PREVIOUS YEAR PAPER

SSC MTS 2024 — 12 November 2024, Shift 3

SSC MTS & Havaldar · 12 November 2024 · 4:00 PM - 5:30 PM

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

Left out of the original paper: 15 (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 12 November 2024, 4:00 PM - 5:30 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-2024-12-nov-shift-3/

Numerical and Mathematical Ability

1. In an election there were only two candidates, Geeta and Shyama. Geeta received 15% of the total votes and Shyama received 8700 votes. 60% of the voters did not cast their vote to either of the two candidates. Find the total percentage of votes that Shyama received, assuming that all the votes cast were valid.

(a) 24%

(b) 23%

(c) 22%

(d) 25%

Answer: (d)

3. Harsha obtained 72, 63 and 81 marks (out of 100) in Maths, Physics and Chemistry, respectively. What is the average of his marks?

(a) 72

(b) 63

(c) 81

(d) 84

Answer: (a)

4. The average salary of all 50 employees including 5 officers of a company is₹855. If the average salary of the officers is₹2,550, find the average salary of the remaining staff of the company. (Rounded to the nearest integer.)

(a) ₹ 637

(b) ₹ 667

(c) ₹ 657

(d) ₹ 677

Answer: (b)

5. Find the simple interest (in ₹) on ₹3500 as a sum borrowed at 6% per year rate of interest for 6 years.

(a) 1220
(b) 1200
(c) 1260
(d) 1300

Answer: (c)

7. In a hospital, 60% of the patients are men, 25% of the patients are women, and 15% of the patients are children. If the average age of the men is 40 years, that of the women is 36 years, and that of the children is 8 years. What is the average age of all the patients?

(a) 24.3 years
(b) 34.2 years
(c) 32.4 years
(d) 23.4 years

Answer: (b)

8. A sum of money at simple interest amounts to ₹2,500 in three years and ₹3,000 in five years. What is the rate of interest (correct up to two decimal places)?

(a) 14.29%
(b) 14.25%
(c) 15%
(d) 13.56%

Answer: (a)

9.

The given table shows the number of pastries sold by four different bakeries in four different months.

Month / Bakery	April	May	June	July
X	640	665	962	748
Y	584	782	456	698
Z	612	498	729	621
T	771	630	568	777

What is the difference between the total number of pastries sold by bakeries X and T together in June, and the total number of pastries sold by bakeries Y and Z together in April?

(a) 334
(b) 374
(c) 314
(d) 354

Answer: (a)

11. Using the factor method of HCF, which of the following is the HCF of 160 and 256?

(a) 40
(b) 32
(c) 64
(d) 16

Answer: (b)

12. Mihir buys a toy for ₹70 and sells it for ₹90. What is his gain percentage?

(a) 35.62%
(b) 25.25%
(c) 28.57%
(d) 20%

Answer: (c)

13. The average score of 30 students (boys and girls only) in a class test was 16.2 and that of 18 boys in the same test was 16. The average score of girls in the same test was:

(a) 16.1
(b) 16.7
(c) 16.5
(d) 16.3

Answer: (c)

14. Two trains start at the same time from two stations and proceed towards each other at speeds of 120 km/hr and 80 km/hr, respectively. When they meet, it is found that one train has travelled 60 km more than the other. What is the distance (in km) between the two stations?

(a) 387
(b) 300
(c) 268
(d) 452

Answer: (b)

16. Find the simple interest (in ₹) on ₹2500 as a sum borrowed at 3% per year rate of interest for 3 years.

(a) 165
(b) 265
(c) 225
(d) 185

Answer: (c)

18. The marked price of a mobile phone at a s[illegible]om is ₹25,000 and is sold at successive discounts of 20%, 15% and 10%. Find its selling price.

(a) ₹15,000
(b) ₹14,960
(c) ₹14,000
(d) ₹15,300

Answer: (d)

19.

The curved surface of a right circular cylinder is to be coloured at the rate of ₹1.50 per sq. cm. If the radius of the circular base is 21 cm and height is 10 cm, then what will be the cost (in ₹) of colouring? (Take $\pi = \frac{22}{7}$)

(a) 1980
(b) 1960
(c) 2000
(d) 1940

Answer: (a)

20. A policeman travelling at a speed of 120 km/h chases a thief 5000 m away from him, and travelling at a speed of 100 km/h. What is the time taken by the policeman to catch the thief?

(a) 10 min

(b) 13.5 min

(c) 20 min

(d) 15 min

Answer: (d)

Reasoning Ability and Problem Solving

1. What will come in place of the question mark (?) in the following equation, if '–' and ' + ' are interchanged and '÷' and '×' are interchanged? 15 – 4 + 9 × 3 ÷ 6 = ?

(a) 12

(b) 18

(c) 10

(d) 1

Answer: (d)

3. In a code language, 'KITE' is written as 'PRGV' and 'MARBLE' is written as 'NZIYOV'. How will 'DOLPHIN' be written in the same language?

(a) XMOKSRM

(b) WMOKSRM

(c) XLOKSRM

(d) WLOKSRM

Answer: (d)

4. In a code language, 'VGAL' is coded as 'BEGJ' and 'XQEB' is coded as 'DOKZ'. How will 'HTSO' be coded in that language?

(a) MRZL

(b) MSZK

(c) NRYM

(d) NQYL

Answer: (c)

6. In a certain code language, 'let us go' is coded as 'ck ru tb' and 'please go away' is coded as 'tb mg du'. How is 'go' coded in that code language?

(a) ru

(b) mg

(c) tb

(d) du

Answer: (c)

8. BZ7 is related to GE15 in a certain way. In the same way, PN13 is related to US21. To which of the following is IG12 related following the same logic?

(a) NL21
(b) NL20
(c) PM20
(d) PN21

Answer: (b)

9. What will come in place of the question mark (?) of the following equation, if '+' and '−' are interchanged and '×' and '÷' are interchanged?

7 + 8 – 24 × 6 ÷ 3 = ?

(a) 16
(b) 11
(c) 8
(d) 15

Answer: (b)

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

TCU, UFP ,VIK, WLF ,?

(a) XPA
(b) XOC
(c) XOA
(d) XOB

Answer: (c)

11. E, F, G, H, P, S, and T are sitting around a circular table, facing the centre (but not necessarily in the same order). F sits second to the right of T. P sits to the immediate left of S. Only one person sits between P and G when counted from the left of P. H sits third to the right of E.How many people are sitting between H and P when counted from the right of H?

(a) None
(b) Three
(c) Two
(d) One

Answer: (a)

12. 11 is related to 78 following a certain logic. Following the same logic, 6 is related to 43. To which of the following is 31 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) 159
(b) 218
(c) 145
(d) 249

Answer: (b)

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

6 16 27 39 52 ?

(a) 66
(b) 64
(c) 65
(d) 67

Answer: (a)

14. In a certain code language, 'gre pul sep' means 'e[illegible]e sofa', 'pul pra sem' means 'clear my sofa' and 'gre boi nad' means 'the great river'. What is the [illegible]de for 'the' in the same code language?

(a) nad
(b) pul
(c) sep
(d) gre

Answer: (d)

15. TW21 is related to ZC66 in a certain way. In the same way, UX33 is related to AD78. To which of the following is MP45 related, following the same logic?

(a) VS90
(b) VS80
(c) SV80
(d) SV90

Answer: (d)

16. Seven executives of a law firm (P, Q, R, S, T, U and V) are sitting at a circular table for a meeting, everyone facing towards the center(but not necessarily in the same order) P is an immediate neighbor of both U and S Q is sitting to the immediate right of S, and is one of the immediate neighbors of T V is sitting second to the right of T. Who is sitting second to the left of U?

(a) V

(b) R

(c) Q

(d) T

Answer: (b)

17. 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 its constituent digits. E.g. 13 – Operations on 13 such as adding /deleting / 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) (18, 108, 12) (33, 198, 22)

(a) (42, 252, 28)

(b) (42, 254, 28)

(c) (40, 252, 28)

(d) (42, 252, 26)

Answer: (a)

18. 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: No sunflower is a lily. No lily is a rose

Conclusions:
(I) No sunflower is a rose.
(II) No rose is a lily.

(a) Only conclusion II follows

(b) Only conclusion I follows

(c) Neither conclusion I nor II follows

(d) Both conclusion I and II follow

Answer: (a)

20. 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 schools are colleges. No college is a university. Conclusions: (I): No school is a university. (II): All colleges are schools.

(a) Only conclusion I follows.

(b) Neither conclusion I nor II follows.

(c) Both conclusions I and II follow.

(d) Only conclusion II follows.

Answer: (a)

General Awareness

1. At the time of its adoption, the Constitution contained 395 Articles and _____ Schedules.

(a) 11
(b) 9
(c) 7
(d) 8

Answer: (d)

2. Vani Jairam, who won Padma Bhushan 2023, belongs to which state?

(a) Gujarat
(b) Maharashtra
(c) Tamil Nadu
(d) Madhya Pradesh

Answer: (c)

4. At the _____, Neeraj Chopra became the first Indian to win a gold medal in javelin throw.

(a) Asian Games, 2022
(b) Asian Games, 2010
(c) Asian Games, 2018
(d) Asian Games, 2014

Answer: (c)

5. How many Pillar Edicts or Major Pillar Edicts (PEs) Ashoka are found?

(a) Two
(b) Seven
(c) Nine
(d) Fourteen

Answer: (b)

6. Lokrang, a five-day festival organised by the Madhya Pradesh Adivasi Lok Kala Academy, begins on _____ every year.

(a) 24 th July
(b) 26 th September
(c) 26 th January
(d) 22 nd March

Answer: (c)

7. Bharatanatyam dancer _____ received the Natya Kala Sarathy award from Sri Parthasarathy Swami Sabha in 2023 at Chennai.

(a) Sreedevi Unni
(b) Hema Rajagopalan
(c) Srekala Bharath
(d) Vidhya Subramanian

Answer: (c)

8. Which of the following types of volcanic eruptions of Earth's volcanoes are most explosive?

(a) Caldera
(b) Flood basalt provinces
(c) Dykes
(d) Lapolith

Answer: (a)

9. Oak and chestnut trees are found in which type of forest in India?

(a) Thorn forests
(b) Tropical deciduous forests
(c) Montane forests
(d) Mangrove forests

Answer: (c)

10. In which of the following sessions of Congress did the Party issue a call to celebrate 26 th January as 'Purna Swaraj Day'?

(a) Lahore 1929
(b) Delhi 1923
(c) Madras 1927
(d) Karachi 1931

Answer: (a)

12. The rock-cut caves in Karnataka, mainly at Badar nd Aihole, were built under the patronage of the _____.

(a) Cholas
(b) Chalukyas
(c) Guptas
(d) Mauryas

Answer: (b)

13. According to Article 280 of the Indian Constitution, the Finance Commission needs to be appointed for every _____.

(a) one year
(b) three years
(c) five years
(d) two years

Answer: (c)

14. A factory set up in my area is causing huge deforestation. Which of the following can we expect to see in the near future?

A) Lowering of ground water
B) Lower temperatures
C) Frequent rain
D) Arrival of new animals

(a) C
(b) A
(c) B
(d) D

Answer: (b)

15. Which of the following statements about the Ozone layer are true?

Statement A: It is found in the stratosphere. Statement B: Chlorofluorocarbons (CFCs) are responsible for ozone hole. Statement C: Ozone layer is found around 15–30 km above the earth's surface. Statement D: Ozone layer is expected not to recover anymore now.

(a) Only statements A and D
(b) Only statement B, C and D
(c) Only statements A and B
(d) Only statements A, B and C

Answer: (d)

16. In which year was the first Socio Economic and ste Census (SECC) conducted in India?

(a) 2001
(b) 1901
(c) 2011
(d) 1911

Answer: (c)

17. A four-carbon chain with a triple bond is called _____.

(a) butanol
(b) butene
(c) butyne
(d) butanal

Answer: (c)

18. What is the term 'ace' commonly associated within sports?

(a) A high jump technique in athletics
(b) Scoring a goal in soccer
(c) A fast serve in tennis
(d) A perfect shot in golf

Answer: (c)

19. The Kakrapar Atomic Power Plant is located in which state?

(a) Rajasthan
(b) Gujarat
(c) Maharashtra
(d) Tamil Nadu

Answer: (b)

20. In May 2023, who was sworn in as Central Vigilance Commissioner?

(a) Samuel Joseph
(b) Dayal Yadav
(c) Ram Manohar Singh
(d) Praveen Kumar Srivastava

Answer: (d)

21. Which Article of the Constitution of India directs the State to provide public assistance to its citizens in case of unemployment, old age, sickness and disablement, within the limits of its economic capacity and development?

(a) Article 12
(b) Article 41
(c) Article 20
(d) Article 32

Answer: (b)

22. The last Mughal emperor of India was:

(a) Bahadur Shah II
(b) Shah Jahan
(c) Akbar II
(d) Aurangzeb

Answer: (a)

23. In 2023, Government of India has announced to set up a/an _____ DigiLocker for use by MSMEs, large businesses and charitable trusts to store and share documents online securely.

(a) Bond
(b) Company
(c) Macro
(d) Entity

Answer: (d)

24. A famous organisation Self-Employed Women's Association (SEWA) is related with which of the following states?

(a) Gujarat
(b) Uttar Pradesh
(c) Haryana
(d) Madhya Pradesh

Answer: (a)

25. Padma Subrahmanyam is associated with which dance form?

(a) Bharatanatyam

(b) Chhau

(c) Kathak

(d) Manipuri

Answer: (a)

English Language and Comprehension

1. Select the most appropriate meaning of the underlined word. The Prime Minister will address the nation tomorrow.

(a) To greet people

(b) A landmark

(c) A postal code for sending letters

(d) To deliver a speech

Answer: (d)

3. Select the INCORRECTLY spelt word from the given sentence.

The teacher's encouragment motivated the students to excel in their studies.

(a) Encouragment

(b) Teacher's

(c) Motivated

(d) Excel

Answer: (a)

5. In the following sentence the underlined part contains as error. Alternatives to the underlined part are given as options. Select the correct alternative. Their chance of winning is slimmest.

(a) slimmer

(b) slim

(c) slimly

(d) most slim

Answer: (b)

6. Select the grammatically correct sentence.

(a) A secondary section of the school is located at an end of the street.

(b) The secondary section of the school is located at the end of the street.

(c) The secondary section of a school is located at the end of a street.

(d) The secondary section of a school is located at an end of the street.

Answer: (b)

7. Select the most appropriate meaning of the idiom from the options given below. To accept the gauntlet

(a) To accept failure

(b) To accept a challenge

(c) To suffer financial loss

(d) To suffer a great insult

Answer: (b)

8. Select the most appropriate option to fill in the blank. You need to rest the _____ before baking the bread.

(a) paste

(b) lard

(c) doe

(d) dough

Answer: (d)

9. Select the most appropriate option to fill in the blanks. The teacher asked the students to remain ____, but the noise continued to ____. She finally had to raise her voice to gain control.

(a) calm; escalate

(b) quit; rise

(c) silent; ascend

(d) still; elevate

Answer: (b)

10. Choose the correctly spelt word to fill in the blank meaningfully. The citizens of Iraq wanted _____ after years of war.

(a) piece

(b) pease

(c) peice

(d) peace

Answer: (d)

11. In the following sentence the underlined part contains as error. Alternatives to the underlined part are given as options. Select the correct alternative. Pankaj is a <u>better</u> cook.

(a) goodest

(b) best

(c) good

(d) more good

Answer: (c)

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

I still / do not understand / why he did not / reply my email.

(a) I still
(b) why he did not
(c) reply my email
(d) do not understand

Answer: (c)

13. Select the correct spelling of the underlined word in the given sentence.

Is he ready to risk his acredation for the greater good?

(a) accraditation
(b) accredation
(c) acreditation
(d) accreditation

Answer: (d)

14. Select the most appropriate option to substitute the underlined segment in the given sentence.

Shirin came off with a brilliant idea to solve the problem

(a) came off on a brilliant idea
(b) came up in a brilliant idea
(c) came up with a brilliant idea
(d) came off to a brilliant idea

Answer: (c)

15. Select the most appropriate synonym of the given word.

Hire

(a) Endure
(b) Engage
(c) Enhance
(d) Engross

Answer: (b)

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

Inferior

(a) Superior
(b) Substandard
(c) Beautiful
(d) Mediocre

Answer: (a)

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

The professor's _____ lecture was filled with complex concepts.

(a) lucyd
(b) lucid
(c) lucide
(d) lucied

Answer: (b)

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

The team captain inquired of his teammates _____ they preferred to choose batting as their initial option.

(a) whither
(b) weather
(c) wither
(d) whether

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.
>
> Employers, nowadays, are (1)_____ on team-building as it proves to be useful in being more productive. So, they create occasions for the employees to spend time together. Some employees are sick (2) _____ office festival parties with mandatory dress codes and fun competitions. Some others (3)____ of having to forcibly bond with colleagues during after-work happy hours when they would rather be at home. A French court (4)____ recently that one very much has the right to be boring at the workplace. Seven years after Mr. T was fired from his company for not participating in fun activities, which included going out for drinks after work once a week, the court said that Mr. T was merely exercising his 'freedom of expression'. It added that the company's culture of fun (5)_____ Mr. T 's fundamental right to 'dignity and respect of private life'. However, employers and HR personnel insist that team-bonding initiatives are crucial to the workplace and the employees too feel the same if they want promotions.

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

(a) focusing
(b) focus
(c) has focused
(d) focuses

Answer: (a)

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

(a) with
(b) for
(c) from
(d) of

Answer: (d)

23. Select the most appropriate option to fill in blank number 3.
    (a) are tired
    (b) has tired
    (c) have tired
    (d) tired
    Answer: (a)

24. Select the most appropriate option to fill in blank number 4.
    (a) has ruled
    (b) was ruled
    (c) is ruled
    (d) have ruled
    Answer: (a)

25. Select the most appropriate option to fill in blank number 5.
    (a) is violated
    (b) violated
    (c) will violate
    (d) violate
    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	**(d)**	3	**(a)**	4	**(b)**	5	**(c)**	7	**(b)**	8	**(a)**
9	**(a)**	11	**(b)**	12	**(c)**	13	**(c)**	14	**(b)**	16	**(c)**
18	**(d)**	19	**(a)**	20	**(d)**						

Reasoning Ability and Problem Solving

1	**(d)**	3	**(d)**	4	**(c)**	6	**(c)**	8	**(b)**	9	**(b)**
10	**(c)**	11	**(a)**	12	**(b)**	13	**(a)**	14	**(d)**	15	**(d)**
16	**(b)**	17	**(a)**	18	**(a)**	20	**(a)**				

General Awareness

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

English Language and Comprehension

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