PREVIOUS YEAR PAPER

SSC MTS 2023 — 1 September 2023, Shift 1

SSC MTS & Havaldar · 1 September 2023 · 9:00 AM - 11:00 AM

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

Left out of the original paper: 3 (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 1 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-2023-1-sep-shift-1/

Numerical and Mathematical Ability

1. If the first number is 20% less than the third number and the ratio of the second to the third number is 7 : 10, then the average of the first and the third number is how much per cent more than the second number?

(a) $26\frac{4}{7}$

(b) $28\frac{2}{7}$

(c) $28\frac{4}{7}$

(d) $24\frac{2}{7}$

Answer: (c)

3. A truck driver drove 60 km/h for three hours. Then he stopped for one hour and did not go anywhere. Then, he drove four more hours at 60 km/h. What was the driver's average speed (in km/h)?

(a) 52.5

(b) 62.4

(c) 50.5

(d) 42.8

Answer: (a)

4.

The following table indicates the number of candidates who appeared in an entrance examination from four different cities A, B, C, D and the ratio of passing and failing. Study the table carefully and answer the question.

City	No. of candidates appeared	Ratio of passing and failing
A	660	5 : 6
B	650	2 : 3
C	500	3 : 2
D	630	4 : 5

Which city has the highest number of candidates who failed in the entrance examination and find its rate of per cent in that city, respectively?

(a)

A, 50%

(b)

B, 60%

(c)

D, 60%

(d)

C, 50%

Answer: (b)

6. Simplify:
(13 ÷ 13 of 13 + 13)/(13 ÷ 13 × 13 + 13)

(a)

$\frac{1}{26}$

(b)

$\frac{15}{26}$

(c)

$\frac{13}{96}$

(d)

$\frac{85}{169}$

Answer: (d)

7. The cost price of an item is ₹4,350. What is the profit percentage (rounded off to 1 decimal place) if it is sold at ₹5,680?

(a)
28.5%
(b)
40.7%
(c)
36.8%
(d)
30.6%

Answer: (d)

8. In a class of 37 students, there are 22 girls. The average weight of these girls is 46 kg and the average weight of the whole class is 50 kg. What is the average weight (in kg) of the boys in that class? (Rounded off to 2 decimal places)

(a)
60.74
(b)
55.87
(c)
61.35
(d)
58.25

Answer: (b)

9. A boat takes 20 hours for travelling downstream from point A to point B and comes back to a midpoint C between A and B. The speed of the stream is 5 km/h and the speed of the boat in still water is 10 km/h. Find the distance between A and B (in km).

(a)
100
(b)
120
(c)
150
(d)
75

Answer: (b)

10. Raju sold an article to Ravi at 10% gain. Ravi sold the article to Ramu at a loss of 10%. If Ramu paid ₹1,485 to Ravi, find the selling price of Raju to Ravi.

(a)

₹1,200

(b)

₹1,500

(c)

₹1,650

(d)

₹1,600

Answer: (c)

11.

A and B can do a piece of work in 4 days, B and C can do the same work in 5 days, A and C can do it in 10 days. If A, B, C work together, in how many days can they complete the work?

(a)

$3\frac{11}{7}$

(b)

$11\frac{3}{7}$

(c)

$3\frac{7}{11}$

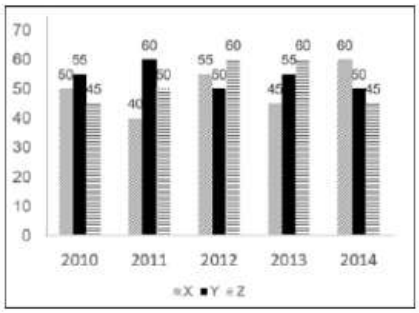
(d)

$11\frac{7}{3}$

Answer: (c)

12.

The graph shows the production of tyres (in Lakhs) by three different companies X, Y, and Z over the years.
Directions: Study the following graph carefully to answer the question given below it.



What is the difference between the average production per year of the company with the highest average production and that of the company with the lowest average production in Lakhs?

(a)

2

(b)

6

(c)

8

(d)

4

Answer: (d)

14. Two numbers A and B are such that the [illegible]% of A and 4% of B is two-fifth of the sum of 7% of A and 11% of B, then the ratio A : B is:

(a)

3 : 7

(b)

5 : 8

(c)

1 : 8

(d)

1 : 7

Answer: (c)

15. Two trains of length 110 m and 85 m are moving in the same direction at 12 m/s and 7 m/s, respectively. Find the time (in seconds) taken by the faster train to cross the slower train.

(a)
39
(b)
35
(c)
19
(d)
29

Answer: (a)

16. In what ratio must a grocer mix two varieties of rice costing ₹128 and ₹143 per kg, respectively, to get a mixture of rice worth ₹137.75 per kg?

(a) 12:5
(b) 7:13
(c) 5:4
(d) 6:7

Answer: (b)

17. Two persons take steps of 77 cm and 88 cm, respe vely. If they start in step, then what is the minimum distance (in cm) they should cover so that h of them can cover the distance in complete steps?

(a)
968
(b)
828
(c)
616
(d)
560

Answer: (c)

18.

The surface area of a sphere is 616 cm^2, find its diameter.

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

(a)

14 cm

(b)

2 cm

(c)

4 cm

(d)

3 cm

Answer: (a)

19. The diameter of a metallic sphere is 6 cm. It is melted and drawn into a wire having a diameter of the cross section as 0.4 cm. Find the length of the wire (in metres).

(a)

18

(b)

9

(c)

12

(d)

10

Answer: (b)

20. A, B and C can do a piece of work in 10, 15, 12 days, respectively. A and B worked alternately for 5 days each and left. Then C joined and completed the work. In how many days did C complete the remaining work?

(a)

3

(b)

1

(c)

4

(d)

2

Answer: (d)

Reasoning Ability and Problem Solving

1. 287 is related to 398 following a certain logic. Following the same logic, 378 is related to 489. To which of the following is 852 related to, following the same logic?

(a)
643
(b)
963
(c)
346
(d)
543

Answer: (b)

2.

If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '-', what will come in place of the question mark (?) in the following equation?
(87 A 29) B 14 D 24 C 14 C 6 B 5 = ?

(a)
68
(b)
74
(c)
62
(d)
56

Answer: (c)

3. What should come in place of '?' in the given series?
9 15 33 87 ? 735 2193

(a)
241
(b)
249
(c)
237
(d)
225

Answer: (b)

4. What should come in place of ? in the given series based on the English alphabetical order?
CNT, FQU, ITV, LWW, ?

(a)
OZX
(b)
NYY
(c)
MXZ
(d)
LYX

Answer: (a)

5. 38 is related to 49 following a certain logic. Following the same logic, 64 is related to 75. To which of the following is 83 related to, following the same logic?

(a)
93
(b)
95
(c)
92
(d)
94

Answer: (d)

6. What should come in place of '?' in the given series?
3 9 45 261 1557 ?

(a)
9555
(b)
8572
(c)
9433
(d)
9333

Answer: (d)

7.

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

$32 - 512 \times 64 + 8 + 64 = ?$

(a)

42

(b)

22

(c)

32

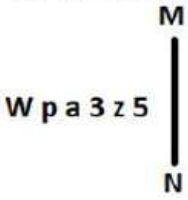
(d)

52

Answer: (c)

8.

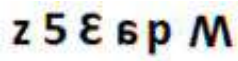
Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



(a)



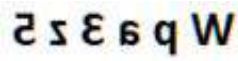
(b)



(c)



(d)



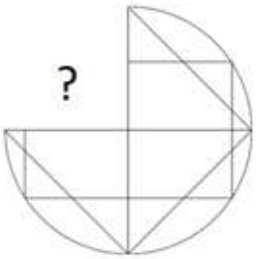
Answer: (d)

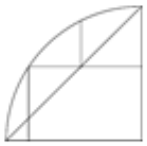
9. What should come in place of '?' in the given series?
16 65 261 1045 4181 ?

(a)
16945
(b)
16273
(c)
16725
(d)
16892

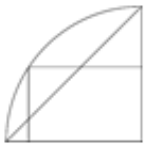
Answer: (c)

10.
Identify the figure that completes the pattern (rotation is NOT allowed).



(a)

(b)

(c)

(d)


Answer: (d)

11. 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)
Reflection : Light

(a)
Sentiment : Feeling

(b)
Echo : Sound

(c)
Iris : Sight

(d)
Movie : Scene

Answer: (b)

12. 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 rags are carpets. Some carpets are steel. Some steel are bottles.
Conclusion I: All carpets are rags.
Conclusion II: Some carpets are bottles.

(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: (d)

13.

Find out the correct alternative that when filled in the blanks in the same sequence will make the series logically complete.

X_AL ZH_L _KAL DNA_ _QAL

(a)

FBPSB

(b)

FABLE

(c)

EABLF

(d)

EBFLA

Answer: (c)

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

(a)

Two

(b)

One

(c)

Three

(d)

Four

Answer: (b)

15. In a certain code language, 'BLUE' is coded as '1542' and 'ABLE' is coded as '1745'. What is the code for 'A' in the given code language?

(a)

7

(b)

1

(c)

4

(d)

5

Answer: (a)

16. Read the given statement(s) 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 statement(s).
Statements: All chocolates are sweets. Some sweets are harmful.
Conclusions:
(I) All Chocolates are harmful.
(II) Some harmful are chocolates.

(a)

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

(b)

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

(c)

Only conclusion (II) is follows.

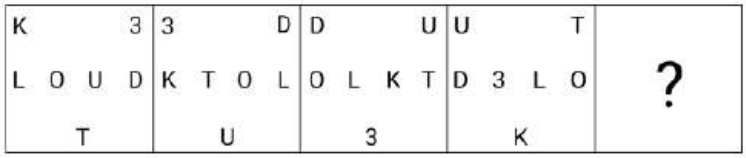
(d)

Only conclusion (I) is follows.

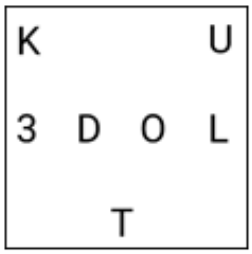
Answer: (a)

17.

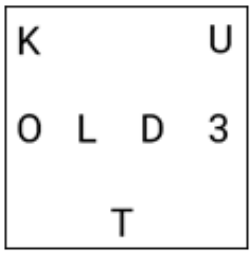
Which figure should replace the question mark (?) if the following figure series were to be continued?



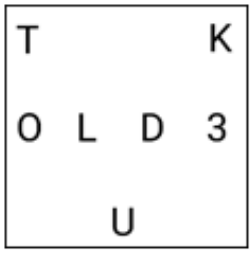
(a)



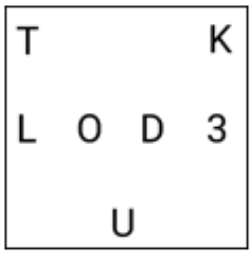
(b)



(c)



(d)



Answer: (d)

18. In a certain code language, 'ENVY' is coded as 'FMWX' and 'ALAS' is coded as 'BKBR'. What is the code for 'BODY' in the given code language?

(a)
DNEY
(b)
DNEX
(c)
CPEY
(d)
CNEX

Answer: (d)

19. Six people, P, Q, R, S, T and U are sitting in a straight line, facing north. U sits fourth to the right of R. R is not sitting at the extreme end of the line. T is the immediate neighbour of U and S. Q sits third to the left of S.
Who is sitting immediately to the right of R?

(a)
S
(b)
T
(c)
Q
(d)
P

Answer: (d)

20.
Select the combination of letters that when sequentially placed in the blanks of the given series, will complete the series.

P _ _ PO _ P _ P _ OP

(a)
POPPO
(b)
POOOP
(c)
OOOPP
(d)
OPPOP

Answer: (d)

General Awareness

1. FIFA U-17 Women's World Cup 2022 matches were NOT held in which state?

(a) Maharashtra
(b) Odisha
(c) Goa
(d) Gujarat

Answer: (d)

2. Who among the following is one of the co-authors of the book, 'Cracking The Code:My Journey in Bollywood'?

(a) Harshvardhan Kapoor
(b) Nawazuddin Siddique
(c) Ayushmann Khurrana
(d) Rajkumar Rao

Answer: (c)

3. In 1873, who published the first photograph of nerve tissue stained with the black reaction technique, describing a whole nerve cell?

(a) Gunter Blobel
(b) Camillo Golgi
(c) William Harvey
(d) Paul Ehrlich

Answer: (b)

4. In October 2022, Virat Kohli became the first Indi to complete how many runs in T20 cricket history?

(a) 11000
(b) 9000
(c) 5000
(d) 15000

Answer: (a)

5. According to Sikh literature, the birth anniversary of Guru Nanak Dev is celebrated on the full moon day of the Indian lunar month _____.

(a) Magh
(b) Paush
(c) Ashada
(d) Kartik

Answer: (d)

6. Yakshagana is a folk dance that belongs to the state of _____.

(a) Kerala
(b) Karnataka
(c) Haryana
(d) Rajasthan

Answer: (b)

7. The brick temple of Bhitargaon is situated in which state?

(a) Odisha
(b) Jharkhand
(c) Uttar Pradesh
(d) Madhya Pradesh

Answer: (c)

8. Which of the following movements was founded in Bengal?

(a) Ramakrishna Mission
(b) Arya Samaj
(c) Satyashodhak Samaj
(d) Prarthana Samaj

Answer: (a)

9. On 15 August 1947, the first prime minister of India, Jawaharlal Nehru, raised the Indian National Flag above the _____of Red Fort in Delhi.

(a) Delhi Gate
(b) Kashmiri Gate
(c) Ajmeri Gate
(d) Lahori Gate

Answer: (d)

10. 'Mandarin' is the official language of which neigh uring country of India?

(a) Afghanistan
(b) Bhutan
(c) Sri Lanka
(d) China

Answer: (d)

11. Which of the following is used to measure the total output of goods and services in an economy including depreciation during a specific period within country?

(a) Net Domestic Product (NDP)
(b) Gross National Product (GNP)
(c) Net National Product (NNP)
(d) Gross Domestic Product (GDP)

Answer: (d)

12. Which of the following is NOT related to the sport of swimming?

(a) Breaststroke
(b) Back stroke
(c) Freestyle
(d) Penalty Corner

Answer: (d)

13. The East-West corridor, which is a part of the Golden Quadrilateral super highways, links which two cities of India from the following?

(a) Ahmadnagar and Imphal
(b) Silchar and Porbander
(c) Jaipur and Gangtok
(d) Gandhi Nagar and Silchar

Answer: (b)

14. What is the name of the seventh most abundant metal in the earth's crust, which is derived from the medieval Latin word 'Kalium'?

(a) Aluminium
(b) Magnesium
(c) Calcium
(d) Potassium

Answer: (d)

15. What is the aim of Article 44 of the Indian Constitution?

(a) To protect every monument or place of artistic or historic interest
(b) To separate judiciary from the executive in the public services of the State
(c) To protect and improve the environment and safeguard the forests and wildlife of the country
(d) To secure for the citizen, a uniform civil code through the territory of India

Answer: (d)

16. Which of the following novels of Kamleshwar was awarded the Sahitya Akademi Award in 2003?

(a) Jalti Hui Nadi
(b) Kaali Aandhi
(c) Kitne Pakistan
(d) Ek Sadak Sattavan Galiyan

Answer: (c)

17. Which of the following institutes was founded by MG Ranade and GV Joshi?

(a) Abhinav Bharat
(b) The Indian National Congress
(c) The Bombay Presidency Association
(d) Poona Sarvajanik Sabha

Answer: (d)

18. Roshan Kumari, Shovana Narayan, Maya Rao and Kumudini Lakhia are eminent _____ artists.

(a) Odissi
(b) Kuchipudi
(c) Kathak
(d) Manipuri

Answer: (c)

19.

Rani Machaiah is a _____ folk dancer who was awarded Padma Shri in 2023.

(a)

Ummathat

(b)

Lambadi

(c)

Gussadi

(d)

Dhimsa

Answer: (a)

20. What is the difference between a debit card and a credit card?

(a) Debit cards are used for online transactions, while credit cards are used for in-person purchases.

(b) Credit cards require a PIN, while debit cards require a signature.

(c) Debit cards withdraw money directly from a bank account, while credit cards allow borrowing up to a certain limit.

(d) Debit cards have higher interest rates than credit cards.

Answer: (c)

21. The Constitution (Scheduled Tribes) Order (Secc Amendment) Bill, 2022 has included Narikoravan and Kurivikkaran communities in the li f Scheduled Tribes of which state?

(a) Bihar

(b) Tamil Nadu

(c) Chhattisgarh

(d) Odisha

Answer: (b)

22.

Which group of musicians were awarded by 'Bharat Ratna' from the following? (As of May 2023.)

(a)

Anu Malik and Udit Narayan

(b)

Pandit Ravi Shankar and Pandit Bhimsen Joshi

(c)

Asha Bhosle and Kishore Kumar

(d)

AR Rahman and Hariprasad Chaurasia

Answer: (b)

23. Which river is also known as Tsangpo?
    (a) Ganga river
    (b) Gandak river
    (c) Kaveri river
    (d) Brahmaputra river
    Answer: (d)

24. What is the destination of the water drained off by the Nile river?
    (a) Lake Victoria
    (b) Indian Ocean
    (c) Mediterranean Sea
    (d) Lake Tanganyika
    Answer: (c)

25. Article 149 of the Constitution deals with _____.
    (a) the qualifications required for the appointment of the Comptroller and Auditor-General of India
    (b) the duties and powers of the Comptroller and Auditor-General of India
    (c) the term of office of the Comptroller and Auditor-General of India
    (d) the appointment of the Comptroller and Auditor-General of India
    Answer: (b)

English Language and Comprehension

1. Select the most appropriate ANTONYM of the given word. Feud
    (a) Gross
    (b) Peril
    (c) Harmony
    (d) Vigour
    Answer: (c)

2. Parts of the following sentence have been given as options. Select the option that contains an error.

All these things happen/ because she do not / pay heed to my words.
    (a) pay heed to my words
    (b) All these things happen
    (c) No error
    (d) because she do not
    Answer: (d)

3. Select the most appropriate option that can substitute the underlined segment in the given sentence. Professor said that I will be late for the lecture.

(a) he shall be late for the lecture
(b) he is late for the lecture
(c) he would be late for the lecture
(d) he may be late for the lecture

Answer: (c)

4. Select the INCORRECTLY spelt word.

(a) Separate
(b) Accommodate
(c) Definitely
(d) Embarass

Answer: (d)

5. Select the most appropriate meaning of the given idiom. Sell like hot cakes

(a) Quick sell out
(b) Selling cakes
(c) Being ignored
(d) Eating hot cake

Answer: (a)

6. Select the most appropriate option that can substi e the underlined segment in the given sentence.

Andrew will playing basketball at the college ment.

(a) are play the
(b) are play
(c) is playing
(d) is played

Answer: (c)

7. Select the most appropriate word to fill in the blank. Hardik Pandya hit four _____ fours and scored 72 runs in the match.

(a) continuous
(b) consecutive
(c) ongoing
(d) constant

Answer: (b)

8. Select the sentence that has NO spelling errors.

(a) The doctor presribed some medicine to alleviate my parsistent cough, which has been boathering me for days.

(b) The doctor precribed some medicine to aleviate my persistent cough, which has been bothering me for days.

(c) The doctor prescribed some medicine to aleviate my parsistent cough, which has been boathering me for days.

(d) The doctor prescribed some medicine to alleviate my persistent cough, which has been bothering me for days.

Answer: (d)

9. Select the most appropriate synonym of the bracketed word in the following sentence to fill in the blank. The athlete's perseverance and mental toughness _____(facilitate) her to overcome adversity and achieve her goals.

(a) restricted

(b) enabled

(c) limited

(d) hindered

Answer: (b)

10. The following sentence has been split into four segments. Identify the segment that contains a grammatical error. Throughout my career as a journalist / I covered many important stories and / interviewed numerous individuals, which allow me / to share important information and insights with my readers.

(a) to share important information and insights with my readers

(b) I covered many important stories and

(c) Throughout my career as a journalist,

(d) interviewed numerous individuals, which allow me

Answer: (d)

11. The following sentence has been split into four segments. Identify the segment that contains a grammatical error. Harish says / that his sister / loves to play / harmonium.

(a) harmonium

(b) loves to play

(c) Harish says

(d) that his sister

Answer: (a)

12. Select the most appropriate option that can substitute the underlined segment in the following sentence. Selling, purchasing, and using an illegally copied product is a criminal offence.

(a) an obsolete

(b) a pirated

(c) an outlawed

(d) a crooked

Answer: (b)

13. Select the most appropriate option to fill in the blank. The hiring manager has already offered you the job; now, _____ to accept or decline the offer.

(a) a penny for your thoughts

(b) the ball is in your court

(c) pull your leg

(d) get your act together

Answer: (b)

14. Select the most appropriate option to fill in the blank. Oberon doesn't like the way Demetrius _____ to Helena. (Credit: A Midsummer Night's Dream)

(a) talked

(b) talks

(c) talking

(d) to talk

Answer: (b)

15. Select the most appropriate meaning of the given idiom. Let sleeping dogs lie

(a) To let somebody sleep

(b) To fall sick intentionally

(c) Leave an existing situation as it is

(d) To care for the pet

Answer: (c)

16. Select the option that can be used as a one-word substitute for the given group of words. A cage made for birds. OR A place for keeping the birds in a confined space.

(a) Aquarium

(b) Apiary

(c) Aviary

(d) Arena

Answer: (c)

17. Select the most appropriate synonym of the given word. Repulsive

(a) Attractive

(b) Reliable

(c) Disgusting

(d) Uniform

Answer: (c)

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

The sergent brought in a lot of changes as soon as he was given charge.

(a) seargeant
(b) sergeannt
(c) sergant
(d) sergeant

Answer: (d)

19. The given sentence contains an error. Select the option that correctly rectifies the error. The boy told his mother that he saw the most tall giraffe at the zoo.

(a) The boy told his mother that he saw the tallest giraffe at the zoo.
(b) The boy told his mother that he saw the most taller giraffe at the zoo.
(c) The boy told his mother that he saw the most tallest giraffe at the zoo.
(d) The boy told his mother that he saw the more taller giraffe at the zoo.

Answer: (a)

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

Call the shots

(a) To be a follower that makes less important decision
(b) To be in a position to make decisions that influ es a situation
(c) To be in a powerless position that follows ord
(d) To be in a neutral position

Answer: (b)

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 blank. That evening we sat in the courtyard of the hotel once more, (1) _____ the sun sink below the western isles. I told Alexi what had happened that day. I (2) _____ I could glimpse the grey stone wall of Lismore House (3) _____ its island hilltop, the red light of the setting sun glinting from the windows, and from there the wasted frame of Jonathan Blake gazing out across the sea, on nothing, his boy waiting for him to die. But it was my (4) _____, simply the image on my mind, like the image burned on to your eyes when you have (5) _____ too long at the sun, the passing footprint of a creature long gone.

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

(a) watching
(b) wallowing
(c) risking
(d) practising

Answer: (a)

22. Select the most appropriate option to fill in blank no. 2.
    (a) fancied
    (b) groped
    (c) imbibed
    (d) translated
    Answer: (a)

23. Select the most appropriate option to fill in blank no. 3.
    (a) off
    (b) on
    (c) aside
    (d) for
    Answer: (b)

24. Select the most appropriate option to fill in blank no. 4.
    (a) dribble
    (b) straw
    (c) fantasy
    (d) habitat
    Answer: (c)

25. Select the most appropriate option to fill in blank no. 5.
    (a) resumed
    (b) rusted
    (c) blocked
    (d) stared
    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)**	3	**(a)**	4	**(b)**	6	**(d)**	7	**(d)**	8	**(b)**	9	**(b)**	10	**(c)**
11	**(c)**	12	**(d)**	14	**(c)**	15	**(a)**	16	**(b)**	17	**(c)**	18	**(a)**	19	**(b)**
20	**(d)**														

Reasoning Ability and Problem Solving

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

General Awareness

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

English Language and Comprehension

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