PREVIOUS YEAR PAPER

SSC MTS 2021 — 6 July 2022, Shift 2

SSC MTS & Havaldar · 6 July 2022 · 1:00 PM - 2:30 PM

90 of the paper's 100 questions · marks per question not printed on the response sheet

Left out of the original paper: 10 (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 6 July 2022, 1:00 PM - 2:30 PM. Each question is followed by its answer, and the answer key is repeated on the last page.

Take it as a timed practice test: exambharo.com/ssc-mts/previous-year-papers/ssc-mts-2021-6-jul-shift-2/

General English

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

Please consult a doctor before you take any medicine.

(a) consulting
(b) consulted
(c) No improvement required
(d) consults

Answer: (c)

2. The following sentence has been divided into part[illegible]One of them may contain an error. Select the part that contains the error from the given options. [illegible]ou don't find any error, mark 'No error' as your answer.

People sometimes asks me / why carbon dioxide / is important for the climate.

(a) is important for the climate
(b) why carbon dioxide
(c) No error
(d) People sometimes asks me

Answer: (d)

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

The snowstorm in that region will effect thousand of travellers.

(a) would affecting thousand
(b) will effect thousands
(c) No improvement required
(d) will affect thousands

Answer: (d)

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

HARMONY

(a) Peace
(b) Discord
(c) Tranquility
(d) Good will

Answer: (b)

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

Sagacious

(a) Dull
(b) Profound
(c) keen
(d) Intelligent

Answer: (a)

6. Select the most appropriate ANTONYM of the underlined word in the given sentence.

We had hundreds of courageous scientists.

(a) diffident
(b) gutsy
(c) audacious
(d) valiant

Answer: (a)

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

Thus, _____ of their purpose, the three knights tried another plan.

(a) involved
(b) foiled
(c) toiled
(d) failed

Answer: (b)

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

Segregate

(a) Submerge
(b) Isolate
(c) Nullify
(d) Integrate

Answer: (b)

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

Abraham also had one sister, of who not much has been recorded.

(a) of what
(b) of whose
(c) of whom
(d) No substitution required

Answer: (c)

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

Obtrusive

(a) Pervasive
(b) Exclusive
(c) Prominent
(d) Modest

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.

A man tends to one / of the horses after it's / training a stud farm.

(a) of the horses after it's
(b) A man tends to one
(c) No error
(d) training at a stud farm

Answer: (a)

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

Change of heart

(a) To narrowly escape disaster
(b) An unfair attack
(c) Different opinion about someone or something
(d) Very similar in appearance

Answer: (c)

14. Select the INCORRECTLY spelt word.

(a) Swimming
(b) Borowing
(c) Sovereign
(d) Preserve

Answer: (b)

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

One who hates mankind

(a) Altruist
(b) Compere
(c) Malevolent
(d) Misanthrope

Answer: (d)

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

In all cases, we have to _____ the facts from the various reports and documents.

(a) Instil
(b) Repel
(c) Standstill
(d) Distil

Answer: (d)

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

Someone who attacks cherished ideas or traditional institutions

(a) Believer
(b) Iconoclast
(c) Humanitarian
(d) Misanthrope

Answer: (b)

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

One who collects stamps

(a) Numismatist
(b) Narcissist
(c) Philatelist
(d) Collector

Answer: (c)

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

An eye wash

(a) In writing
(b) A pretence
(c) Avoid talking
(d) A rare event

Answer: (b)

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.
>
> Mt. Mantap in North Korea has now been reported to have (1) _____ from its original state after an underground nuclear test was carried out under it at the Punggye-ri nuclear test site on 3 September 2017. An international team of scientists (2) _____ a special satellite radar imaging called synthetic aperture radar and seismic recordings to study the effects of the blast which (3) _____ a 5.2 magnitude earthquake. The surface of the mountain was pushed (4) _____ by almost 11 feet and then collapsed leaving the mountain about 20 inches (5) _____.

21. Select the most appropriate option to fill in blank number 1.
    (a) relapsed
    (b) clasped
    (c) mapped
    (d) collapsed
    Answer: (d)

22. Select the most appropriate option to fill in blank number 2.
    (a) framed
    (b) used
    (c) urged
    (d) deduced
    Answer: (b)

23. Select the most appropriate option to fill in blank number 3.
    (a) altered
    (b) neglected
    (c) caused
    (d) lost
    Answer: (c)

24. Select the most appropriate option to fill in blank number 4.
    (a) wayward
    (b) confined
    (c) aligned
    (d) outwards
    Answer: (d)

25. Select the most appropriate option to fill in blank number 5.
    (a) different
    (b) shorter
    (c) proper
    (d) greater
    Answer: (b)

General Intelligence and Reasoning

1. J, K, L, M and N are sitting on a bench. J is the immediate neighbour of K, M is the immediate neighbour of N, and J is not sitting with L who sits on the right end of the bench. J sits to the right of M and N. M sits to the right of N. In which position is J sitting?

(a) Third from the left
(b) Fourth from the left
(c) Second from the left
(d) Second from the right

Answer: (a)

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

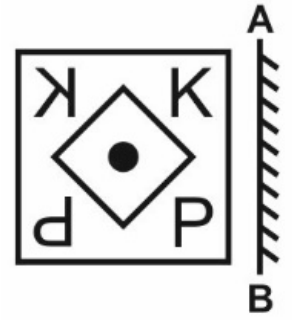
48, 52, 60, 72, 88, ?

(a) 118
(b) 98
(c) 112
(d) 108

Answer: (d)

3.

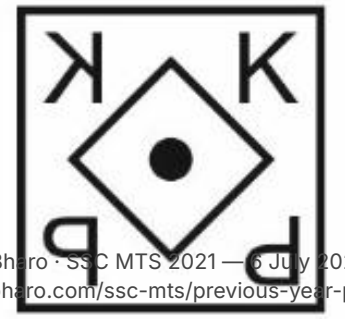
Select the correct mirror image of the given figure when the mirror is placed at the right side.



(a)



(b)



(c)



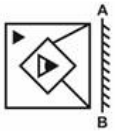
(d)



Answer: (c)

4.

Select the correct mirror image of the given figure when the mirror is placed at the line AB as shown.



(a)



(b)



(c)



(d)



Answer: (d)

5. Eight girls, G1, G2, G3, G4, G5, G6, G7 and G8, are sitting around a circular table facing the centre (not necessarily in the same order). G5 is third to the right of G1. G8 is second to the right of G4. G4 is not the immediate neighbour of G1 or G5. G6 and G2 are immediate neighbours. G2 is not the immediate neighbour of G1. G7 is not the immediate neighbour of G8. Which of the following statements is correct?

I. G7 is the immediate left of G4.

II. G1 and G3 are neighbour of G8.

(a) Only I is correct.

(b) Neither I nor II is correct.

(c) Only II is correct.

(d) Both I and II are correct.

Answer: (d)

6. In a certain code language, '7 8 3' means 'Naira likes ice-creams', '1 3 5' means 'icecreams are tasty', '2 5 4' means 'we are friends', then what is the code for 'tasty' in the same code language?

(a) 1
(b) 3
(c) 2
(d) 5

Answer: (a)

7. Select the option that is related to the sixth number in the same way as the first number is related to the second number and third number is related to fourth number. 8432 : 4382 :: 2496 : 4926 :: ? : 2174

(a) 7412
(b) 7421
(c) 7214
(d) 7142

Answer: (c)

8. After interchanging the given two signs and two numbers (not digits), what will be the value of the given equation?

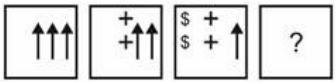
÷ and +, 12 and 14 12 ÷ 45 + 15 × 14 – 10 = ?

(a) 40
(b) 20
(c) 60
(d) 80

Answer: (a)

9.

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



(a)



(b)



(c)



(d)



Answer: (b)

10. Select the option in which the numbers are related in the same way as are the numbers in the following sets.

(3, 5, 7) (11, 13, 17)

(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /deleting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

(a) (7, 11, 17)

(b) (5, 7, 19)

(c) (7, 11, 21)

(d) (13, 17, 19)

Answer: (d)

11. In a certain code language, 'TANK' is coded as '4' and 'PIR' is coded as '3'. How will 'FREIGHT' be coded in that language?

(a) 7

(b) 9

(c) 6

(d) 5

Answer: (a)

12. 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: I. All W are A. II. Some X are W.

Conclusions:

I. All X are A. II. Some W are X. III. Some A are not X.

(a) Only conclusion III follows

(b) Only conclusion II follows

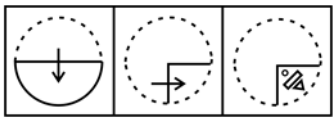
(c) All conclusions follow

(d) Only conclusion I follows

Answer: (b)

14.

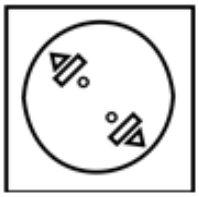
The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?



(a)



(b)



(c)



(d)



Answer: (c)

15. The volume of 7 spheres V1, V2, V3, V4, V5, V6 and V7 are compared. The volume of V4 is less than V1, V2 and V5. The volume of V7 is greater than only two spheres. The volume of V4 is more than V7. If the volume of V6 is not the lowest, then the volume of how many spheres is less than V3?

(a) 0

(b) 5

(c) 1

(d) 6

Answer: (a)

16. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.

PAT : SVA :: CRA : ?

(a) FMI
(b) FMH
(c) EMH
(d) FNH

Answer: (b)

17. 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: I. All P are Q. II. All N are P.

Conclusions: I. All N are Q. II. Some P are N.

(a) Both conclusions I and II follow
(b) Only conclusion II follows
(c) Neither conclusion I nor II follows
(d) Only conclusion I follows

Answer: (a)

18. By interchanging the given two signs + and − and two numbers 17 and 216 (NOT digits), which of the following equations will be correct?

I. 10 × 216 + 17 ÷ 6 – 13 = 146
II. 7 × 216 + 41 – 17 ÷ 36 = 81

(a) Only I
(b) Only II
(c) Neither I nor II
(d) Both I and II

Answer: (c)

19. In a certain code language, 'CEKF' is written as 'ZBHC' and 'NCPF' is written as 'KZMC'. How will 'JROG' be written in that language?

(a) GOMD
(b) GOLE
(c) GOLD
(d) GPLD

Answer: (c)

20. Select the option in which the pair of letter-clusters share the same relationship as that shared by the given letter-clusters.

RSPQ : QPSR

(a) CRAX : XARC
(b) BEJK : KJBE
(c) MAND : NDAM
(d) TOUR : RUTO

Answer: (a)

21. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.

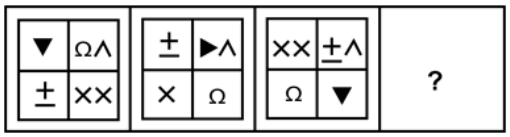
KRO, PWT, UBY, ?

(a) ZGE
(b) ZMD
(c) ZGD
(d) ZFD

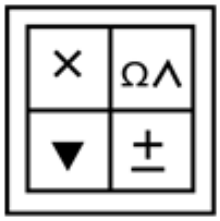
Answer: (c)

22.

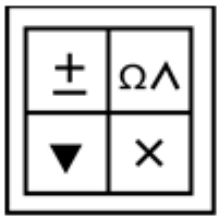
Select the figure from among the given options that can replace the question mark (?) in the following series.



(a)



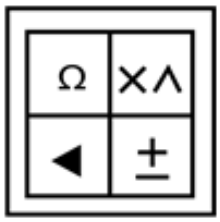
(b)



(c)



(d)



Answer: (d)

23.

Select the option in which the given figure is embedded (rotation is allowed).



(a)



(b)



(c)



(d)



Answer: (a)

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

21, 42, 168, 1008, ?

(a) 8304

(b) 8064

(c) 7864

(d) 8834

Answer: (b)

25. In a certain code language, 'ABCD' is coded as '2345', and 'PALE' is coded as '172136'. How will 'TOP' be coded in that language?

(a) 201607

(b) 211617

(c) 201617

(d) 201516

Answer: (b)

Numerical Aptitude

1.

In what time does a sum of money amount to twice of itself at simple interest of 10% per annum?

(a)

10 years

(b)

5 years

(c)

15 years

(d)

12.5 years

Answer: (a)

2.

Find the average of all the prime numbers between 1 to 50. [Give your answer correct to one decimal place.]

(a)

24.9

(b)

34.9

(c)

52.9

(d)

21.9

Answer: (d)

3.

Select the number that will come in place of the question mark (?) in the following mathematical statement.

$\frac{18}{292} \times \frac{73}{144} \times ? = 19$

(a)

622

(b)

608

(c)

618

(d)

610

Answer: (b)

4.

A cylindrical rod of iron, whose height is equal to the radius of its base, is melted and cast into spherical balls, each of whose radius is half the radius of the base of the rod. Find the number of spherical balls thus made.

(a)

4

(b)

6

(c)

5

(d)

3

Answer: (b)

5.

What is the value of $(1 \div 8)$ of $512 - \{-5 \div 0.5\} \times 6$?

(a)

114

(b)

4

(c)

124

(d)

64

Answer: (c)

6.

If $P = 2^8 \times 3^5, Q = 2^3 \times 3^4$, and $R = 3^5 \times 2^7$, then what is the highest common factor of P, Q and R?

(a)

$2^3 \times 3^4$

(b)

$2^8 \times 3^5$

(c)

$2^2 \times 3^2$

(d)

$2^4 \times 3^5$

Answer: (a)

7.

An article is sold at a discount of 12.5%, and still there is a profit of 15%. At what approximate percentage over and above its cost price has the mark-up price of the article been fixed?

(a)

29.41%

(b)

30.08%

(c)

34.46%

(d)

31.43%

Answer: (d)

10.

The average of the runs scored by 8 players in an innings is 55. If the runs scored by 7 of these players in that innings are 25, 35, 45, 60, 65, 60 and 80, then how many runs are scored by the 8th player in that innings?

(a)

65

(b)

80

(c)

75

(d)

70

Answer: (d)

11.

15% of 20% of S = 126. What is the value of S?

(a)

4200

(b)

4500

(c)

4800

(d)

3900

Answer: (a)

12.

What distance will be covered in 14 minutes by an auto rickshaw moving at 42 km/h?

(a)

6.2 km

(b)

7.2 km

(c)

9.8 km

(d)

5.8 km

Answer: (c)

15.

The following table shows the number of children from 4 different schools who like 4 different types of fruits. All the children like only one of the given fruits.

	No. of children who likes			
School	Apple	Orange	Mango	Grapes
P	120	50	160	150
Q	90	160	60	90
R	140	120	190	110
S	160	50	40	70

The total number of students who like grapes from schools P and R togeth what percentage of the total number of students who like mango from school R?(Correct to two decimal places)

(a)

136.84%

(b)

140.68%

(c)

128.92%

(d)

150%

Answer: (a)

17.

Raman can do a piece of work in 8 days, Sanam and Aman together can do the same work in 6 days, while Raman and Aman together can do it in 4 days. How long will Sanam alone take to do the work?

(a)

25 days

(b)

18 days

(c)

24 days

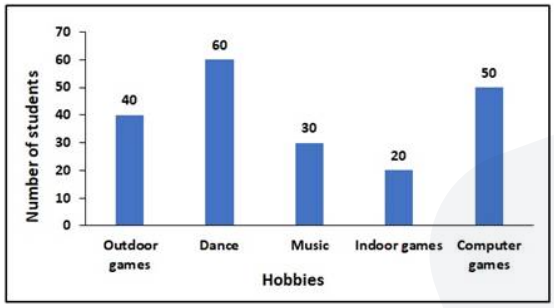
(d)

16 days

Answer: (c)

18.

The following bar graph shows the results of a survey conducted for 200 students about their favourite hobbies.



In percentage terms, how many more students chose outdoo[illegible]r favourite hobby over those who chose indoor games as their favourite hobby?

(a)

50%

(b)

100%

(c)

200%

(d)

20%

Answer: (b)

19.

If the circumference of the top of a hemispherical bowl is 44 mm, find the radius of the top of that bowl. [Use $\pi = \frac{22}{7}$]

(a)

10 mm

(b)

7 mm

(c)

9 mm

(d)

8 mm

Answer: (b)

20.

Find the value of 'b' in the given mathematical statement:

30% of b% of 296 = 40% of 50% of 5% of 1480

(a)

$\frac{80}{3}$

(b)

$\frac{40}{3}$

(c)

$\frac{125}{3}$

(d)

$\frac{50}{3}$

Answer: (d)

21.

The ratio of the present ages of Smithers and Homer is 3 : 5. After 7 years, Homer's age will be 42 years. What will be Smithers' age after 8 years?

(a)

23 years

(b)

22 years

(c)

29 years

(d)

31 years

Answer: (c)

22.

The volume of a wall whose height is six times its breadth and length is half its height, is 23958 cm^3. What is the breadth of the wall?

(a)

21 cm

(b)

15 cm

(c)

11 cm

(d)

18 cm

Answer: (c)

25.

At simple interest a certain sum amounts to₹12,000 in 5 years and to₹18,000 in 8 years. What is the rate of simple interest per annum on offer?

(a)

62.5%

(b)

150%

(c)

100%

(d)

12.5%

Answer: (c)

General Awareness

1. Which of the following naturally occurring acids is present in ant sting?
   (a) Lactic acid
   (b) Citric acid
   (c) Methanoic acid
   (d) Oxalic acid
   Answer: (c)

2. Which team lost to Hyderabad FC in the finals of ISL 2021-22?
   (a) Jamshedpur FC
   (b) Kerala Blasters FC
   (c) ATK Mohun Bagan
   (d) FC Goa
   Answer: (b)

3. Why is there low population growth in a society that is underdeveloped and technologically backward?
   (a) Because both death rate and birth rate are high
   (b) Because both death rate and birth rate are low
   (c) Because such countries usually have strict government policies related to population growth
   (d) Because people migrate from underdeveloped countries
   Answer: (a)

4. Right to Education was added as a fundamental right in the Indian Constitution in _____.
   (a) 1997
   (b) 1986
   (c) 2002
   (d) 2004
   Answer: (c)

5. What is the coil of wire in the electric room heater known as?
   (a) Cell
   (b) Fuse
   (c) Switch
   (d) Element
   Answer: (d)

6. In which state of India is the Sri Brahmapureeswarar temple situated?
   (a) Andhra Pradesh
   (b) Tamil Nadu
   (c) Rajasthan
   (d) Manipur
   Answer: (b)

7. 'Waiting for a Visa' is the autobiography of which of the following persons?

(a) BR Ambedkar
(b) Indira Gandhi
(c) Mahatma Gandhi
(d) Jawaharlal Nehru

Answer: (a)

8. In which of the following sites of Indus Valley Civilisation was 'The Great Bath' found?

(a) Kalibangan
(b) Dholavira
(c) Lothal
(d) Mohenjo-Daro

Answer: (d)

9. Which team won the Vijay Hazare Trophy 2021 – 22?

(a) Tamil Nadu
(b) Services
(c) Uttar Pradesh
(d) Himachal Pradesh

Answer: (d)

10. Which of the following dance forms depicts the ar sh of women whose partners are gone from home?

(a) Matki
(b) Biraha
(c) Alkap
(d) Paika

Answer: (b)

11. As per Census 2011, which of the following states of India has the highest sex ratio?

(a) Madhya Pradesh
(b) Uttar Pradesh
(c) Kerala
(d) Maharashtra

Answer: (c)

12. The SAHAY scheme to promote sports in rebel hit areas was launched by which state of India?

(a) Jharkhand
(b) Odisha
(c) Haryana
(d) Assam

Answer: (a)

13. The oceanic crust of the earth mainly consists of _____.
    (a) silica and magnesium
    (b) silica and alumina
    (c) magnesium and nickel
    (d) iron and alumina
    Answer: (a)

14. In which year was the Child Marriage Restraint Act passed in India?
    (a) 1929
    (b) 1931
    (c) 1935
    (d) 1933
    Answer: (a)

15. In which season are Kharif crops grown?
    (a) Autumn
    (b) Monsoon
    (c) Spring
    (d) Winter
    Answer: (b)

16. What is the longitudinal valley lying between lesse malaya and the Shiwaliks called?
    (a) Hana
    (b) Sind
    (c) Kangra
    (d) Dun
    Answer: (d)

17. Which of the following persons was appointed as Chief of the Air Staff of India in September 2022?
    (a) RKS Bhadauria
    (b) Harjit Singh Arora
    (c) Vivek Ram Chaudhari
    (d) Sandeep Singh
    Answer: (c)

18. _____ founded Satyashodhak Samaj, which campaigned against idolatry and the caste system.
    (a) Keshab Chandra Sen
    (b) Raja Ram Mohan Roy
    (c) Debendranath Tagore
    (d) Jyotirao Govindrao Phule
    Answer: (d)

19. Madhavi Mudgal is associated with which classical dance of India?
(a) Manipuri
(b) Kathak
(c) Odissi
(d) Sattriya
Answer: (c)

20. Which of the following is the first solar project to break the grid parity barrier in India?
(a) Bhadla Solar Park
(b) Kurnool Ultra Mega Solar Park
(c) Rewa Ultra Mega Solar
(d) Charanka Solar Park
Answer: (c)

21. In which of the following states is the Goncha Festival celebrated?
(a) Chhattisgarh
(b) Karnataka
(c) Jharkhand
(d) Odisha
Answer: (a)

22. Which of the following is a component of capital k get?
(a) Direct spending
(b) Non-tax revenue
(c) Tax revenue
(d) Non-plan capital expenditure
Answer: (d)

23. How many Grammy Awards has AR Rahman won?
(a) 1
(b) 4
(c) 2
(d) 3
Answer: (c)

24. Which of the following is the correct chronological order of the rulers of the Tughluq dynasty who ruled over Delhi from the year 1320 to 1414?
(a) Ghiyasuddin Tughluq, Firuz Shah Tughluq, Muhammad Tughluq
(b) Firuz Shah Tughluq, Muhammad Tughluq, Ghiyasuddin Tughluq
(c) Ghiyasuddin Tughluq, Muhammad Tughluq, Firuz Shah Tughluq
(d) Muhammad Tughluq, Firuz Shah Tughluq, Ghiyasuddin Tughluq
Answer: (c)

25. As per the Constitution of India, every Legislative Assembly of every State, unless sooner dissolved, shall continue for _____ from the date appointed for its first meeting.

(a) two years

(b) three years

(c) six years

(d) five years

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 English

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

General Intelligence and Reasoning

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

Numerical Aptitude

1	**(a)**	2	**(d)**	3	**(b)**	4	**(b)**	5	**(c)**	6	**(a)**
7	**(d)**	10	**(d)**	11	**(a)**	12	**(c)**	15	**(a)**	17	**(c)**
18	**(b)**	19	**(b)**	20	**(d)**	21	**(c)**	22	**(c)**	25	**(c)**

General Awareness

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