PREVIOUS YEAR PAPER

SSC MTS 2024 — 14 November 2024, Shift 2

SSC MTS & Havaldar · 14 November 2024 · 12:30 PM - 2:30 PM

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

Left out of the original paper: 17 (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 14 November 2024, 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-2024-14-nov-shift-2/

Numerical and Mathematical Ability

1. The scale of a map is given as 1:250. Two cities are 6.5 km apart on the map. The actual distance between them is

(a) 1200 km

(b) 1000 km

(c) 1625 km

(d) 1250 km

Answer: (c)

2.

The sum of the radius of the base and the height of a solid cylinder is 96 meters. If the total surface area of the cylinder is 12672 m^2, what is the curved surface area and volume of the cylinder repectively ? (use $\pi = \frac{22}{7}$)

(a) 7660 m2, 93990 m3
(b) 9900 m2, 103950 m3
(c) 9500 m2, 113550 m3
(d) 8600 m2, 105850 m3

Q.3 : 1. 10%

2. 12%

3. 8%

4. 6%

Q.4 On selling a book for ₹348, a shopkeeper los 3%. In order to gain 22%, he must sell that book for: 1. ₹424

2. ₹379

3. ₹369

4. ₹488

Answer: (b)

4. On selling a book for ₹348, a shopkeeper loses 13%. In order to gain 22%, he must sell that book for:

(a) ₹424
(b) ₹379
(c) ₹369
(d) ₹488

Answer: (d)

7. Rice worth ₹84 per kg and ₹96 per kg is mixed with a third variety of rice in the ratio 1 : 1 : 2. If the mixture is worth ₹99 per kg, the price of the third variety per kg is:

(a) ₹115
(b) ₹110
(c) ₹108
(d) ₹112

Answer: (c)

8. The average of six numbers is 30. If one number is excluded, the average becomes 28. Find the excluded number.

(a) 36
(b) 35
(c) 30
(d) 40

Answer: (d)

9. The average income of 25 persons is ₹2,400 and that of another 20 persons is ₹1,500. The average income of all of them together is:

(a) ₹2,100
(b) ₹2,150
(c) ₹2,000
(d) ₹1,950

Answer: (c)

10. Find the simple interest (in ₹) on ₹3000 a su borrowed at 4% per year rate of interest for 4 years.

(a) 480
(b) 420
(c) 440
(d) 520

Answer: (a)

12. The average of 20, 40, 60, 80, 100, 120 and 140 is:

(a) 80
(b) 90
(c) 85
(d) 70

Answer: (a)

14. Air is leaking from a spherical-shaped advertising balloon at the rate of 24 cubic feet per minute. If the radius of the balloon is 8 feet, how long would it take for the balloon to empty? Round your answer to the nearest minute. Use the approximate of value of π, that is 3.14.

(a) 65 minutes
(b) 80 minutes
(c) 89 minutes
(d) 94 minutes

Answer: (c)

15. The following graph represents the production of electric scooters (in thousands) for the years 2020 and 2021 from five manufacturers P, Q, R, S, and T.

What is the percentage by which the total production of all manufacturers in the year 2021 exceeds the total production of manufacturers in the year 2020? (Round to the nearest integer)

(a) 38%
(b) 31%
(c) 42%
(d) 29%

Answer: (b)

16. A boat can travel at a speed of 13 km/h in still water. If the speed of the stream is 4 km/h, find the time taken by the boat to go 68 km downstream.

(a) 4 hours
(b) 3 hours
(c) 5 hours
(d) 6 hours

Answer: (a)

17. What sum (in ₹) will earn a simple interest of ₹360 in 3 years at 8% per year rate of interest?

(a) 2000
(b) 1500
(c) 3000
(d) 750

Answer: (b)

20. If 45% of the sum of the two numbers is equal to 60% of the difference between the two numbers, find the ratio of the smallest number to the greatest number.

(a) 4 : 3
(b) 1 : 7
(c) 3 : 4
(d) 7 : 1

Answer: (b)

Reasoning Ability and Problem Solving

1. 192 is related to 38 following a certain logic. Following the same logic, 270 is related to 51. To which of the following is 258 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 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

(a) 49
(b) 43
(c) 41
(d) 46

Answer: (a)

2. 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 lions are cheetahs. Some cheetahs are tigers.

Conclusions:
(I) Some tigers are not cheetahs.
(II) All cheetahs are lions.

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

Answer: (c)

3. Select the set in which the numbers are related in the same way as are the numbers of the following sets.

(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.) (1, 16, 5) (2, 19, 7)

(a) (3, 35, 5)
(b) (6, 40, 3)
(c) (8, 22, 4)
(d) (5, 20, 6)

Answer: (c)

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

4, 7, 11, 18, 29, 47, 76, ?, 199

(a) 127

(b) 125

(c) 123

(d) 130

Answer: (c)

7. A, B, C, L, M, Y and X are sitting around a circular table facing the centre (but not necessarily in the same order). C sits fourth to the left of M. Only one person sits between L and Y when counted from the left of L. Only one person sits between Y and X when counted from left of Y. Only two people sit between A and Y when counted from the right of A.Who sits third to the right of B?

(a) X

(b) C

(c) A

(d) L

Answer: (c)

8. 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 hands are legs. •Some hands are eyes. Conclusion (I): All legs are hands. Conclusion (II): Some legs are eyes.

(a) Both Conclusions I and II follow

(b) Neither Conclusion I nor II follows

(c) Only Conclusion II follows

(d) Only Conclusion I follows

Answer: (c)

9. What will come in the place of '?' in the following equation, if '+' and '–' are interchanged and '×' and '÷' are interchanged? 16 – 4 × 2 ÷ 3 + 6= ?

(a) 12

(b) 8

(c) 16

(d) 24

Answer: (c)

10. What should come in place of the question mark (?) in the given series based on the English alphabetical order? CHK, GKO, ? , OQW, STA

(a) LOS

(b) KNT

(c) KNS

(d) LOT

Answer: (c)

11. NKBI is related to PIDG in a certain way based on the English alphabetical order. In the same way, SMFG is related to UKHE. To which of the following is UPQR related, following the same logic?

(a) TRDW

(b) WNSP

(c) YGBF

(d) WRSD

Answer: (b)

14. Which two numbers should be interchanged to make the given equation correct? 28 − 4 × 5 + 36 ÷ 9 + 2 × 3 = 53 (Note: Interchange should be done of entire number and not individual digits of a given number)

(a) 5 and 3

(b) 4 and 9

(c) 28 and 36

(d) 2 and 9

Answer: (d)

16. RQ 45 is related to TS 50 in a certain way. In the same way, UX 19 is related to WZ 24.To which of the following is CF 68 related following the same logic?

(a) EH 73

(b) NT 45

(c) NV 37

(d) ST 55

Answer: (a)

17. In a certain code language, 'CREATE' is coded as '84' and 'FLOP' is coded as '56'. What is the code for 'PURPOSEFULLY' in the given code language?

(a) 170

(b) 142

(c) 117

(d) 168

Answer: (d)

18. M, N, O, P, Q, R and S are sitting around a circular table facing the centre (but not necessarily in the same order). P is sitting fourth to the right of N. Q is sitting third to the left of O. M is sitting to the immediate right of Q. R is sitting to the immediate right of N. How many people are sitting between P and S when counted from the left of S?

(a) 2

(b) 3

(c) 1

(d) 4

Answer: (c)

19. In a certain code language, ‘use the force’ is coded as ‘gp sb cn’ and ‘force is strong’ is coded as ‘hv sk gp’. How is ‘force’ coded in that language?

(a) sk
(b) gp
(c) hv
(d) cn

Answer: (b)

General Awareness

1. The National Programme for Civil Services Capacity Building (NPCSCB) envisaged by the Central Government is called _____.

(a) Sahakar Mitra Scheme
(b) Mission Karmayogi
(c) Seva Nidhi Scheme
(d) Seed Scheme

Answer: (b)

2. The Directive Principles of State Policy are considered fundamental in the governance of the country, but they are not enforceable by any court. This concept is mentioned in which Article?

(a) Article 49
(b) Article 37
(c) Article 38
(d) Article 32

Answer: (b)

3. From which state in India did the legendary volleyball player Jimmy George hail?

(a) Odisha
(b) Kerala
(c) Telangana
(d) Maharashtra

Answer: (b)

5. Name the Union territory with the lowest density of popula on as per Census of India 2011.

(a) Lakshdweep
(b) Andaman and Nicobar Islands
(c) New Delhi
(d) Daman and Diu

Answer: (b)

7. In a food chain of Algae-Shrimp-Fish-Bird, if the energy available at the bird is 4 kJ, then the energy available at the shrimp is:

(a) 0.04 kJ
(b) 4 kJ
(c) 400 kJ
(d) 4000 kJ

Answer: (c)

8. The _____ Polo Club is the home of the Ezra Cup event, the world's oldest polo tournament, started in 1880.

(a) Calcutta
(b) Delhi
(c) Jaipur
(d) Hyderabad

Answer: (a)

9. Which of the following dance forms emotes a play through dancing in which the song is customarily in Manipravala language?

(a) Kuchipudi
(b) Sattriya
(c) Kathak
(d) Mohiniattam

Answer: (d)

10. The Mawsynram receives the highest a[illegible]ual rainfall in the world. It is located in which hills?

(a) Garo hills
(b) Maikala hills
(c) Khasi hills
(d) Jaintia hills

Answer: (c)

11. Which festival commemorates the death of Hussain Ibn Ali?

(a) Shab-i-baraat
(b) Muharram
(c) Milad-un-nabi
(d) Eid-ul-fitr

Answer: (b)

12. Who among the following has been appointed as the new Director General of the Geological Survey of India (GSI) in June 2023?

(a) Ajay Yadav
(b) Ashwani Kumar
(c) Amarendu Prakash
(d) Janardan Prasad

Answer: (d)

13. According to the census of India 2011, which union territory from the following has the highest sex ratio?

(a) Lakshadweep
(b) Puducherry
(c) Daman and Diu
(d) Chandigarh

Answer: (b)

14. Who presides over the House in absence of the Speaker and the Deputy Speaker in the Indian political system?

(a) President
(b) Chairperson so nominated
(c) Chief Justice of the Supreme Court
(d) Prime Minister

Answer: (b)

15. Which of the following instruments is pl[illegible]d by [illegible]reya Bhattacharjee, an eminent musician from Assam?

(a) Tabla
(b) Violin
(c) Flute
(d) Sitar

Answer: (a)

16. Which of the following is the residential place of Buddhist priests?

(a) Stambha
(b) Stupa
(c) Vihara
(d) Chaitya

Answer: (c)

17. In Maikal hills, which of the following minerals is deposited?

(a) Copper
(b) Iron
(c) Coal
(d) Bauxite

Answer: (d)

18. Which of the following possesses the largest isolated single cell?
    (a) Ostrich egg
    (b) Human brain
    (c) Amoeba
    (d) Blue whale
    Answer: (a)

19. 'Waiting for a Visa' is a 20-page autobiography of _____.
    (a) Dr Bhim Rao Ambedkar
    (b) Mahatma Gandhi
    (c) Jawahar Lal Nehru
    (d) Sadar Vallabhbhai Patel
    Answer: (a)

20. Which of the following is an artificial port in India?
    (a) Kolkata port
    (b) Deendayal port
    (c) Chennai port
    (d) Mumbai port
    Answer: (c)

21. Who is the first Indian Female Dancer to receive th ighest Padma award, Padma Vibhushan?
    (a) Sonal Mansingh
    (b) Madhavi Mudgal
    (c) Sanjukta Panigrahi
    (d) Shobha Naidu
    Answer: (a)

22. Pulakeshin II was the famous ruler of which of the following dynasties?
    (a) Gauda
    (b) Vakataka
    (c) Chalukya
    (d) Maitraka
    Answer: (c)

23. Which of the following national income aggregates is generally recognised as National Income of a country?
    (a) Gross National Product at Market Prices
    (b) Net National Product at Factor Cost
    (c) Gross Domestic Product at Factor Cost
    (d) Net National Product at Market Prices
    Answer: (b)

24. Which of the following Commissions was set up to investigate the incident of Jallianwala Bagh in 1919?

(a) Peel Commission
(b) Sadler Commission
(c) Hunter Commission
(d) Simon Commission

Answer: (c)

25. The Home Rule League Movement of Bal Gangadhar Tilak had its base across Karnataka and Maharashtra, but excluding which of the following?

(a) Bombay
(b) Berar
(c) Nagpur
(d) Poona

Answer: (a)

English Language and Comprehension

1. Select the INCORRECTLY spelt word.

(a) Brilliant
(b) Gentle
(c) Kinetic
(d) Hektic

Answer: (d)

2. Select the option with the correct spelling to replace the underlined word in the given sentence.

As the roller coaster reached its highest point, a surge of addrenalline coursed through her veins, making her heart race with excitement.

(a) adrineline
(b) adrennaline
(c) adrenaline
(d) adreneline

Answer: (c)

3. Select the most appropriate option to fill in the blank. Though Amal took continuous medication, he was not able to _____ his injury.

(a) hill
(b) heal
(c) hail
(d) heel

Answer: (b)

4. 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.

I had never saw/ such a sight/ before I visited Switzerland.

(a) No error
(b) such a sight
(c) I had never saw
(d) before I visited Switzerland.

Answer: (c)

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. Tara has been playing / cricket with her friends / since noon.

(a) No error
(b) Tara has been playing
(c) Cricket with her friends
(d) Since noon

Answer: (a)

7. Select the option that rectifies the underlined spelling error.

The permisible limit of vehicle speed has been increa in India by the Road Transport Corporation.

(a) permisibble
(b) parmitted
(c) permissible
(d) parmissible

Answer: (c)

8. Select the most appropriate synonym of the underlined word in the given sentence. Wine glass is very fragile; you must handle it with care.

(a) Delicate
(b) Sturdy
(c) Resilient
(d) Rough

Answer: (a)

9. Select the option that can be used as a one-word substitute for the given group of words.

A person who is mentally ill

(a) Mercenary
(b) Psychiatrist
(c) Psychologist
(d) Lunatic

Answer: (d)

10. Select the most appropriate option to substitute the underlined idiom/phrase in the given sentence. The salesman informed the customers that if they had any questions, they could drop a line.

(a) send a brief letter
(b) call his secretary
(c) come back with the items
(d) complain against him

Answer: (a)

11. Parts of the following sentence have been given as options. Select the option that contains an error. He bought strange vintage car on auction from the customs department.

(a) on auction
(b) He bought
(c) from the customs department
(d) strange vintage car

Answer: (d)

12. Select the most appropriate option to fill in the blank. His business was so successful that Mark was able to _____ at the age of 50.

(a) retire
(b) give up
(c) succeed
(d) admit

Answer: (a)

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

She told me / her name but / I'm not remembering / it now.

(a) it now
(b) I'm not remembering
(c) She told me
(d) her name but

Answer: (b)

14. Select the most appropriate phrase to replace the underlined word.

She is feeling unwell today, so she will not be going to work.

(a) face like thunder
(b) under the weather
(c) head in the clouds
(d) chase rainbows

Answer: (b)

15. Select the most appropriate option that can substitute the underlined segment in the given sentence. She confided in me on her anxious, whispering her secrets between sips of coffee.

(a) about her anxious
(b) regarding herself's anxiousness
(c) about her anxiety
(d) on her anxiousness

Answer: (c)

17. Select the most appropriate synonym of the underlined word.

The company's new product received affirmative feedback from customers.

(a) detailed
(b) critical
(c) positive
(d) reflective

Answer: (c)

18. The following sentence has been split into four parts. Identify the part that contains a grammatical error.

Surprisingly!/ dark chocolates/ are most bitterer/ in taste.

(a) in taste.
(b) are most bitterer
(c) dark chocolates
(d) Surprisingly!

Answer: (b)

19. Select the option that will improve the underlined part of the given sentence.

Just when they reach the airport, the flight had departed from the runway.

(a) After they just reach
(b) Just they reach
(c) Just when they have reached
(d) Just before they reached

Answer: (d)

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

Sathish remained unwavering in the face of the assaulting gang, standing as resolute as _____.

(a) steal
(b) still
(c) stall
(d) steel

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.
>
> These letters are not intended to dominate your way of thinking or to persuade you to _____ 1___ to the way the writer thinks or feels. It is really a dialogue _____ 2_____ two friends talking about their problems. You must have observed the state of our society, and that there must be a _____ 3_____ transformation in the way human beings live, their relation to each other, and in every way possible. We are deeply concerned for our students. The teacher is the _____ 4_____ important person in the school, for on her or him depends the future welfare of mankind. As the society is disintegrating, these schools must be centres for the regeneration ____ 5___ the mind.

21. Select the most appropriate option to fill in blank number 1.
    (a) affirm
    (b) confirm
    (c) control
    (d) conform

    Answer: (d)

22. Select the most appropriate option to fill in blank number 2.
    (a) unless
    (b) between
    (c) before
    (d) behind

    Answer: (b)

23. Select the most appropriate option to fill in blank number 3.
    (a) highly
    (b) radical
    (c) radial
    (d) avoidable

    Answer: (b)

24. Select the most appropriate option to fill in blank number 4.
    (a) most
    (b) not
    (c) more
    (d) much

    Answer: (a)

25. Select the most appropriate option to fill in blank number 5.
    (a) of
    (b) under
    (c) although
    (d) off

    Answer: (a)

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)**	4	**(d)**	7	**(c)**	8	**(d)**	9	**(c)**
10	**(a)**	12	**(a)**	14	**(c)**	15	**(b)**	16	**(a)**	17	**(b)**
20	**(b)**										

Reasoning Ability and Problem Solving

1	**(a)**	2	**(c)**	3	**(c)**	4	**(c)**	7	**(c)**	8	**(c)**
9	**(c)**	10	**(c)**	11	**(b)**	14	**(d)**	16	**(a)**	17	**(d)**
18	**(c)**	19	**(b)**								

General Awareness

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

English Language and Comprehension

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