PREVIOUS YEAR PAPER

SSC MTS 2023 — 8 September 2023, Shift 1

SSC MTS & Havaldar · 8 September 2023 · 9:00 AM - 11:00 AM

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 8 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-2023-8-sep-shift-1/

Numerical and Mathematical Ability

3.

Simplify:

$3\frac{2}{7} + 3\frac{2}{11} \times 3\frac{1}{7} \div 4\frac{1}{3}$

(a)

$7\frac{54}{91}$

(b)

$9\frac{54}{91}$

(c)

$5\frac{54}{91}$

(d)

$3\frac{54}{91}$

Answer: (c)

4.

A deposited ₹62,500 at the rate of 8% per annum compounded half yearly, then what is the compound interest at the end of two years?

(a)

₹18,161.12

(b)

₹12,171.72

(c)

₹10,821.18

(d)

₹10,616.16

Answer: (d)

5.

A man and woman working on alternate days can finish a work in 15 days if the man works on the first day. The same work is finished in 14.5 days if they work on alternate days and if the woman starts on the first day. The work will be finished by a man alone in _____ days.

(a)

25

(b)

21

(c)

15

(d)

22

Answer: (d)

6.

If the cost price of 12 mangoes is equal to the selling price of 16 mangoes, then the loss percentage is:

(a)

25%

(b)

4%

(c)

20%

(d)

33%

Answer: (a)

7.

A boat covers a distance of 65 km downstream in 5 hours while it takes 13 hours to cover the same distance upstream. What is the speed of the boat in still water?

(a)

8 km/h

(b)

11 km/h

(c)

6 km/h

(d)

9 km/h

Answer: (d)

8.

There are two varieties of rice. Variety 1 costs ₹100 per kg and variety 2 costs ₹120 per kg. The vendor mixed both the varieties and sold for ₹121 per kg and gained 10%. Find the ratio of variety 1 to variety 2 rice in the mixture.

(a)

1 : 1

(b)

3 : 1

(c)

2 : 1

(d)

1 : 3

Answer: (a)

9.

The average weight of A, B and C is 43 kg. If the average weight of A and B is 40 kg and that of B and C is 41 kg, then the weight (in kg) of B is?

(a)

41

(b)

43

(c)

33

(d)

37

Answer: (c)

10.

Vinita obtained an amount of ₹23,340 as simple interest on a certain amount at 15% per annum after 8 years. What was the amount invested by Vinita?

(a)

₹20,450

(b)

₹18,650

(c)

₹17,490

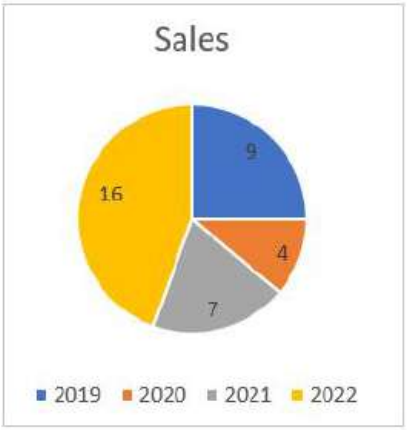
(d)

₹19,450

Answer: (d)

12.

Consider the sales of a company in the year 2019, 2020, 2021 and 2022 given in the pie chart.



The difference in angles at the centre by sales in 2022 and 2019 is _____ degrees.

(a)

50

(b)

80

(c)

60

(d)

70

Answer: (d)

13.

A can complete a piece of work in 20 days. B can complete the same work in 36 days. If A and B work together, then the number of days required to complete the work is:

(a)

$10\frac{6}{7}$

(b)

$12\frac{6}{7}$

(c)

$12\frac{1}{7}$

(d)

$10\frac{1}{7}$

Answer: (b)

14.

What is the fourth proportional to 816, 226, 408?

(a)
108
(b)
103
(c)
113
(d)
117

Answer: (c)

15.

If the price of a product is decreased by 50%, then increased by 50% and then again increased by 50%, what is the net increase percentage in the price?

(a)
13.5%
(b)
11.5%
(c)
12.5%
(d)
9.5%

Answer: (c)

18. The cost price of an item is ₹4,850. What is the profit percentage (rounded off to 1 decimal place) if it is sold at ₹6,680?

(a) 44.6%
(b) 37.7%
(c) 39.5%
(d) 35.5%

Answer: (b)

19.

The radius of a cone is 10.5 cm and the area of the curved surface is 396 cm^2. Find it's slant height.

Take $\pi = \frac{22}{7}$

(a)

9 cm

(b)

11.5 cm

(c)

12 cm

(d)

8.5 cm

Answer: (c)

20.

Find the volume of a cuboid whose dimensions are 12.2 cm, 16 cm and 8.5 cm.

(a)

3072 cm^3

(b)

1659.2 cm^3

(c)

832 cm^3

(d)

1664 cm^3

Answer: (b)

Reasoning Ability and Problem Solving

1.

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

ICU, FAT, CYS, ZWR, ?

(a)

VTR

(b)

VST

(c)

WVS

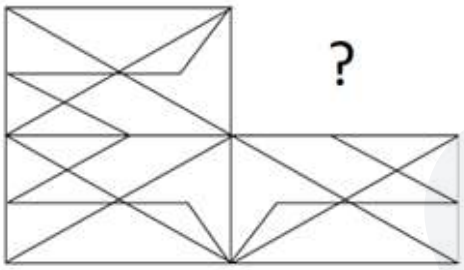
(d)

WUQ

Answer: (d)

4.

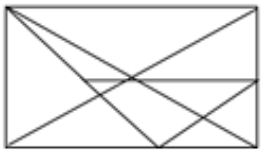
Identify the figure that completes the pattern (rotation is NOT allowed).



(a)



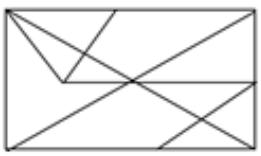
(b)



(c)



(d)



Answer: (a)

5.

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

TEO, RCM, PAK, NYI, ?

(a)

KVH

(b)

KUH

(c)

LVG

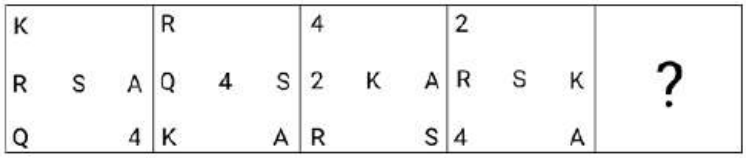
(d)

LWG

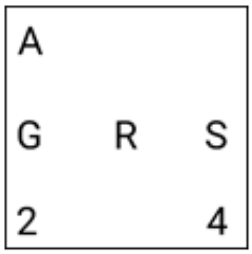
Answer: (d)

6.

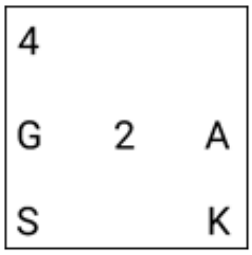
Which figure should replace the question mark (?) if the following figure series were to be continued?



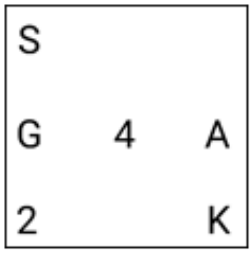
(a)



(b)



(c)



(d)



Answer: (c)

7.

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

13 C 8 G 45 B 22 D 2 = ?

(a)

78

(b)

62

(c)

70

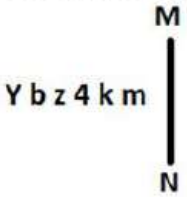
(d)

55

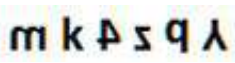
Answer: (c)

8.

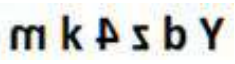
Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



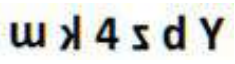
(a)



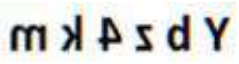
(b)



(c)



(d)



Answer: (d)

9.

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)

Cricket : Pitch

(a)

Wrestling : Track

(b)

Ship : Dock

(c)

Boxing : Ring

(d)

Boat : Harbour

Answer: (c)

10.

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

(a)

Two

(b)

Five

(c)

Three

(d)

One

Answer: (d)

11.

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

73 75 77 79 81 ?

(a)

82

(b)

83

(c)

85

(d)

84

Answer: (b)

12. Seven people, U, M, K, G, B, R and D are sitting in a straight line, facing south. Only two people sit to the left of B. M sits third to the right of G. U is the immediate neighbour of M and B. D sits to the immediate left of K.

Total how many people sit between D and G?

(a) Two

(b) Three

(c) One

(d) Four

Answer: (b)

13.

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

GUN, DWM, AYL, XAK, ?

(a)

VCI

(b)

VBH

(c)

UCJ

(d)

UBI

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: All people are tall. Some tall are buildings. No buildings are clocks.

Conclusion I: Some people are buildings.

Conclusion II: No clocks are buildings.

(a)

Only conclusion (II) is follow.

(b)

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

(c)

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

(d)

Only conclusion (I) is follow.

Answer: (a)

16.

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?
119 I (7 J 3) L (50 K 5) L 45 = ?

(a)
85
(b)
80
(c)
75
(d)
70

Answer: (a)

18.

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

11 32 74 158 326 ?

(a)
662
(b)
674
(c)
625
(d)
648

Answer: (a)

19.

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 combs are wood. Some wood are tables. Some tables are plastic.

Conclusion I: Some wood are combs.

Conclusion II: All plastic are tables.

(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: (c)

General Awareness

1. Which Indian Mass Movement began with the famo Dandi March' of Mahatma Gandhi?

(a) Civil Disobedience Movement

(b) Non-Cooperation Movement

(c) Quit India Movement

(d) Kheda Movement

Answer: (a)

2.

Whose autobiography is titled 'An Unsuitable Boy'?

(a)

Karan Johar

(b)

Aditya Chopra

(c)

Hansal Mehta

(d)

Sanjay Kapoor

Answer: (a)

3. The length of the men's kabaddi court is _____ metres.

(a) 10

(b) 13

(c) 17

(d) 15

Answer: (b)

4.

Who among the following is the author of the book 'The Zoya factor'?

(a)

Kiran Desai

(b)

Sudha Murty

(c)

Anuja Chauhan

(d)

Nandini Bajpai

Answer: (c)

5.

Who among the following has NOT received the Sangeet Natak Akademi A -2021 (given in February 2023) for his/her contribution in dance ?

(a)

Neena Prasad

(b)

Sumitra Guha

(c)

Jayalakshmi Eshwar

(d)

Thokchom Ibemubi Devi

Answer: (b)

6. Which of the following is NOT a Directive Principle based on the ideals of Mahatma Gandhi?

(a) To promote industrialisation in urban areas

(b) To organise village Panchayats

(c) To prohibit intoxicating drinks and drugs that are injurious to health

(d) To promote cottage industries in rural areas

Answer: (a)

7. Which of the following methods is used to calculate national income by summing up the total incomes earned by individuals and businesses in an economy?

(a) Value-added method
(b) Output method
(c) Income method
(d) Expenditure method

Answer: (c)

8. What is personal income?

(a) The income earned by individuals and households after taxes and other deductions
(b) The total income earned by businesses and corporations in an economy
(c) The income earned by individuals through their own business or self-employment
(d) The total income earned by individuals and households before taxes and other deductions

Answer: (d)

9. Who founded the Hindu reform organisation Brahmo Samaj?

(a) Ramkrishna Paramhans
(b) Rabindranath Tagore
(c) Atmaram Pandurang
(d) Raja Ram Mohan Roy

Answer: (d)

10. Whom among the following Indian singers is kno as 'Gazal King'?

(a) Manna Dey
(b) Mukesh
(c) Shailendra
(d) Jagjit Singh

Answer: (d)

11. Dree Utsav is celebrated in the state of _____.

(a) Arunachal Pradesh
(b) Kerala
(c) Assam
(d) Andhra Pradesh

Answer: (a)

12. _____ word of Indian dance is derived from a Sanskrit word and literally means 'taking towards'.

(a) Nritta
(b) Laasya
(c) Taandava
(d) Abhinaya

Answer: (d)

13. Which of the following is an example of the Western Coast Port?
    (a) Tuticorin Port
    (b) Paradip Port
    (c) Mumbai Port
    (d) Vishakhapatnam Port
    Answer: (c)

14. What are the three tiers of the Government in India?
    (a) Union government, Judiciary government and Federal government
    (b) Union government, State Government and Federal Government
    (c) Union government, State government and Judiciary government
    (d) Union Government, State Government and Local Government
    Answer: (d)

15. The foundation of Sanchi Stupa was laid by which of the following Kings?
    (a) Samudragupta
    (b) Bimbisara
    (c) Ashoka
    (d) Chandragupta Maurya
    Answer: (c)

16. During which months do retreating monsoons occ n India?
    (a) January and February
    (b) May and June
    (c) October and November
    (d) March and April
    Answer: (c)

17. Which is the primary structural component responsible for most of the mechanical strength of the cell wall?
    (a) Heparin
    (b) Glycogen
    (c) Chitin
    (d) Cellulose
    Answer: (d)

18. Ball and spring model of chemical bonds obey:
    (a) Hooke's law
    (b) Charles' law
    (c) gravitational law
    (d) Newton's law
    Answer: (a)

19. Pandit Janki Prasad was associated with which of the following Gharanas of Kathak?

(a) Banaras
(b) Raigarh
(c) Jaipur
(d) Lucknow

Answer: (a)

20. In 2023, Ajay Singh, the chief of SpiceJet was appointed as president of which of the following?

(a) FICCI
(b) ASSOCHAM
(c) CII
(d) NASSCOM

Answer: (b)

21. Rohit Sharma became the first ever Indian to play how many T20 cricket matches in October 2022?

(a) 300
(b) 100
(c) 200
(d) 400

Answer: (d)

22. Which form of Indian dance is said to be 'soft an uitable for female presentation'?

(a) Nritta
(b) Taandava
(c) Laasya
(d) Nritya

Answer: (c)

23. Which of the following oceans is surrounded by the continent of North America and South America to the east?

(a) Pacific Ocean
(b) Atlantic Ocean
(c) Indian Ocean
(d) Arctic Ocean

Answer: (a)

24. The famous 'Pashupatinath Temple' is located in which country from the following?

(a) Nepal
(b) Bhutan
(c) Maldives
(d) Sri Lanka

Answer: (a)

25. In which of the following years was the first Janjatiya Khel Mahotsav held?

(a) 2023
(b) 2021
(c) 2020
(d) 2022

Answer: (a)

English Language and Comprehension

1. Select the option that can be used as a one-word substitute for the given group of words. One who does not believe in the existence of God

(a) Atheist
(b) Priest
(c) Monk
(d) Believer

Answer: (a)

2. 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'.

You are the beautiful woman I have ever seen.

(a) no rectification needed
(b) more beautiful
(c) beauty
(d) most beautiful

Answer: (d)

3. Choose the option which best expresses the meaning of the given idiom.

By fair means or foul

(a) To work without planning
(b) To find difficulty in completing some work
(c) To get one's way with honesty or dishonesty
(d) To provoke someone into quarrelling

Answer: (c)

4. The following sentence has been split into four segments. Identify the segment that contains a grammatical error. My younger daughter, / Kanu prefer / dark chocolate / to yoghurt.

(a) dark chocolate
(b) My younger daughter
(c) Kanu prefer
(d) to yoghurt

Answer: (c)

5. Choose the sentence that contains an error.

(a) I saw a movie that was directed by Steven Spielberg.

(b) She is the only person who can solve this difficult math problem.

(c) He is an lawyer who works for a prestigious law firm.

(d) The Great Wall of China is a popular tourist attraction.

Answer: (c)

6. Parts of the following sentence have been given as options. Select the option that contains an error. Ishita will playing Tennis for her favourite team.

(a) will playing

(b) Tennis for

(c) her favourite team

(d) Ishita

Answer: (a)

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

He apologised in her silently before he pushed deeper into her thoughts.

(a) apologise in her

(b) apologised with her

(c) apologised of her

(d) apologised to her

Answer: (d)

8. Select the correctly spelt word.

(a) Bihavior

(b) Behavier

(c) Behaviour

(d) Behaveor

Answer: (c)

9. Select the most appropriate synonym of the given word. Obvious

(a) Clear

(b) Murky

(c) Ambiguous

(d) Opaque

Answer: (a)

10. Select the most appropriate meaning of the given idiom. As phony as a three-dollar bill

(a) Something that is attractive

(b) Something that is genuine

(c) Something that is disgusting

(d) Something that is fake

Answer: (d)

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

They are going to give me a lovely present, but I cannot ___ what it will be.

(a) give
(b) gist
(c) guess
(d) guest

Answer: (c)

12. Select the INCORRECTLY spelt word.

(a) Important
(b) Maintanance
(c) Friend
(d) Rhythm

Answer: (b)

13. Select the most appropriate synonym of the given word. Determined

(a) Flexible
(b) Famous
(c) Decisive
(d) Elevated

Answer: (c)

14. Select the most appropriate synonym of the underlined word. Ray was cynical about love.

(a) prolific
(b) obese
(c) trusting
(d) pessimistic

Answer: (d)

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

The company sent out a questionaire to its employees to gather feedback on their work environment.

(a) questioneire
(b) questionnaire
(c) questionnire
(d) questionaiare

Answer: (b)

16. Select the option that can be used as a one-word substitute for the given group of words. A person who feeds on human flesh

(a) Cannibal
(b) Carnivore
(c) Nudge
(d) Omnivore

Answer: (a)

17. 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'. Larger emissions of greenhouse gases lead to higher concentrations in the atmosphere.

(a) leaded to higher concentrations
(b) have lead to higher concentrations
(c) is lead to higher concentrations
(d) No substitution required

Answer: (d)

18. Select the most appropriate meaning of the underlined idiom. Ramesh always blows his own trumpet.

(a) praises himself
(b) criticises himself
(c) does his own work
(d) depends on others

Answer: (a)

19. Select the most appropriate meaning of the underlined idiom. He was on cloud nine when he got admission in Cambridge University.

(a) involved in useless journey
(b) very happy
(c) unsettled
(d) available to be called to go to work

Answer: (b)

20. Select the option that can be used as a one-word substitute for the given group of words. An examination of a body after death

(a) Post room
(b) Post death
(c) Post partum
(d) Post mortem

Answer: (d)

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. One of the (1)_____ tragedies is seeing someone with incredible talent get (2)_____ because he or she lacks some basic skills. This book (3)_____ the number one reason executives derail, and it provides extremely helpful tools to operate in a fast-paced, resultoriented environment. I am impressed by how insightful, (4)_____, well organised and focused it is. It will surely help one (5)_____ several difficult situations.

21. Select the most appropriate option to fill in blank number 1.
    (a) more great
    (b) great
    (c) greater
    (d) greatest
    Answer: (d)

22. Select the most appropriate option to fill in blank number 2.
    (a) uplifted
    (b) damaged
    (c) derailed
    (d) channelised
    Answer: (c)

23. Select the most appropriate option to fill in blank r ber 3.
    (a) demeans
    (b) devours
    (c) addresses
    (d) neglects
    Answer: (c)

24. Select the most appropriate option to fill in blank number 4.
    (a) sophisticated
    (b) pessimistic
    (c) cumbersome
    (d) readable
    Answer: (d)

25. Select the most appropriate option to fill in blank number 5.
    (a) condemn
    (b) salvage
    (c) reject
    (d) discourage
    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

3	**(c)**	4	**(d)**	5	**(d)**	6	**(a)**	7	**(d)**	8	**(a)**	9	**(c)**	10	**(d)**
12	**(d)**	13	**(b)**	14	**(c)**	15	**(c)**	18	**(b)**	19	**(c)**	20	**(b)**		

Reasoning Ability and Problem Solving

1	**(d)**	4	**(a)**	5	**(d)**	6	**(c)**	7	**(c)**	8	**(d)**	9	**(c)**	10	**(d)**
11	**(b)**	12	**(b)**	13	**(c)**	15	**(a)**	16	**(a)**	18	**(a)**	19	**(c)**		

General Awareness

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

English Language and Comprehension

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