PREVIOUS YEAR PAPER

SSC CGL 2023 Tier I — 25 July 2023, Shift 2

SSC CGL · 25 July 2023 · 11:45 AM - 12:45 PM

79 of the paper's 100 questions · +2 for a correct answer, −0.5 for a wrong one · 60 minutes

Left out of the original paper: 21 (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 25 July 2023, 11:45 AM - 12:45 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-cgl/previous-year-papers/ssc-cgl-2023-tier-1-25-jul-shift-2/

General Intelligence and Reasoning

1. Select the option that is related to the fourth term in the same way as the first term is related to the second term and the fifth term is related to the sixth term. 169 : 14 :: ? : 16 :: 289 : 18

(a) 205

(b) 230

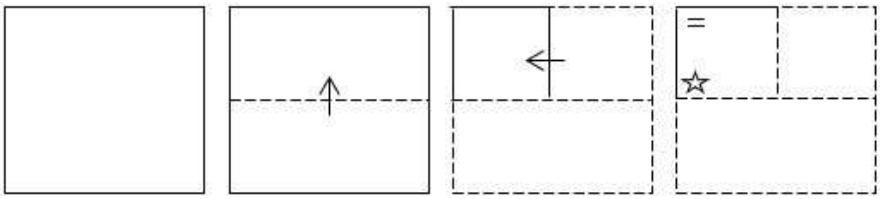
(c) 225

(d) 125

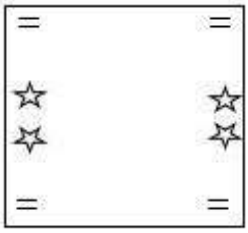
Answer: (c)

2.

A paper is folded and cut as shown below. How will it appear when unfolded?



(a)



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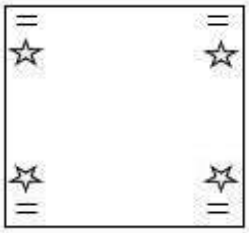

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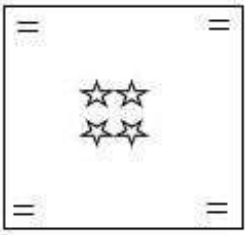

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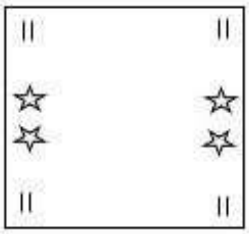
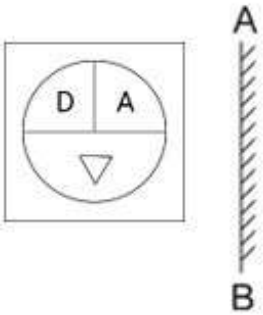
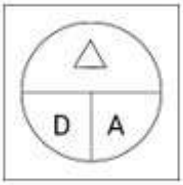


Answer: (a)

3. Select the correct mirror image of the given figure when the mirror is placed at AB.



(a)



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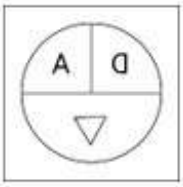

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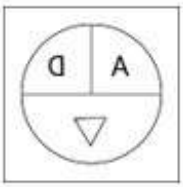

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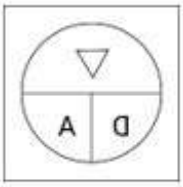


Answer: (b)

5. Select the option that is related to the fifth letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster and the fourth letter-cluster is related to the third letter-cluster. MAP: NZK ::HOZ:SLA :: WQK:?

(a) DJP

(b) DIP

(c) CIP

(d) CJP

Answer: (a)

7. Study the given pattern carefully and select the number that can replace the question mark (?) in it. (6, 1, 18) (5, 4, 60) (6, 2, ?) (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) 36

(b) 32

(c) 40

(d) 24

Answer: (a)

8. Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation. 18 * 3 * 12 * 9 * 3 * 111

(a) ÷, +, ×, −, =

(b) ×, +, ÷, −, =

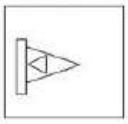
(c) ×, −, ×, +, =

(d) ×, +, ×, −, =

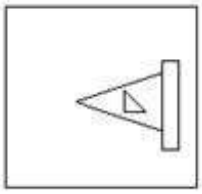
Answer: (a)

9.

Select the correct mirror image of the given figure when the mirror is placed at the right side of the figure.



(a)



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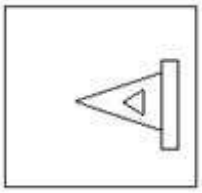
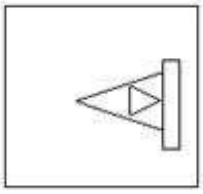
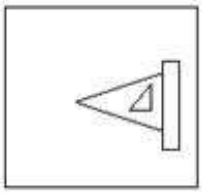


(c)



(d)



Answer: (c)

10. The second number in the given number-pairs is obtained by performing certain mathematical operation(s) on the first number. The same operation(s) is/are followed in all the number-pairs except one. Find that odd number-pair.

(a) 2 : 9

(b) 6 : 21

(c) 10 : 33

(d) 8 : 29

Answer: (d)

11. Three statements are given followed by three conclusions numbered I, II and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements. Statements: Some teachers are scientists. All scientists are doctors. All doctors are engineers. Conclusions:
I. Some doctors are teachers.
II. Some engineers are teachers.
III. Some doctors are scientists.

(a) Only conclusions II and III follow

(b) Only conclusions I and III follow

(c) All conclusions follow

(d) Only conclusions I and II follow

Answer: (c)

12. Which of the following letter-clusters will replace the question mark (?) in the given series to make it logically complete? ADZ, GJF, MPL, SVR, ?

(a) XYB

(b) YBX

(c) XBY

(d) YXB

Answer: (b)

13. In a certain code language, if 'RPD' is written as '43', and 'FCL' is written as '60', how will 'QTS' be written in the same code language?

(a) 35

(b) 28

(c) 25

(d) 40

Answer: (c)

14. Looking at the family picture, Smriti said, "She is my father's father-in-law's wife's son's only sister.' How is the person in the photo related to Smriti's father?

(a) Mother

(b) Sister-in-law

(c) Wife

(d) Daughter

Answer: (c)

15. Three statements are given followed by three conclusions numbered I, II and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements. Statements: Some colours are rainbows. Some paints are rainbows. All rainbows are drawings. Conclusions:
I. Some drawings are colours.
II. All paints are drawings.
III. Some drawings are rainbows.

(a) Only conclusions I and II follow

(b) Only conclusions I and III follow

(c) Only conclusions II and III follow

(d) All conclusions follow

Answer: (b)

16. 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/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) (2, 7, 27) (6, 15, 63)

(a) (3, 21, 24)

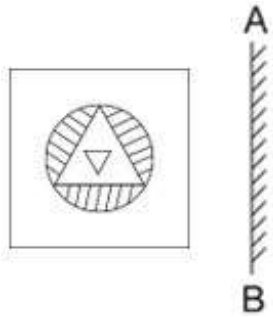
(b) (9, 8, 50)

(c) (12, 4, 40)

(d) (8, 8, 48)

Answer: (d)

17. Select the correct mirror image of the given figure when the mirror is placed at AB.

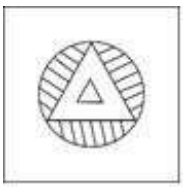


(a)

(b)

(c)

(d)



Answer: (c)

18. Select the option that represents the letters that, when placed from left to right in the blanks below, will complete the letter series. C _ R C _ R _ A R _ A _ C A _

(a) R A C A C A

(b) R A C A A C

(c) A C R A C R

(d) A A C C R R

Answer: (d)

19. Which of the following numbers will replace the question mark (?) in the given series? 3, 8, 15, 26, 39, ?

(a) 61

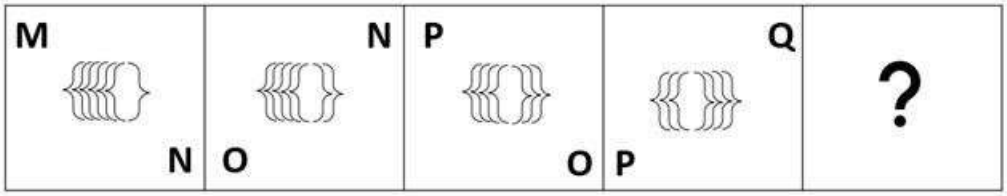
(b) 49

(c) 52

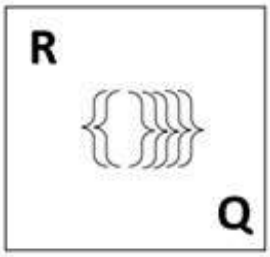
(d) 56

Answer: (d)

20. Select the figure that will come in place of the question mark (?) in the following figure series.



(a)



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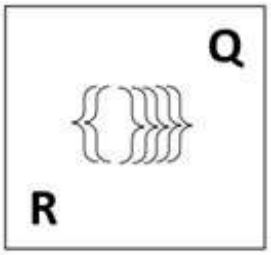
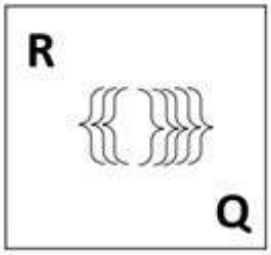
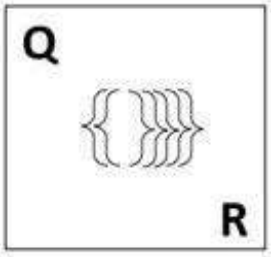


(c)



(d)



Answer: (d)

21. Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number. 98 : 7 :: 162 : 9 :: 242 : ?

(a) 11

(b) 12

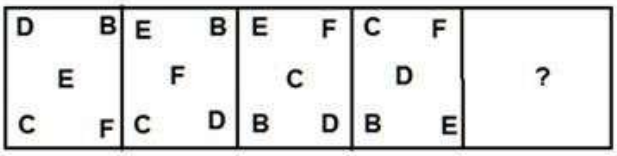
(c) 14

(d) 13

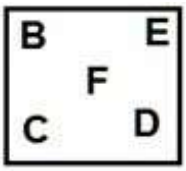
Answer: (a)

22.

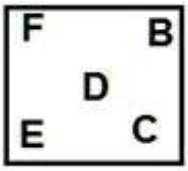
Select the figure that will replace the question mark (?) in the following figure series.



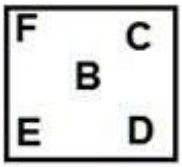
(a)



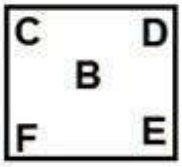
(b)



(c)



(d)



Answer: (d)

23. Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series. _ _ MSDRTM _ _ R _ _ SD _ TM _ D

(a) RSTDTMRS

(b) RTSDMTRS

(c) RTSDMTSR

(d) RTSDTMRS

Answer: (d)

24. In a certain code language, 'DISCIPLINE' is written as 'DKSCKPLKNG', 'REVOLUTION' is written as 'RGVQLWTKQN'. How will 'UNIVERSITY' be written in that language?

(a) WNKGVRSKTY

(b) WNKVGSRKTY

(c) WNKVGRSKTY

(d) WNKVGRKSTY

Answer: (c)

25. If '<' means '−', '!' means '×', '>' means '+' and '$' means '÷', then what is the value of the following expression? 183 > 39 $ 13 ! 6 < 26

(a) 175

(b) 160

(c) 193

(d) 181

Answer: (a)

General Awareness

3. What is the atomicity of Chlorine?

(a) Tetra-atomic

(b) Diatomic

(c) Poly-atomic

(d) Monoatomic

Answer: (b)

4. How many elected members are there in the Legislative Assembly of Telangana till December 2022?

(a) 124

(b) 120

(c) 121

(d) 119

Answer: (d)

12. Where and when were the first Khelo India University Games held?
    (a) Maharashtra, 2019
    (b) Odisha, 2020
    (c) Punjab, 2019
    (d) Kerala, 2020

    Answer: (b)

15. Who introduced the Zamindari Settlement as a measure of land revenue administration?
    (a) Lord Lytton
    (b) Lord Curzon
    (c) Lord Cornwallis
    (d) Lord Wellesley

    Answer: (c)

18. The Indian Constitution originally consisted of _____ Articles.
    (a) 395
    (b) 385
    (c) 365
    (d) 375

    Answer: (a)

19. Which cells, also called neurilemma cells, are the [illegible]n glial cells in the PNS and play an essential role in the survival and functions of neuron[illegible]
    (a) Bipolar cells
    (b) Ganglion cells
    (c) Schwann cells
    (d) Photoreceptor cells

    Answer: (c)

21. On 21 November 2022, who assumed charge as the new Election Commissioner (EC) of India?
    (a) Manoj Kumar
    (b) Rajiv Kumar
    (c) Arun Goel
    (d) Anup Chandra Pandey

    Answer: (c)

22. Which of the following is NOT one of the characteristics of the new agricultural strategy?
    (a) Use of chemical fertilisers
    (b) Use of hybrid seeds
    (c) Extensive irrigation
    (d) Use of organic manures

    Answer: (d)

24. In _____, Lord Curzon, the Viceroy of India, announced the partition of Bengal.
    (a) 1907
    (b) 1906
    (c) 1911
    (d) 1905
    Answer: (d)

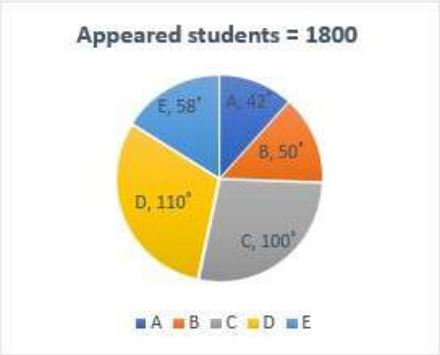
25. Who among the following is appointed as new Attorney General for India in September 2022?
    (a) R Venkataramani
    (b) KK Venugopal
    (c) Fali Sam Nariman
    (d) Harish Salve
    Answer: (a)

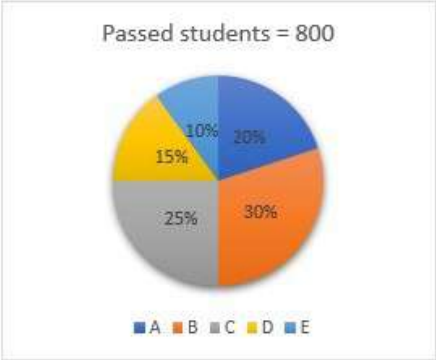
Quantitative Aptitude

1. Find the value of tan (−1125°).
    (a)
    1
    (b)
    $\frac{1}{2}$
    (c)
    -1
    (d)
    0
    Answer: (c)

2.

The following pie charts show the data of the number of appeared and passed students of class 12 in sections A,B,C,D and E.





Find the difference between the number of students who appeared for the exam in sections A and B.

(a) 60

(b) 30

(c) 50

(d) 40

Answer: (d)

4. The angles of a triangle are in the ratio 2 : 3 : 7. What is the measure of the largest angle of the triangle?

(a) 100°

(b) 45°

(c) 90°

(d) 105°

Answer: (d)

5.

P and Q together complete a job in $4\frac{2}{5}$ days. R and S complete the same job in $4\frac{8}{9}$ days. If P, Q, R and S work together, how many days do they need to complete the same job?

(a)

$2\frac{7}{18}$

(b)

$1\frac{7}{18}$

(c)

$1\frac{6}{19}$

(d)

$2\frac{6}{19}$

Answer: (d)

6. A can finish a work in 60 days. He works at it for 1 ays and then B alone finishes the remaining work in 48 days. In how much time can A and B wo g together finish the work?

(a)

$\frac{960}{31}$ days

(b)

$\frac{171}{37}$ days

(c)

51 days

(d)

45 days

Answer: (a)

7. The value of which of the following is different from the other options?

(a) sin 90°

(b) sec 60°

(c) cos 0°

(d) tan 45°

Answer: (b)

8.

A can complete $\frac{1}{3}$ of a work in 7 days and B can complete $\frac{2}{7}$ of the same work in 10 days. In how many days can both A and B together complete the work?

(a) $12\frac{3}{8}$

(b) $11\frac{7}{8}$

(c) $13\frac{1}{8}$

(d) $15\frac{1}{7}$

Answer: (c)

9. Ramesh, on his way to his hometown, travelled the first 250 km at a speed of 75km/h and the next 250 km at a speed of 85 km/h. Find the average speed for the whole journey(correct to 2 decimal places).

(a) 80.55km/h

(b) 79.69km/h

(c) 79.20km/h

(d) 80.69km/h

Answer: (b)

10.

A can do $\frac{1}{8}$ of a piece of work in 32 days, B can do $37\frac{1}{2}$% of the same work in 24 days, while C can do 60% of the same work in 48 days. B and C together started and worked for x days. After x days, B left the work and A joined C and both completed the remaining work in (x + 8) days. If the ratio of the work done by (B + C) together to the work done by (A + C) together is 9 : 11, then what fraction of the same work can be completed by C alone in 3.5x days?

(a) $\frac{18}{25}$

(b) $\frac{4}{5}$

(c) $\frac{7}{10}$

(d) $\frac{3}{4}$

Answer: (c)

11. Which of the following numbers is divisible by 8?

(a) 18718

(b) 18716

(c) 18712

(d) 18714

Answer: (c)

12. The three sides of two triangles are 4, 5 and 6 cm. Select the INCORRECT statement.

(a) The angle opposite to the greater side in those triangles will be greater.

(b) The area of the two triangles will be different.

(c) The two triangles are congruent.

(d) The two triangles are scalene triangles.

Answer: (b)

13. If RP and RQ are two tangents to a circle with centre O such that ∠POQ = 120°, where P and Q are the points on the circle and R is a point outside the circle then ∠PRQ is equal to:

(a) 90°

(b) 75°

(c) 60°

(d) 45°

Answer: (c)

14. The length, breadth and height of a hall are 10 m, 20 m and 15m respectively. Find the cost of whitewashing the walls of the inside of the hall and ceiling at the rate of ₹10.20/m^2

(a)

₹13,394

(b)

₹11,220

(c)

₹15,320

(d)

₹16,542

Answer: (b)

16. The marked price of an article is ₹50,000. Of three shopkeepers, the first one allows two successive discounts of 25% and 15%.The second one allows two successive discounts 20% and 20%. The third shopkeeper allows two successive discounts of 30% and 10%. From which shopkeeper does the customer get more profit?

(a) First

(b) Same for all the shopkeepers

(c) Third

(d) Second

Answer: (c)

17. Mona purchased two sets of jewellery f[illegible] each. She sold these sets of jewellery, gaining 8% on one and loosing 6% on the other. Calc[illegible]er total loss or gain in this whole transaction.

(a) ₹120 gain

(b) ₹80 gain

(c) ₹80 loss

(d) ₹120 loss

Answer: (b)

18. A boat covers a distance of 12 km in 1 hour upstream and in 45 minutes downstream. Find the speed of the boat and the stream (in km/h).

(a) 16; 4

(b) 16; 2

(c) 14; 2

(d) 12; 4

Answer: (c)

19. Which of the following numbers is divisible by 99?

(a) 31548

(b) 60687

(c) 44775

(d) 84456

Answer: (b)

20.

Simplify $\frac{256x^4 - 16y^4}{(80x^2 - 20y^2)(16x^2 + 4y^2)}$.

(a)

5

(b)

$\frac{1}{20}$

(c)

$\frac{1}{5}$

(d)

$\frac{2}{5}$

Answer: (c)

21.

The given table represents the monthly income of 100 families of a locality.

Monthly income range (in ₹)	Number of families
Income more than ₹10,000	100
Income more than ₹13,000	85
Income more than ₹16,000	69
Income more than ₹19,000	50
Income more than ₹22,000	33
Income more than ₹25,000	15

The number of families having income range (in ₹) 19000 – 22000 is:

(a) 17

(b) 19

(c) 22

(d) 24

Answer: (a)

22. A family income is ₹35,000 in a month. [illegible] far [illegible] spends the income on various expenditures, viz., food, health, education, entertainment, a[illegible]. After incurring all the expenditures, 8% is saved every month. The expenditure on health is 50% more than that of food. While food is three times of the expenditure on entertainment, the expenditure on health is half of the expenditure on education. The expenditure on rent is one-third of the combined expenditure on food, health and education. How much expenditure (in ₹) is incurred on education?

(a) 12600

(b) 8400

(c) 13200

(d) 7700

Answer: (a)

23. Which of the following is the lowest ratio?

(a)
$8 : 19$

(b)
$15 : 38$

(c)
$17 : 38$

(d)
$13 : 19$

Answer: (b)

24.

If $7a - \frac{7}{a} + 4 = 0$, then find $a^3 - \frac{1}{a^3} - 1$.

(a)
$\frac{-995}{343}$

(b)
$\frac{-875}{248}$

(c)
$\frac{-694}{315}$

(d)
$\frac{-765}{262}$

Answer: (a)

25. ₹8,500 becomes ₹11,050 in 6 years at a certain rate of simple interest. If the rate becomes 1.8 times of itself, the amount of the same principal in 5 years will be:

(a) ₹15,625

(b) ₹14,350

(c) ₹13,550

(d) ₹12,325

Answer: (d)

English Comprehension

1. Select the most appropriate synonym of the given word. Gentle

(a) Fierce

(b) Ferocious

(c) Cruel

(d) Sympathetic

Answer: (d)

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

My friend Meera and her mother <u>is visiting</u> me this weekend.

(a) have visiting

(b) am visiting

(c) was visiting

(d) are visiting

Answer: (d)

3. Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.
A. Several times I have visited the narrow, dirty streets where the poor live, and I grow hot and indignant to think that good people should be content to live in fine houses and become strong and beautiful, while others are condemned to live in hideous, sunless tenements and grow ugly, withered and cringing.
B. Dear little creatures, they crouch in my heart and haunt me with a constant sense of pain.
C. The children who crowd these grimy alleys, half-clad and underfed, shrink away from your outstretched hand as if from a blow.
D. In the country one sees only nature's fair work and one's soul is not saddened by the cruel struggle for mere existence that goes on in the crowded city.

(a) BACD

(b) ADBC

(c) CABD

(d) DACB

Answer: (d)

4. Identify from the given options the word OPPOSITE in meaning to the underlined word according to its meaning in the following sentence. The confectioner <u>dusted</u> a fine layer of sugar on the muffin.

(a) scattered

(b) sprinkled

(c) powdered

(d) cleaned

Answer: (d)

5. 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. Anti-party activities / improved my relations /with an opposition.

(a) Anti-party activities

(b) No error

(c) Improved my relations

(d) With an opposition

Answer: (d)

6. Select the most appropriate ANTONYM of the given word. Compulsory

(a) Obligatory

(b) Mandatory

(c) Voluntary

(d) Subsidiary

Answer: (c)

7. Select the most appropriate meaning of the given idiom. At cross purposes

(a) Developing and amplifying ideas given

(b) Finalising ideas and plans

(c) Blindly following each other's ideas

(d) Disagreeing with each other's ideas

Answer: (d)

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

The Department of Educational Policy is committed to the study of educational policy, analyse, and evaluate educational programmes, to identify trends, understand outcomes and guide policy and practice, towards finding solutions to current problems in educational governance and management.

(a) affiliated

(b) dedicated

(c) inclined

(d) apathetic

Answer: (b)

9. Select the option that can be used as a one-word substitute for the given group of words. Never changing and therefore boring.

(a) Outdated

(b) Impractical

(c) Idealistic

(d) Monotonous

Answer: (d)

10. Select the option that expresses the given sentence in active voice. The painting was not made by you.

(a) You should not make the painting.

(b) You does not make the painting.

(c) You did not make the painting.

(d) You do not make the painting.

Answer: (c)

11. 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. All the horses, except one, always / behaved in a rough manner when / Robert come to clean the stable.

(a) behaved in a rough manner when

(b) Robert come to clean the stable

(c) No error

(d) All the horses, except one, always

Answer: (b)

12. Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select 'No substitution'.

I've got <u>a lot of homeworks</u> this weekend.

(a) a lot of homework

(b) No substitution

(c) a lots of homework

(d) much homework

Answer: (a)

13. Select the option that expresses the given sentence in active voice. He was praised by his father.

(a) His father has praised him.

(b) His father praises him.

(c) His father had praised him.

(d) His father praised him.

Answer: (d)

14. Select the most appropriate ANTONYM of the underlined word.

He was riding his bike on a <u>bumpy</u> surface.

(a) Jerky

(b) Uneven

(c) Choppy

(d) Steady

Answer: (d)

16. Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.
A. Many species of bamboo flower once in several years and then die.
B. The stem itself is hollow and is connected to a network of rhizomes, which spreads out beneath the surface of the soil.
C. Roots grow out of this network of rhizomes and help the plants to absorb and distribute food and water from the soil.
D. The bamboo is a variety of grass, with a woody, many-jointed stem.

(a) ADCB
(b) DBCA
(c) BCAD
(d) CADC

Answer: (b)

18. Sentences with spelling errors are given. Select the sentence with NO error.

(a) Making healtcare more affordable is something I would do as Prescident.
(b) Making healtcare more afordable is something I would do as President.
(c) Making healthcare more affordable is something I would do as President.
(d) Making healthcare more afordable is something I would do as Prescident.

Answer: (c)

19. Select the INCORRECTLY spelt word.

(a) Receipt
(b) Technically
(c) Harrasment
(d) Vaccinate

Answer: (c)

20. Select the most appropriate option to fill in the blank. Yesterday, I ate only a _____ of apples for my dinner.

(a) pier
(b) pear
(c) pare
(d) pair

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. Since the 17th century, manure has been utilised in agriculture. In those days, they didn't know how plants got the (1)_____ they needed. They would toss wood debris, fish remains and other side-effects in an unfilled land to dispose of them. However, it wasn't long before people began to notice that the grass, bushes and shrubs there were beginning to (2) _____. They came to the conclusion that the soil supplied the plants with the nutrients they needed, and that organic remains could aid in this process. Because manure is (3) _____from animals and plants, it not only provides a wide range of plant nutrients but also improves the structure of the soil. Farmers gradually began using fertilisers as well because they understood that if their farmlands were treated in a similar manner, the growth of their crops would also improve. It bonds the soil particles together to form soil crumbs, which are necessary for cultivating soil. Additionally, the addition of manure to the soil aids in the prevention of soil erosion and the loss of plant nutrients during precipitation. Commercial fertilisers, in contrast to manure, are inorganic (4) _____ that do not alter the structure of the soil. Their function is to provide the sprouting plants with additional nutrients. A farmer ought to know when and how to apply a particular kind of fertiliser. When the plants require a particular nutrient the most, use it. If fertilisers haven't been added correctly to the soil, their roots won't be able to take in a lot. Rainwater could wash away these fertilisers, or they could end up (5) _____ the plants instead, costing the farmer money.

21. Select the most appropriate option to fill in blank no.1.
    (a) maintenance
    (b) nutrients
    (c) ingredients
    (d) items
    Answer: (b)

22. Select the most appropriate option to fill in blank no. 2.
    (a) cherish
    (b) raise
    (c) flourish
    (d) tend
    Answer: (c)

23. Select the most appropriate option to fill in blank no. 3.
    (a) extracted
    (b) constructed
    (c) derived
    (d) build
    Answer: (c)

24. Select the most appropriate option to fill in blank no. 4.
    (a) contents
    (b) substances
    (c) essences
    (d) compositions
    Answer: (b)

25. Select the most appropriate option to fill in blank no. 5.
    (a) wounding
    (b) harming
    (c) replicating
    (d) hurting

    Answer: (b)

Answer key

Answer key as marked in the Staff Selection Commission's response sheet. "—" means the sheet did not show it clearly.

General Intelligence and Reasoning

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

General Awareness

3	**(b)**	4	**(d)**	12	**(b)**	15	**(c)**	18	**(a)**	19	**(c)**	21	**(c)**	22	**(d)**
24	**(d)**	25	**(a)**												

Quantitative Aptitude

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

English Comprehension

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