d)
Hariprasad Chaurasia

Answer: (c)

4. Who was the Prime Minster of India when the Fundamental Duties were first incorporated in the Constitution of India?

(a) Jawaharlal Nehru
(b) Indira Gandhi
(c) Atal Bihari Vajpayee
(d) Rajiv Gandhi

Answer: (b)

5. Who said the following?

"Money is what money does."

(a) Prof. Seligman
(b) Prof. Cole
(c) Prof. Walker
(d) Prof. Robertson

Answer: (c)

6. Which of the following ports is located in Odisha?

(a) Haldia port
(b) Kandla port
(c) Paradip Port
(d) Tuticorin Port

Answer: (c)

7. Rohini Bhate, Pandit Munnalal Shukla, Ku dini nia and Uma Sharma are famous exponents of which of the following classical dance forms?

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

Answer: (c)

8.

The forces exerted on a body during a short period are known as:

(a)
Impulse
(b)
Pressure
(c)
Surface tension
(d)
Tensile stress

Answer: (a)

9. India played the final of ODI Cricket World Cup 2011 against which country?

(a) Australia
(b) Sri Lanka
(c) England
(d) Pakistan

Answer: (b)

10. Mohiniyattam is a classical dance style belongs to _____.

(a) Kerala
(b) Odisha
(c) Manipur
(d) Tamil Nadu

Answer: (a)

11. Which of the following is NOT a feature of the Indian political party system?

(a) Lack of effective opposition
(b) Single party system
(c) Multi-party system
(d) Factions and defections

Answer: (b)

12. Which of the following was the first Satyagraha M ment led by Mahatma Gandhi in British India?

(a) Champaran Satyagraha
(b) Kheda Satyagraha
(c) Rowlatt Satyagraha
(d) Bardoli Satyagraha

Answer: (a)

14. The fundamental vocabulary of _____ dance constitutes mock combat techniques, stylised gaits of birds and animals and movements modelled on the chores of village housewives and mostly performed by male dancers in Eastern India.

(a) Manipuri
(b) Kathakali
(c) Chhau
(d) Sattariya

Answer: (c)

15. The Red Fort is located in:

(a) Lucknow
(b) Delhi
(c) Indore
(d) Ahmedabad

Answer: (b)

16. The Goa government launched a new scheme in November 2022 for which of the following?

(a) Ithihas Darshan
(b) Goa Darshan
(c) Bharat Darshan
(d) Dev Darshan

Answer: (d)

17. Ruturaj Gaikwad became the first batsman in List-A cricket to hit how many sixes in an over?

(a) 4
(b) 5
(c) 6
(d) 7

Answer: (d)

19. Camels are found in which type of forests in India from the following?

(a) Montane forests
(b) The thorn forest and scrubs
(c) Mangrove forests
(d) Tropical evergreen forests

Answer: (b)

20. Under whom among the following British Governo enerals was the new policy of 'paramountcy' initiated in British India by the East Ind Company?

(a) Lord Hastings
(b) Lord Amherst
(c) Lord Wellesley
(d) Lord Cornwallis

Answer: (a)

21. Paryushana Parva is a festival of which of the following communities?

(a) Jain
(b) Christian
(c) Parsi
(d) Hindu

Answer: (a)

22. Who coined the word 'cell' in the 1600s, from the Latin word 'cellula', meaning 'small room'?

(a) Louis Pasteur
(b) Robert Hooke
(c) Theodor Schwann
(d) Lynn Margulis

Answer: (b)

23. Which of the following is a feature of Micro Finance Institutions?

(a) Financial service to government employees

(b) Finance service to Union ministers

(c) Financial service to corporate

(d) Financial service to disadvantaged people

Answer: (d)

24. Which of the following States became the overall champions in both the men's and women's categories in the 2023 Janjatiya Khel Mahotsav?

(a) Chhattisgarh

(b) Karnataka

(c) Jharkhand

(d) Odisha

Answer: (d)

25.

The mohororvicic (Moho) discontinuity separates?

(a)

Earth's lithosphere and asthenosphere

(b)

Earth's atmosphere and hydrosphere

(c)

Earth's crust and the inner core

(d)

Earth's crust and the mantle

Answer: (d)

English Language and Comprehension

1. The following sentence has been split into four segments. Identify the segment that contains a grammatical error and select the option which rectifies that error.

The space agency wanted / to test with a chimp / before orbiting a astronaut / in a Mercury capsule.

(a) The space agency want

(b) in an Mercury capsule.

(c) before orbiting an astronaut

(d) to test with an chimp

Answer: (c)

2. Select the most appropriate option that can substitute the underlined segment in the given sentence. They said that he is not going to call them.

(a) he shall not call them
(b) he has not gone to call then
(c) they are not going to call them
(d) he was not going to call them

Answer: (d)

4. Select the most appropriate meaning of the underlined idiom.

The entrepreneur decided to throw caution to the wind.

(a) Take a risk
(b) Take the best option
(c) Think innovatively
(d) In extreme windy conditions

Answer: (a)

5. Select the most appropriate synonym of the given word. Tedious

(a) Carefree
(b) Hostile
(c) Dynamic
(d) Dreary

Answer: (d)

6. Select the option that can be used as a one-word substitute for the given group of words. Not fit for eating

(a) Inept
(b) Ineligible
(c) Ineluctable
(d) Inedible

Answer: (d)

7. The following sentence has been split into four segments. Identify the segment that contains an error. If he had paid / attention to the announcement, / he had not / missed the train.

(a) If he had paid
(b) he had not
(c) attention to the announcement
(d) missed the train

Answer: (b)

8. Select the most appropriate meaning of the given idiom. Child's play

(a) In someone's role
(b) Something very easy
(c) Weakness
(d) Just behaviour

Answer: (b)

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

The tour company has included all the activities that you have requested in your itenarary.

(a) itinerarey
(b) itenerarey
(c) itinerary
(d) itenerary

Answer: (c)

10. Select the most appropriate meaning of the given idiom.

Spill the beans

(a) To believe something as it seems
(b) To tell a secret
(c) To do things in a fair way
(d) To cry over what is done

Answer: (b)

11. Select the most appropriate meaning of the underlined idiom. The mother requested the nurse to keep an eye on the baby while she went for tea.

(a) Keep informed
(b) Mistreat
(c) Watch and take care
(d) Watch for the arrival or appearance

Answer: (c)

12. Select the most appropriate option that can substitute the underlined segment in the given sentence. If you need any help tomorrow, let him knows.

(a) let me know
(b) let us known
(c) let him known
(d) let them knew

Answer: (a)

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

Helena loves to dig and played in the dirt like any other child.

(a) playing on dirt
(b) playing with in dirt
(c) plays of dirt
(d) play in the dirt

Answer: (d)

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

Everyone likes in watch a magic show.

(a) likes to watching
(b) like in watching
(c) likes to watch
(d) liked in watch

Answer: (c)

17. Select the most appropriate option to fill in the blank. He is first _____ to his job and then to his family.

(a) enabled
(b) committed
(c) confirmed
(d) convinced

Answer: (b)

18. Select the most appropriate synonym of the given word. Pretend

(a) Feign
(b) Benign
(c) Align
(d) Reign

Answer: (a)

19. Select the most appropriate ANTONYM of the given word. Align

(a) Position
(b) Disrupt
(c) Centre
(d) Coincide

Answer: (b)

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

One of her colleagues had agreed to act as the arbitratore in finalising the contract.

(a) arbitetrator
(b) arbitor
(c) arbitraitor
(d) arbitrator

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. There will only be two types of human beings in the future: the minority having enormous brains and (1)_____ bodies, and the majority with tiny brains and muscular bodies. The size of the average brain will (2)_____ diminish; not because of our innate laziness, but because of our over-concern about our physical appearance. In the old days, most people dreamt of having shelter and a stable food supply. As we no longer struggle for the basic (3)_____, our dreams focus instead on the search for physical beauty, how to obtain and maintain the 'ideal body shape' and healthy life the media promotes. Physical beauty will become the main goal of the majority. They'll do exercises every day, taking (4)_____ to maintain their shape while not noticing that their brains are shrinking. Actually, there is no doubt that they'll work (5)_____ hard to make their brains smaller.

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

(a) cute
(b) minor
(c) tiny
(d) minute

Answer: (c)

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

(a) properly
(b) gradually
(c) appropriately
(d) slightly

Answer: (b)

23. Select the most appropriate option to fill in blank number 3.

(a) necessities
(b) identities
(c) facilities
(d) amenities

Answer: (a)

24. Select the most appropriate option to fill in blank number 4.
    (a) nutrition
    (b) nutrients
    (c) preservatives
    (d) additives

    Answer: (b)

25. Select the most appropriate option to fill in blank number 5.
    (a) so
    (b) rarely
    (c) impishly
    (d) extremely

    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	**(c)**	2	**(b)**	3	**(b)**	4	**(d)**	5	**(d)**	6	**(c)**	7	**(b)**	8	**(b)**
9	**(d)**	10	**(b)**	11	**(c)**	12	**(c)**	13	**(a)**	15	**(a)**	16	**(a)**	17	**(b)**
20	**(a)**														

Reasoning Ability and Problem Solving

1	**(d)**	2	**(d)**	3	**(b)**	4	**(a)**	5	**(c)**	6	**(d)**	8	**(c)**	9	**(c)**
10	**(d)**	12	**(b)**	13	**(c)**	14	**(c)**	15	**(b)**	16	**(d)**	17	**(c)**	18	**(c)**
19	**(b)**	20	**(b)**												

General Awareness

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

English Language and Comprehension

1	**(c)**	2	**(d)**	4	**(a)**	5	**(d)**	6	**(d)**	7	**(b)**	8	**(b)**	9	**(c)**
10	**(b)**	11	**(c)**	12	**(a)**	13	**(d)**	[illegible]	**(c)**	17	**(b)**	18	**(a)**	19	**(b)**
20	**(d)**	21	**(c)**	22	**(b)**	23	**(a)**		**(b)**	25	**(d)**				