PREVIOUS YEAR PAPER

SSC CGL 2020 Tier I — 16 August 2021, Shift 1

SSC CGL · 16 August 2021 · 9:00 AM - 10:00 AM

82 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: 18 (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 16 August 2021, 9:00 AM - 10:00 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-cgl/previous-year-papers/ssc-cgl-2020-tier-1-16-aug-shift-1/

General Intelligence and Reasoning

2. Four words have been given, out of which three are alike in some manner and one is different. Select the word that is different.

(a) Envy

(b) Hatred

(c) Empathy

(d) Jealousy

Answer: (c)

3. Study the given pattern carefully and select the number that can replace the question mark (?) in it. 14 16 13 18 6 ? 12 21 17

(a) 6

(b) 8

(c) 5

(d) 7

Answer: (c)

5. Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different.

(a) RTPO

(b) LNJI

(c) DFBA

(d) FHDB

Answer: (d)

6. Select the option that is related to the third number in the same way as the second number is related to the first number. 16 : 144 : : 28 : ?

(a) 420

(b) 364

(c) 263

(d) 544

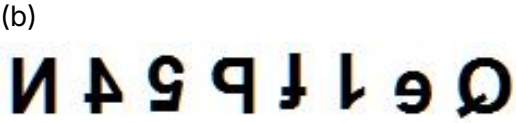
Answer: (a)

7.

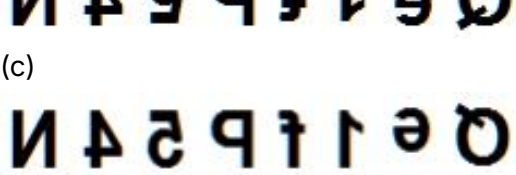
Select the correct mirror image of the given combination when the mirror is placed at MN as shown.

(a)

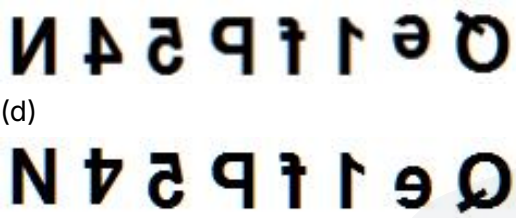
(b)



(c)



(d)



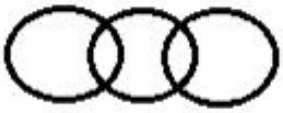
Answer: (a)

8.

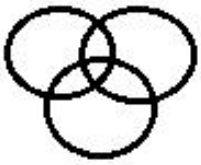
Select the Venn diagram that best illustrates the relationship between the following classes.

Coriander seeds, Spices, Cinnamon

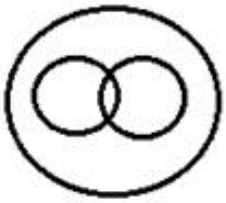
(a)



(b)



(c)



(d)

Answer: (d)

10. In a certain code language, 'FRENCH' is coded as '114' and 'LOSS' is coded as '47'. How will 'COURSE' be coded in that language?

(a) 87

(b) 120

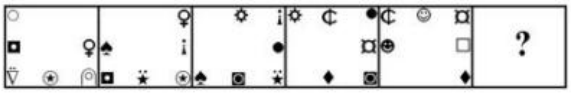
(c) 81

(d) 103

Answer: (a)

13.

Select the figure from among the given options that can replace the question mark (?) in the following series.



(a)

(b)

(c)

(d)

Answer: (a)

15. In a certain code language, 'PRINT' is written as 'YMNIU'. How will 'MAGIC' be written in that language?

(a) HRLRZ

(b) HLDRV

(c) HRLZR

(d) HDLVR

Answer: (c)

16. Which two numbers should be interchanged to make the given equation correct? 36 × 81 ÷ 9 – (88 ÷ 4) + 14 + (22 + 7) = 169

(a) 14 and 22

(b) 9 and 36

(c) 36 and 14

(d) 81 and 36

Answer: (c)

18. What was the day of the week on 17 April 2014?

(a) Friday

(b) Wednesday

(c) Saturday

(d) Thursday

Answer: (d)

19. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series. THME, WKJB, ZNGY, CQDV, ?

(a) FUAS

(b) FTAS

(c) FTAR

(d) FTBS

Answer: (b)

20. 'A # B' means 'A is the son of B'. 'A @ B' means 'A is the mother of B'. 'A & B' means 'A is the wife of B'. 'A % B' means 'A is the sister of B'. If 'M @ R % K # G # N & T', then which of the following statements is NOT correct?

(a) T is the paternal grandfather of M.

(b) N is the paternal grandmother of K.

(c) M is the mother of K.

(d) R is the daughter of G.

Answer: (a)

21. Select the combination of letters that will successively placed in the blanks of the given series will complete the series. U A _ B _ T U _ C B D _ _ _ B _ T U A C _ _ T

(a) C, D, A, T, U, D, C, D

(b) C, D, A, U, U, D, B, D

(c) C, D, A, T, U, D, B, D

(d) D, C, A, T, U, D, D, B

Answer: (c)

22. Select the number from among the given options that can replace the question mark (?) in the following series. 10, 22, 35, 40, 72, 40, ?

(a) 134

(b) 143

(c) 131

(d) 133

Answer: (d)

23. 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 bank is an office. All offices are stalls. Conclusions:
I. No bank is a stall.
II. No stall is a bank.
III. Some stalls are offices.
IV. All the stalls are offices.

(a) Both conclusions I and II follow

(b) Only conclusion I follows

(c) Both conclusions I and IV follow

(d) Only conclusion III follows

Answer: (d)

24. Select the option in which the numbers are related in the same way as are the numbers of the following set. (6, 9, 45)

(a) (7, 4, 48)

(b) (2, 8, 46)

(c) (8, 10, 36)

(d) (6, 8, 60)

Answer: (c)

25. Four number-pairs have been given, out of which three are alike in some manner and one is different. Select the number-pair that is different.

(a) 21 : 139

(b) 25 : 167

(c) 15 : 197

(d) 27 : 181

Answer: (c)

General Awareness

1. Who among the following is credited with postulating three laws of planetary motion?

(a) Galileo Galilei

(b) Isaac Newton

(c) Tycho Brahe

(d) Johannes Kepler

Answer: (d)

2. Who among the following was the first Indian to unfurl the tricolour on foreign land?

(a) Begum Hazrat Mahal

(b) Bhikaiji Cama

(c) Annie Besant

(d) Lakshmi Sehgal

Answer: (b)

3. Which of the following states' former Governor, Mata Prasad, died in January 2021?
   (a) Arunachal Pradesh
   (b) Goa
   (c) Uttar Pradesh
   (d) Uttarakhand
   Answer: (a)

4. _____ is created by the collision of convergent plate boundaries.
   (a) Mid-ocean ridge
   (b) Mountain building
   (c) Land erosion
   (d) Oceanic trench
   Answer: (b)

5. According to the Puranas, Lord Vishnu took the shape of _____ in order to rescue the earth, which had sunk into water.
   (a) a boar
   (b) a lion
   (c) a tiger
   (d) an elephant
   Answer: (a)

6. Which of the following is a water-soluble vitamin?
   (a) Vitamin K
   (b) Vitamin C
   (c) Vitamin A
   (d) Vitamin D
   Answer: (b)

7. Who among the following was the Nizam of Hyderabad in 1947?
   (a) Mir Mahbub Ali Khan
   (b) Akbar Ali Khan
   (c) Osman Ali
   (d) Nasir Jung
   Answer: (c)

8. Which of the following diseases is caused by a parasite?
   (a) Malaria
   (b) Goitre
   (c) Pneumonia
   (d) Plague
   Answer: (a)

9. With which of the following sports is the term ‘Chinaman’ associated?
   (a) Polo
   (b) Table tennis
   (c) Cricket
   (d) Swimming
   Answer: (c)

10. Which of the following Articles of the Constitution of India provides for the creation of a GST Council?
   (a) Article 246A
   (b) Article 279A
   (c) Article 269A
   (d) Article 323A
   Answer: (b)

11. Which of the following is the meaning of ‘Pishtaq’ in the context of medieval Indo-Islamic architecture?
   (a) True arch
   (b) Dome
   (c) Water tank
   (d) Tall gateway
   Answer: (d)

13. Which of the following is NOT a feature of food security?
   (a) Affordability
   (b) Acceptability
   (c) Availability
   (d) Accessibility
   Answer: (b)

14. Who among the following never became the Vice President of India?
   (a) Gulzarilal Nanda
   (b) VV Giri
   (c) Zakir Husain
   (d) BD Jatti
   Answer: (a)

15. Halogens have _____ electrons in their outermost shells.
   (a) five
   (b) six
   (c) eight
   (d) seven
   Answer: (d)

17. Which of the following locations has the highest altitude?
(a) Kolkata
(b) Moradabad
(c) Patna
(d) Ranikhet
Answer: (d)

18. 'Bolak-aat' is a _____ from the state of Karnataka.
(a) painting form
(b) music form
(c) sculpting form
(d) dance form
Answer: (d)

19. Which of the following is a work on statecraft written by Krishnadevaraya?
(a) Amuktamalyada
(b) Tolkappiyam
(c) Karpuramanjari
(d) Kadambari
Answer: (a)

20. When is National Girl Child Day observed annually in India?
(a) 5 June
(b) 12 May
(c) 24 January
(d) 9 September
Answer: (c)

21. Tapovan Vishnugad Hydroelectric Project is located in:
(a) Himachal Pradesh
(b) Ladakh
(c) Uttarakhand
(d) Jammu and Kashmir
Answer: (c)

22. How many trains were flagged off by Prime Minister Narendra Modi in January 2021 connecting the location of the Statue of Unity to different parts of India?
(a) Eight
(b) Six
(c) Seven
(d) Five
Answer: (a)

23. Which part of the body is associated with the rickets disorder?
    (a) Heart
    (b) Skin
    (c) Bones
    (d) Eyes

    Answer: (c)

24. India and _____ were declared joint winners of the 2020 Online FIDE Chess Olympiad.
    (a) Serbia
    (b) The US
    (c) Estonia
    (d) Russia

    Answer: (d)

25. Who among the following was appointed as the Chairman and Managing Director of Telecommunications Consultants India Limited in January 2021?
    (a) Rajeev Kumar
    (b) Sarabjit Singh Sandhu
    (c) Sanjeev Kumar
    (d) Jitendra Singh

    Answer: (c)

Quantitative Aptitude

1.

The income of A is 30% less than the income of B and the income [illegible] 7.5% more than that of C. If the income of A is ₹28500 less than that of B, then the income (in ₹) of C is :

(a)
36000

(b)
48000

(c)
50000

(d)
40000

Answer: (d)

2.

In $\triangle ABC$, $\angle A = 90°$, $AD \perp BC$ at D. If AB = 12 cm and AC = 16 cm, then what is the length (in cm) of BD?

(a)

7.8

(b)

6.4

(c)

7.2

(d)

8.4

Answer: (c)

3.

Ratio of the present age of a mother to that of the daughter is 7 : 1. After 5 years the ratio will become 4 : 1. What is the difference (in years) in their present ages?

(a)

29

(b)

30

(c)

28

(d)

31

Answer: (b)

5.

Table shows the number of trees planted in 4 cities from 2016 to 2020.

Years	Chandigarh	Ahmadabad	Pune	Kolkata
2016	1800	2500	1800	2000
2017	2500	2300	1850	1800
2018	2300	2400	1840	1760
2019	2440	1950	1900	1600
2020	2250	2100	2000	1750

From 2016 to2020, how many more trees were planted in Ahmedabad as compared to trees planted in Pune?

(a)

1860

(b)

1850

(c)

2000

(d)

2340

Answer: (a)

6.

Angle between the internal bisectors of two angles $\angle B$ and $\angle C$ of a ΔABC is 132°, then the value of $\angle A$ is :

(a)
62°
(b)
72°
(c)
84°
(d)
48°

Answer: (c)

9.

$x + y + z = 2$ and $xy + yz + zx = -11$, then the value of $x^3 + y^3 + z^3 - 3xyz$ is :

(a)
78
(b)
71
(c)
74
(d)
69

Answer: (c)

10.

The selling price of an article marked for ₹10000 after giving three discounts, 20%, 10% and k% is ₹6120. What will be selling price (in ₹) of the same article if a single discount of (k + 20)% is allowed?

(a)
8500
(b)
6800
(c)
6500
(d)
8000

Answer: (c)

11.

Table shows income (in ₹) received by 4 employees of a company during the month of December 2020 and all their income sources.

Source	Amit	Suresh	Nitin	Varun
Salary	35000	38500	29000	42000
Arrears	6000	6300	5000	7500
Bonus	1000	1100	1000	1240
Overtime	1800	1950	1400	1500

By what percent are the Arrears of Amit and Suresh taken together less than the Arrears of Nitin and Varun taken together?

(a)
1.4
(b)
1.2
(c)
1.5
(d)
1.6

Answer: (d)

12.

If $a^3 + b^3 = 405$ and $a + b = 9$, then the value of ab is

(a)
10
(b)
15
(c)
8
(d)
12

Answer: (d)

13.

Study the following table and answer the question:

Number of students enrolled for Vocational Courses (VC) in five institutes - A, B, C, D & E.

Year / Institute	2013	2014	2015	2016	2017	2018
A	120	135	130	135	128	140
B	125	132	138	132	135	142
C	125	120	125	138	140	135
D	100	125	122	140	128	138
E	105	110	115	147	130	145

The total number of students enrolled for VC in institute C in 2013, 2014 and 2017 is what percent of the total number of students enrolled in all the five institutes in 2018?

(a)

62

(b)

55

(c)

58

(d)

53

Answer: (b)

14.

If $\left(2x - \frac{3}{x}\right) = 2$, then what is th[illegible]lu[illegible] of $\left(16x^4 + \frac{81}{x^4}\right)$?

(a)

328

(b)

180

(c)

184

(d)

220

Answer: (c)

16.

The average of 22 numbers is 37.5. The average of first 12 numbers is 40.6 and that of the last 12 numbers is 35.4. If 11th and 12th numbers are excluded, then what is the average of the remaining numbers?

(a)

37.8

(b)

36.9

(c)

37.4

(d)

36.4

Answer: (b)

17.

If the 6-digit number $5x423y$ is divisible by 88, then what is the value of $(5x - 8y)$?

(a)

16

(b)

28

(c)

24

(d)

14

Answer: (c)

18.

If $3\cos^2\theta - 4\sin\theta + 1 = 0, 0° < \theta < 90°$, then $\tan\theta + \sec\theta = ?$

(a)

$2\sqrt{5}$

(b)

$2\sqrt{3}$

(c)

$3\sqrt{3}$

(d)

$\sqrt{5}$

Answer: (d)

19.

In a circle with center O, AB is a diameter and CD is a chord such that $\angle ABC = 34°$ and CD = BD. What is the measure of $\angle DBC$?

(a)

$24°$

(b)

$28°$

(c)

$32°$

(d)

$30°$

Answer: (b)

21.

A sum of ₹7500 amounts to ₹9075 at 10% p.a, interest being compounded yearly in a certain time. The simple interest (in ₹) on the same sum for the same time and the same rate is :

(a)

1500

(b)

1520

(c)

1480

(d)

1530

Answer: (a)

24.

What is the area (in cm^2) of a circle inscribed in a square of area 784 cm^2 ? (Take $\pi = \frac{22}{7}$)

(a)

660

(b)

616

(c)

924

(d)

462

Answer: (b)

English Comprehension

1. Select the most appropriate option to fill in the blank. A _____ souvenir will be released on the occasion of the World Meet.

(a) considerable

(b) voluminous

(c) generous

(d) bountiful

Answer: (b)

2. Select the option that can be used as a one-word substitute for the given group of words. A large building with an extensive floor area, typically for housing aircraft

(a) Shed

(b) Airport

(c) Hangar

(d) Barn

Answer: (c)

3. The following sentence has been divided into parts. One of them contains an error. Select the part that contains the error from the given options. The Principal requested / the teacher's / to monitor / and take care of the small children.

(a) the teacher's

(b) to monitor

(c) The Principal requested

(d) and take care of the small children

Answer: (a)

4. Sentences of a paragraph are given below [illegible] led order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.
A. This invention has helped us to heal wounds caused by bacteria.
B. Penicillin is one of the most useful drugs man has invented.
C. In the beginning however, very few people knew of this discovery and its use.
D. Its use has saved the lives of hundreds of thousands of soldiers.

(a) ABCD

(b) DCBA

(c) CABD

(d) BADC

Answer: (d)

5. Select the most appropriate option to fill in the blank. You need not _____ so much fuss about wearing a mask when you go out.

(a) cause

(b) generate

(c) do

(d) make

Answer: (d)

6. Select the INCORRECTLY spelt word.
   (a) Cerebral
   (b) Arbitrary
   (c) Scrutinize
   (d) Withdrawl

   Answer: (d)

7. Select the INCORRECTLY spelt word.
   (a) Moisture
   (b) Vishious
   (c) Mimic
   (d) Anxious

   Answer: (b)

8. Select the most appropriate ANTONYM of the given word. Invade
   (a) Surrender
   (b) Attack
   (c) Seize
   (d) Assault

   Answer: (a)

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

The place is <u>too much noisy.</u>
   (a) No substitution
   (b) much too much noisy
   (c) much noisy
   (d) too noisy

   Answer: (d)

10. Select the most appropriate synonym of the given word. Transmit
   (a) Accept
   (b) Catch
   (c) Convey
   (d) Receive

   Answer: (c)

11. Select the most appropriate ANTONYM of the given word. Toxic
   (a) Healthy
   (b) Lethal
   (c) Harmful
   (d) Venomous

   Answer: (a)

12. Select the option that can be used as a one-word substitute for the given group of words. A person who listens to someone's private conversation without them knowing

(a) Infiltrator
(b) Spy
(c) Eavesdropper
(d) Secret agent

Answer: (c)

13. Select the most appropriate meaning of the given idiom. Full of beans

(a) Full of cowardice
(b) Full of energy
(c) A dish made of French beans
(d) A storeroom full of vegetables

Answer: (b)

14. Select the most appropriate synonym of the given word. Numerous

(a) Several
(b) Totalled
(c) Numbered
(d) Few

Answer: (a)

15. Select the most appropriate meaning of the giver om. To cut a long story short

(a) Like to tell long stories
(b) Tell something briefly
(c) Like to tell short stories
(d) Tell something in a roundabout way

Answer: (b)

17. Select the option that will improve the underlined part of the sentence. In case no improvement is needed, select 'No improvement required'.

I wish I <u>have</u> come an hour sooner.

(a) has
(b) No improvement required
(c) had
(d) will

Answer: (c)

18. Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.
A. Then I took him by the hand and led him across the street.
B. I was going to the market when I saw a blind man trying to cross the street.
C. He expressed his gratitude with folded hands.
D. I walked across to the blind man.

(a) ABCD
(b) BDAC
(c) CBDA
(d) DABC

Answer: (b)

19. Select the option that expresses the given sentence in passive voice. Someone stole his traveller's cheques when he was travelling in Europe.

(a) His traveller's cheques was stole when he was travelling in Europe.
(b) Someone had been stole his traveller's cheques when he was travelling in Europe.
(c) His traveller's cheques were stolen when he was travelling in Europe.
(d) His traveller's cheques are stole when he was travelling in Europe.

Answer: (c)

20. The following sentence has been divided into parts. One of them contains an error. Select the part that contains the error from the given options. It have been only / through writing / that men have been able / to spread their ideas to mankind.

(a) to spread their ideas to mankind
(b) that men have been able
(c) It have been only
(d) through writing

Answer: (c)

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.
>
> It is true that the more you study, the more you (1)_____ your horizon and hence your point of view undergoes a (2)_____. A person with higher education certainly has a better (3)_____ and ideas to help in community and societal (4)_____. Ideas that are gathered from such people provide a global (5)_____ for the nation as a whole.

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

(a) expand
(b) exchange
(c) narrow
(d) convert

Answer: (a)

22. Select the most appropriate option to fill in blank number 2.
    (a) backwardness
    (b) enlargement
    (c) succession
    (d) transformation

    Answer: (d)

23. Select the most appropriate option to fill in blank number 3.
    (a) scope
    (b) luck
    (c) outlook
    (d) routine

    Answer: (c)

24. Select the most appropriate option to fill in blank number 4.
    (a) maturity
    (b) elaboration
    (c) development
    (d) ripening

    Answer: (c)

25. Select the most appropriate option to fill in blank number 5.
    (a) posture
    (b) proportion
    (c) perspective
    (d) prejudice

    Answer: (c)

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

2	**(c)**	3	**(c)**	5	**(d)**	6	**(a)**	7	**(a)**	8	**(d)**	10	**(a)**	13	**(a)**
15	**(c)**	16	**(c)**	18	**(d)**	19	**(b)**	20	**(a)**	21	**(c)**	22	**(d)**	23	**(d)**
24	**(c)**	25	**(c)**												

General Awareness

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

Quantitative Aptitude

1	**(d)**	2	**(c)**	3	**(b)**	5	**(a)**	6	**(c)**	9	**(c)**	10	**(c)**	11	**(d)**
12	**(d)**	13	**(b)**	14	**(c)**	16	**(b)**	17	**(c)**	18	**(d)**	19	**(b)**	21	**(a)**
24	**(b)**														

English Comprehension

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