PREVIOUS YEAR PAPER

SSC CGL 2020 Tier I — 16 August 2021, Shift 3

SSC CGL · 16 August 2021 · 3:00 PM - 4:00 PM

86 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: 14 (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).

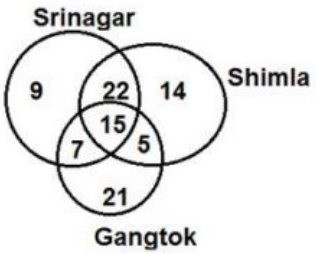
Questions from the Staff Selection Commission's paper of 16 August 2021, 3:00 PM - 4:00 PM. Each question is followed by its answer, and the answer key is repeated on the last page.

Take it as a timed practice test: exambharo.com/ssc-cgl/previous-year-papers/ssc-cgl-2020-tier-1-16-aug-shift-3/

General Intelligence and Reasoning

2.

The following Venn diagram shows the number of families who have visited three different places (Srinagar, Shimla, Gangtok).



What is the number of families who have visited at least two of the places of Srinagar, Shimla and Gangtok?

(a) 27

(b) 49

(c) 15

(d) 34

Answer: (b)

3. 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) NPSV

(b) QTWZ

(c) XADG

(d) BEHK

Answer: (a)

4. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series. b _ c e _ k b _ c _ f k b b _ e f _ b b c _ f k

(a) b, f, b, e, c, e, k

(b) b, e, b, f, c, k, e

(c) b, f, b, e, c, k, e

(d) b, f, b, c, e, k, e

Answer: (c)

5. Select the option in which the numbers are NOT related in the same way as are the numbers of the following set. (7, 21, 49)

(a) (6, 18, 36)

(b) (8, 24, 64)

(c) (5, 15, 25)

(d) (9, 27, 72)

Answer: (d)

6. When number X multiplied to its next number, the product 1260 is obtained. When Number X is added to Number Y, a total of 106 is obtained. Find the value of Number Y. (Assume numbers to be positive)

(a) 77

(b) 61

(c) 87

(d) 71

Answer: (d)

8. Select the correct combination of mathematical signs that can sequentially replace the * signs and balance the equation. 36 * 14 * 63 * 9 * 11 * (6 * 3) * 90

(a) -, +, ÷, ×, -, +, =

(b) -, +, ÷, ×, =, -, +

(c) -, +, ×, ÷, -, +, =

(d) +, -, ÷, ×, =, -, +

Answer: (a)

9. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series. BOARD, BOARW, BOAIW, ?, BLZIW, YLZIW

(a) BOZIW

(b) BOAIW

(c) BLZRW

(d) BOZRW

Answer: (a)

10.

Find the number of triangles in the given figure.

(a)
13
(b)
17
(c)
19
(d)
15

Answer: (d)

11. In a certain code language, 'AND' is written as 'C-L[illegible]' and 'NOR' is coded as 'P-MQ-T'. How will 'BUT' be written in that language?

(a) D-SW-U
(b) C-SU-V
(c) D-SW-V
(d) C-TV-W

Answer: (c)

12. Select the option that is related to the third number in the same way as the second number is related to the first number. 21 : 445 : : 24 : ?

(a) 495
(b) 505
(c) 523
(d) 580

Answer: (d)

13. Select the option that is related to the third word in the same way as the second word is related to the first word. Awful : Nice : : Nomadic : ?

(a) Homeless
(b) Careless
(c) Nocturnal
(d) Settled

Answer: (d)

15. 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 dancers are talented. Some girls are dancers. Conclusions:
I. Some girls are talented.
II. All talented are girls.
III. All girls are talented.

(a) Only conclusion III follows

(b) Both conclusions I and II follow

(c) Only conclusion II follows

(d) Only conclusion I follows

Answer: (d)

16. In a certain code language, 'SAFETY' is coded as '95' and 'EXPAND' is coded as '87'. How will 'GATHER' be coded in that language?

(a) 88

(b) 90

(c) 86

(d) 84

Answer: (c)

17. Select the option in which the numbers are related in the same way as are the numbers of the following set. (16, 12, 32)

(a) (20, 15, 42)

(b) (76, 57, 176)

(c) (56, 24, 68)

(d) (36, 27, 77)

Answer: (d)

18. Select the number from among the given options that can replace the question mark (?) in the following series. 37, 52, 74, 104, 143, ?

(a) 176

(b) 168

(c) 192

(d) 202

Answer: (c)

19. Select the option in which the words share the same relationship as that shared by the given pair of words. Dentist : Hospital

(a) Engineer : Design

(b) Criminal : Police Station

(c) Professor : University

(d) Doctor : Treatment

Answer: (c)

20. 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) Vivacious

(b) Sluggish

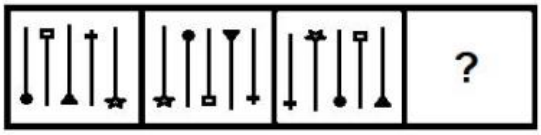
(c) Lethargic

(d) Passive

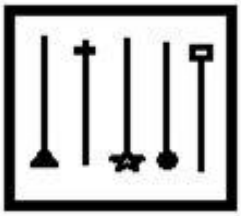
Answer: (a)

21.

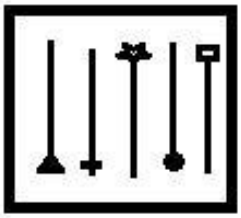
Select the figure from among the given options that can replace the question mark (?) in the following series.



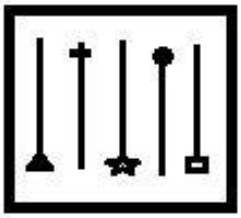
(a)



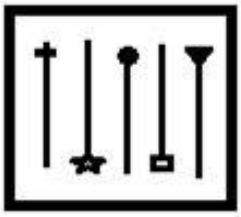
(b)



(c)



(d)



Answer: (c)

23. 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) 5237 : 4003

(b) 4327 : 2003

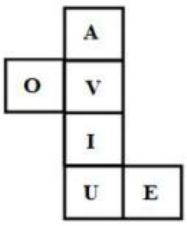
(c) 3527 : 2293

(d) 2347 : 1113

Answer: (b)

24.

A cube is made by folding the given sheet. In the cube so formed, what would be the letter on the face opposite the face showing the letter 'A'?



(a)

(b)

(c)

(d)

Answer: (b)

25. Pointing to the photograph of a girl, Raghav said, "She is my father's mother's daughter's only brother's daughter". How is Raghav's father related to that girl's mother?

(a) Father

(b) Maternal uncle

(c) Son

(d) Husband

Answer: (d)

General Awareness

1. Who among the following won the 'Indian Personality of the Year Award' during the 51st International Film Festival?

(a) Amitabh Bachchan

(b) Asha Bhosle

(c) Biswajit Chatterjee

(d) Shabana Azmi

Answer: (c)

2. In which of the following years did the revolt in the countryside of the Bombay Deccan occur?

(a) 1875

(b) 1790

(c) 1905

(d) 1890

Answer: (a)

3. As of 26th January 2021, who is the Lok Sabha Speaker?

(a) JP Nadda

(b) Rajnath Singh

(c) Om Birla

(d) Nitin Gadkari

Answer: (c)

4. 'Jadopatiya' is a form of _____ popular in the state Jharkhand.

(a) painting

(b) music

(c) sculpture

(d) dance

Answer: (a)

5. Article 21A of the Constitution of India provides Right to _____.

(a) Work

(b) Privacy

(c) Equality

(d) Education

Answer: (d)

6. 'Swasthya Sathi' scheme is the health insurance scheme that covers the entire population of which of the following states?

(a) Meghalaya

(b) Assam

(c) Bihar

(d) West Bengal

Answer: (d)

7. In which of the following states was the International Paragliding Festival organised by the Adventure Sports and Sustainable Tourism Academy (ASSTA) in 2020?

(a) Tripura
(b) Uttarakhand
(c) Assam
(d) Kerala

Answer: (d)

8. What is the abbreviated form of the IPL franchise cricket team from Chennai?

(a) CA
(b) CSK
(c) CL
(d) GCW

Answer: (b)

9. Which of the following states topped the second edition of the Indian Innovation Index released by NITI Aayog in January 2021?

(a) Punjab
(b) Tamil Nadu
(c) Karnataka
(d) Andhra Pradesh

Answer: (c)

10. SHG promotes thrift in small proportion by a minimum contribution from each member of the group. What does 'H' stand for in SHG?

(a) Help
(b) Habitat
(c) Harvest
(d) Heavy

Answer: (a)

11. In which of the following states is Anchar Lake located?

(a) Meghalaya
(b) Assam
(c) Jammu and Kashmir
(d) Bihar

Answer: (c)

12. Who among the following rulers is called the ‘Napolean of India’?

(a) Bindusara
(b) Chandragupta I
(c) Samudragupta
(d) Ashoka

Answer: (c)

13. What do you call the effect of splitting of a spectral line into several components in the presence of a static magnetic field?

(a) Askaryan effect
(b) Zeeman effect
(c) Bezold effect
(d) Domino effect

Answer: (b)

14. Which of the following states won the National Award for Best Electoral Practices 2020?

(a) Mizoram
(b) Meghalaya
(c) Kerala
(d) Karnataka

Answer: (b)

15. Deserts, rain forests, coral reefs and mangroves are features of _____ diversity.

(a) ecological
(b) cultural
(c) species
(d) genetic

Answer: (a)

16. As of 2020, which among the following is a permanent member at United Nations Security Council?

(a) Germany
(b) Brazil
(c) China
(d) Japan

Answer: (c)

17. Which of the following is NOT in Karnataka?

(a) Hampi
(b) Duduma Waterfall
(c) Mysore Palace
(d) Bannerghatta National Park

Answer: (b)

18. Topaz is a _____ of fluorine and aluminium.

(a) silicate
(b) sulphate
(c) phosphate
(d) carbonate

Answer: (a)

19. When is the statehood day of Tripura observed?

(a) 12 March

(b) 3 October

(c) 21 February

(d) 21 January

Answer: (d)

20. Who among the following was one of the leaders who was instrumental in convincing Mahatma Gandhi about the need to start a non-cooperation movement in support of The Khilafat?

(a) Shaukat Ali

(b) Mohammad Ali Jinnah

(c) Maulana Abul Kalam Azad

(d) Abdul Ghaffar Khan

Answer: (a)

21. In the periodic table, the highly electronegative halogens and the highly electropositive alkali metals are separated by:

(a) Rare earth elements

(b) Alkaline earth metals

(c) Noble gases

(d) Noble metals

Answer: (c)

22. Which of the following organs secretes hydrochloric acid that helps our body in killing pathogenic bacteria?

(a) Stomach

(b) Brain

(c) Heart

(d) Kidney

Answer: (a)

23. Which of the following state governments launched the long-awaited policy of manufactured sand in January 2021?

(a) Madhya Pradesh

(b) Maharashtra

(c) Rajasthan

(d) Gujarat

Answer: (c)

24. Who among the following laid the foundations of the Indian National Movement by founding the Indian Association at Calcutta in 1876?

(a) Surendranath Banerjee

(b) Dadabhai Naoroji

(c) Aurobindo Ghose

(d) Womesh Chandra Banerjee

Answer: (a)

25. Who among the following is an Indian Paralympic swimmer?

(a) Sukant Kadam

(b) Sharath M Gayakwad

(c) Gaurav Khanna

(d) Pramod Bhagat

Answer: (b)

Quantitative Aptitude

1.

The average height of some students in a group is 156 cm. If 5 students of average height 160 cm join the group, then the average height of all the students in the group increases by 0.8 cm. What is the number of students in the group, initially?

(a) 10

(b) 15

(c) 20

(d) 25

Answer: (c)

2.

In $\triangle$ ABC, DE || AB, where D and E are the points on sides AC and BC, respectively. If AD = $x - 3$, AC = $2x$, BE = $x - 2$ and BC = $2x + 3$, then what is the value of x ?

(a) 10

(b) 9

(c) 12

(d) 8

Answer: (b)

3.

The data given in the table shows the number of boys and girls enrolled in three different streams in a school over 5 years.

years	Arts		Science		Commerce	
	Boys	Girls	Boys	Girls	Boys	Girls
2012	48	36	40	35	35	45
2014	42	43	42	32	32	42
2016	45	42	38	30	36	38
2018	39	46	41	23	28	34
2020	36	43	39	30	39	41

By what percent is the total number of boys in Arts stream more than the total number of boys in Science stream in the years 2012 to 2020?

(a)

5

(b)

$4\frac{16}{21}$

(c)

0

(d)

$2\frac{18}{41}$

Answer: (a)

4.

A certain sum amounts to ₹291600 in 2 years and to ₹314928 in 3 years on compound interest compounded annually. How much will be the simple interest (in ₹) on ₹40000 at the same rate for 2 years?

(a)

6400

(b)

8000

(c)

7500

(d)

9600

Answer: (a)

6.

If $sin\left(\frac{2A+B}{2}\right) = cos\left(\frac{2A-B}{2}\right) = \frac{\sqrt{3}}{2}$, $0° < \frac{2A+B}{2} < 90°$ and $0° < \frac{2A+B}{2} < 90°$ then find the value of $sin[3(A-B)]$.

(a)

$\frac{\sqrt{3}}{2}$

(b)

$\frac{1}{\sqrt{2}}$

(c)

$\frac{1}{2}$

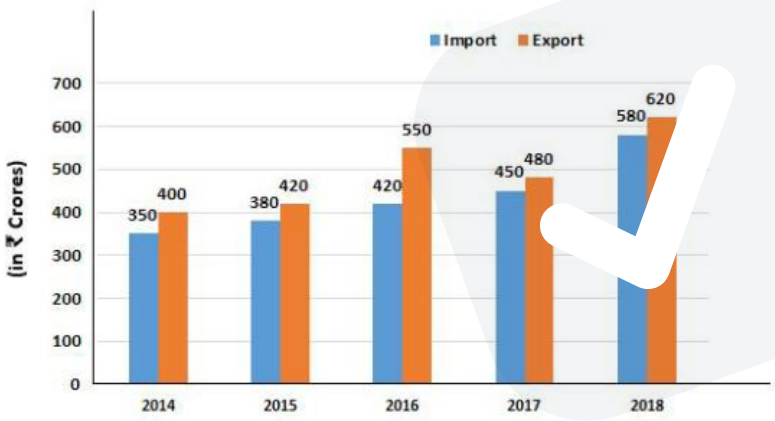
(d)

1

Answer: (b)

7.

The given bar graph shows the imports and exports (in crore ₹) of steel for 5 years from 2014 to 2018.



What is the ratio of average export to average import over the five years?

(a)

247 : 109

(b)

247 : 218

(c)

109 : 247

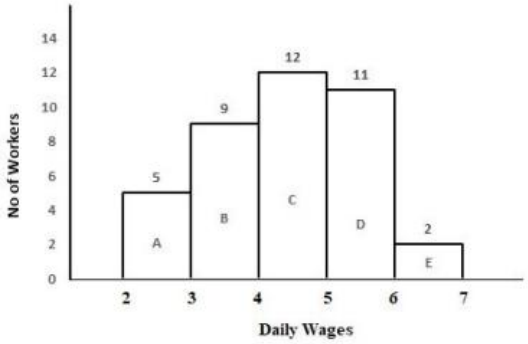
(d)

218 : 247

Answer: (b)

8.

In a factory, there are 39 workers who have been categorised into five groups (A, B, C, D, E) on the basis of the range of their daily wages (in multiples of ₹100). It is ensured that the daily wage of no worker is an exact multiple of ₹100. The distribution is presented through the given histogram.



If two Managers are engaged to supervise the workers, with daily wages ranging between ₹700 and ₹800, then what will be the average daily wage (nearest to a ₹) of all members of staff of the factory?

(a)

₹445

(b)

₹400

(c)

₹455

(d)

₹467

Answer: (c)

9.

A shopkeeper allows 16% discount on every item. Even after giving the discount, he makes a profit of 8%. If he gives 8% discount instead of 16% on an item marked for ₹1800, then what will be his profit percent? (correct to 2 decimal places)

(a)

19

(b)

18.31

(c)

18

(d)

18.29

Answer: (d)

14.

In a circle with centre O, AB and CD are two parallel chords on the same side of the diameter. If AB = 12 cm, CD = 18 cm and distance between the chords AB and CD is 3 cm, then find the radius of the circle (in cm).

(a)

12

(b)

$3\sqrt{13}$

(c)

15

(d)

9

Answer: (b)

16.

The value of $4(\sin^4 30° + \cos^4 30°) - 3(\sin^2 45° - 2\cos^2 45°)$ is:

(a)

0

(b)

4

(c)

2

(d)

1

Answer: (b)

17.

Samir and Puneet can complete the same work in 10 days and 15 days respectively. The work was assigned for ₹4500. After working together for 3 days Samir and Puneet involved Ashok. The work was completed in total 5 days. What amount (in ₹) was paid to Ashok?

(a)

800

(b)

1500

(c)

750

(d)

1071

Answer: (c)

19.

$\triangle ABC$ is incribed in a circle with center O, such that $\angle ACB = 115°$. O is joined to A. What is the measure of $\angle OAB$?

(a)

$25°$

(b)

$20°$

(c)

$35°$

(d)

$30°$

Answer: (a)

20.

A trader bought two articles for ₹490. He sold one at a loss of 20% and the other at a profit of 16%. If the selling price of both articles is same, then the cost price (in ₹) of the article sold at 20% loss is:

(a)

310

(b)

300

(c)

290

(d)

280

Answer: (c)

21.

If a number is first increased by 15%, then reduced by 15%, it results in 782. If the same number is first reduced by 25%, then increased by 25% and again reduced by 20%, then what will be the resulting number?

(a)

712

(b)

150

(c)

750

(d)

600

Answer: (d)

22.

Fourth proportion to 12, 18, and 6 is same as the third proportion to k and 6. What is the value of k?

(a)

$3\sqrt{6}$

(b)

4

(c)

13.5

(d)

3

Answer: (b)

23.

Find the difference between squares of the greatest value and the smallest value of P if the number 5306P2 is divisible by 3.

(a)

6

(b)

36

(c)

68

(d)

60

Answer: (d)

English Comprehension

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

I asked Rahul <u>that how far was his office</u> from his home.

(a) that how far his office is

(b) then how far was his office

(c) how far his office was

(d) No substitution required

Answer: (c)

2. Select the most appropriate option to fill in the blank. My New Year's _____ is to think positive always.

(a) repetition
(b) resolution
(c) confession
(d) celebration

Answer: (b)

3. Select the option that expresses the given sentence in reported speech. "Is the door closed?" Alka asked Tarun.

(a) Alka asked Tarun is the door close.
(b) Alka asked Tarun if the door is closed.
(c) Alka asked Tarun whether she closed the door.
(d) Alka asked Tarun whether the door was closed.

Answer: (d)

4. Select the option that can be used as a one-word substitute for the given group of words. A place in a large institution, for the care of those who are ill

(a) Hangar
(b) Hostel
(c) Infirmary
(d) Dormitory

Answer: (c)

6. Select the INCORRECTLY spelt word.

(a) Professional
(b) Dillemma
(c) Perpetuate
(d) Electronics

Answer: (b)

7. Select the most appropriate ANTONYM of the given word. Magnificent

(a) Modest
(b) Mighty
(c) Opulent
(d) Grandiose

Answer: (a)

8. Select the most appropriate synonym of the given word. Slack

(a) Keen
(b) Active
(c) Lively
(d) Careless

Answer: (d)

9. Select the most appropriate option to fill in the blank. We _____ the marks of the students on different subjects and compared their performance for the year.

(a) questioned

(b) inspected

(c) analysed

(d) probed

Answer: (c)

10. 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. Raman putted the vegetables / in the frying pan / and after adding some water, / closed the lid.

(a) and after adding some water

(b) closed the lid

(c) in the frying pan

(d) Raman putted the vegetables

Answer: (d)

11. Select the INCORRECTLY spelt word.

(a) Boundary

(b) Photgraph

(c) Competency

(d) Processing

Answer: (b)

12. 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 recruiters / were pleased / to John's / domain knowledge and personality.

(a) domain knowledge and personality

(b) The recruiters

(c) to John's

(d) were pleased

Answer: (c)

13. Select the most appropriate meaning of the given idiom. At the eleventh hour

(a) At 11:00 a.m.

(b) At 11:00 p.m.

(c) One hour before midnight

(d) At the very last minute

Answer: (d)

14. 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. I was shocked to find my house unlocked.
B. To my astonishment, I found that my son, who had a spare key, had come in my absence.
C. Last Sunday I returned home late at night.
D. I ran inside in fear that my house has been robbed.

(a) CDAB
(b) ABCD
(c) BCDA
(d) CADB

Answer: (d)

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

(a) Adapt
(b) Shift
(c) Move
(d) Change

Answer: (a)

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

(a) Congregation
(b) Constellation
(c) Planets
(d) Astronomy

Answer: (b)

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

Among applied sciences, medicine <u>is one which have given</u> man some power over death.

(a) is the one which gave
(b) No substitution required
(c) is one which has given
(d) are one which given

Answer: (c)

18. Select the most appropriate meaning of the given idiom. A storm in a teacup

(a) Disarranging the cutlery
(b) A sudden storm during teatime
(c) Unnecessary tension
(d) Lot of fuss that will soon be forgotten

Answer: (d)

19. 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. Whichever soonest made a traveller take off his cloak should be accounted the more powerful.
B. They agreed to put the point to test.
C. A dispute once arose between the wind and the sun to decide which was the stronger of the two.
D. The wind began, and blew with all his might and sent a blast, cold and fierce as a storm.

(a) BCDA
(b) CDBA
(c) CBAD
(d) ACDB

Answer: (c)

20. Select the most appropriate ANTONYM of the given word. Hazard

(a) Risk
(b) Peril
(c) Safety
(d) Gamble

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.
>
> "Everything in Bhutan is chemical-free, all fruits and vegetables are (1)_____ organically, so whatever you buy is (2)_____ farm produced as the (3)_____ of the population indulge in farming for (4)_____," says my taxi driver Karma Chime. "We use turmeric on wounds, also to dye (5)_____ and it is added extensively in our cooking. Also, many believe it is anti-cancer and can treat tumours.

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

(a) grown
(b) grew
(c) grows
(d) grow

Answer: (a)

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

(a) locally
(b) closely
(c) nearby
(d) nearly

Answer: (a)

23. Select the most appropriate option to fill in blank number 3.
    (a) community
    (b) common
    (c) majority
    (d) mass

    Answer: (c)

24. Select the most appropriate option to fill in blank number 4.
    (a) conservation
    (b) sustenance
    (c) provision
    (d) nutrition

    Answer: (b)

25. Select the most appropriate option to fill in blank number 5.
    (a) fashions
    (b) covering
    (c) attires
    (d) garments

    Answer: (d)

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

General Awareness

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

Quantitative Aptitude

1	**(c)**	2	**(b)**	3	**(a)**	4	**(a)**	6	**(b)**	7	**(b)**	8	**(c)**	9	**(d)**
14	**(b)**	16	**(b)**	17	**(c)**	19	**(a)**	20	**(c)**	21	**(d)**	22	**(b)**	23	**(d)**

English Comprehension

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