PREVIOUS YEAR PAPER

SSC MTS 2023 — 5 September 2023, Shift 3

SSC MTS & Havaldar · 5 September 2023 · 4:00 PM - 6:00 PM

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

Left out of the original paper: 9 (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 5 September 2023, 4:00 PM - 6:00 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-mts/previous-year-papers/ssc-mts-2023-5-sep-shift-3/

Numerical and Mathematical Ability

1.

In how many years will a sum of ₹18,000 at 20% per annum compounded half yearly becomes ₹23,958?

(a) $1\frac{1}{2}$

(b) $3\frac{1}{2}$

(c) $1\frac{1}{4}$

(d) $2\frac{1}{2}$

Answer: (a)

2.

Rashmi and Tina can do a piece of work in 20 and 30 days, respectively. If they work at it on alternate days with Rashmi beginning, then, in how many days will the work be over?

(a) 28

(b) 26

(c) 24

(d) 12

Answer: (c)

3.

A swimmer swims downstream from point A to point B in 4 hours. It covers the same distance upstream in 5 hours. If the speed of the stream is 2 km/h, what is the distance between A and B:

(a)

80 km

(b)

72 km

(c)

60 km

(d)

100 km

Answer: (a)

4.

The average of the two numbers is 48. If 3 is added to a smaller number, then the ratio between them is 11 : 20. Find the larger number. (Round up to two decimal places).

(a)

40.87

(b)

3.87

(c)

63.87

(d)

70.87

Answer: (c)

5.

In a group of people, 70% are men and 30% are women. The average age of the men is 50 years and that of the women is 40 years. Find the average age of all the members in the group (in years).

(a)

48

(b)

47

(c)

46

(d)

45

Answer: (b)

6.

Simplify: $\dfrac{\frac{1}{3} \div \frac{1}{3} \times \frac{1}{3}}{\frac{1}{3} + \frac{1}{3} - \frac{1}{3}} = ?$

(a)

3

(b)

$\frac{1}{9}$

(c)

1

(d)

$\frac{1}{3}$

Answer: (c)

7.

A man and a boy can do a piece of work in 12 days. If the man works alone for the last 3 days, it is completed in 13 days. How long would the boy take to do it alone?

(a)

36 days

(b)

18 days

(c)

72 days

(d)

30 days

Answer: (a)

9.

A train covers a certain distance with a speed of 72 km/h in the first two hours of its journey and 120 km in the next 1.5 hours. What is its average speed (in km/h, rounded off to the nearest integer) for the entire journey?

(a)

75

(b)

78

(c)

73

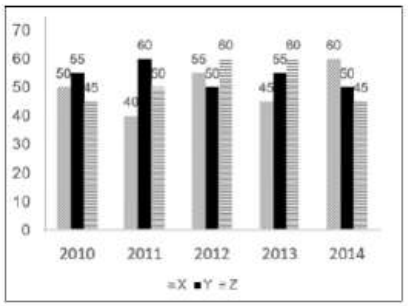
(d)

79

Answer: (a)

10.

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



What is the percentage increase in production of company X fro.. .1 to 2012?

(a)

37.5%

(b)

32.5%

(c)

38.25%

(d)

35%

Answer: (a)

11. By selling 8 items, a shopkeeper gains the selling price of 2 items. The gain percentage of the shopkeeper is:

(a)

25%

(b)

$16\frac{2}{3}\%$

(c)

$33\frac{1}{3}\%$

(d)

30%

Answer: (c)

12.

Zeenat earns 20% on an investment, but she loses 10% on another investment. If the two investments are respectively in the ratio of 3 : 5, then what is the percentage gain or loss for Zeenat on the two investments taken together?

(a)

1.25% Gain

(b)

2.25% Loss

(c)

1.25% Loss

(d)

2.25% Gain

Answer: (a)

13.

Find the arithmetic mean of 28, 21, 39, 33, 36, 23.

(a)

30

(b)

32

(c)

26

(d)

28

Answer: (a)

14.

An athlete crosses a 3000-m distance in 10 minutes. What is his speed (in km/h)?

(a)

16

(b)

12

(c)

14

(d)

18

Answer: (d)

15.

The diameter of the base of a right circular cylinder is 36 cm and its height is 21 cm. Find the volume of the cylinder.

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

(a)

2376 cm^3

(b)

85536 cm^3

(c)

21384 cm^3

(d)

5346 cm^3

Answer: (c)

17.

Three numbers are in the ratio 3 : 5: 7. If their LCM is 2625, find their HCF.

(a)

100

(b)

125

(c)

50

(d)

25

Answer: (d)

18.

The table below shows the marks obtained by students A, B and C in French and Geography in an examination. The maximum marks for each subject are 100. Study the table carefully and answer the question that follows.

Student	French	Geography
A	98	100
B	89	98
C	92	99

What is the ratio of the average marks of the three students in Geography to that in French?

(a)

32 : 28

(b)

28 : 32

(c)

33 : 31

(d)

31 : 33

Answer: (c)

19.

A contractor reduces the working time of a week (Monday to Saturday) from 48 hours to 36 hours for his workers without changing the payment. What is the percentage increase in the hourly rate?

(a)

$30\frac{1}{3}\%$

(b)

$33\frac{1}{3}\%$

(c)

$67\frac{2}{3}\%$

(d)

$70\frac{2}{3}\%$

Answer: (b)

20.

The length of the median of an equilateral triangle is $6\sqrt{3}$ cm. The area of the triangle is:

(a)

$36\sqrt{3}$ cm^2

(b)

36 cm^2

(c)

72 cm^2

(d)

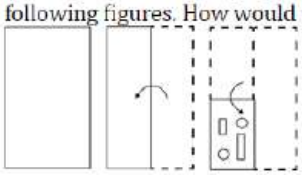
$72\sqrt{3}$ cm^2

Answer: (a)

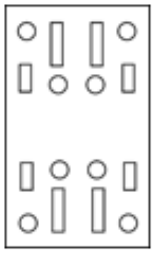
Reasoning Ability and Problem Solving

1.

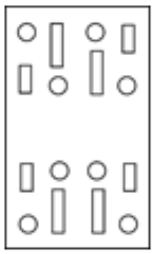
The sequence of folding a piece of paper and the manner in which the folded paper is cut is shown in the following figures. How would this paper look when unfolded?



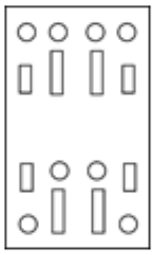
(a)



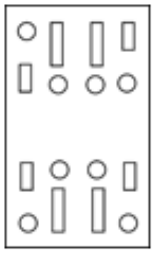
(b)



(c)



(d)



Answer: (a)

2.

21 is related to 147 following a certain logic. Following the same logic, 32 is related to 224. To which of the following is 52 related to, following the same logic?

(a)
356
(b)
364
(c)
365
(d)
346

Answer: (b)

3.

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

LV_J _VFJ T_GJ XVH_ BV_J

(a)
EPVJI
(b)
DVJLE
(c)
DBRPE
(d)
EJBLR

Answer: (a)

4.

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

_ GGHG _ _ GG _ G _

(a)
HGHHG
(b)
GHHGH
(c)
HGGHH
(d)
HHHGH

Answer: (a)

5.

उस शब्द-युग्म का चयन कीजिए जो नीचे दिए गए शब्दों के युग्म में व्यक्त किए गए समान संबंध का सबसे अच्छा निरूपण करता है।

(शब्दों को अर्थपूर्ण हिंदी शब्दों के रूप में माना जाना चाहिए और उन्हें शब्द में अक्षरों की संख्या/व्यंजन/स्वरों की संख्या के आधार पर एक दूसरे से संबंधित नहीं किया जाना चाहिए।)

हकलाना : बातचीत

(a)

दृष्टिवैषम्य : दृष्टि

(b)

शोर मचाना : सुनना

(c)

सुगंध : महक

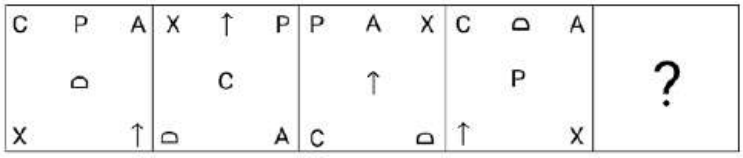
(d)

नोवोकेन : स्पर्श

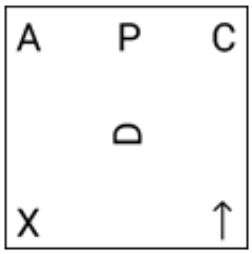
Answer: (a)

7.

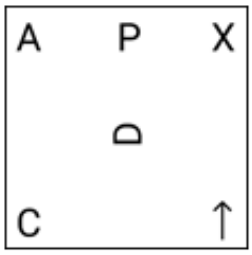
Which figure should replace the question mark (?) if the following figure series were to be continued?



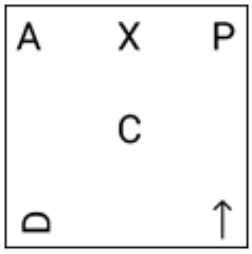
(a)



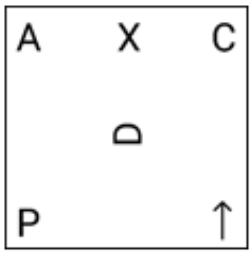
(b)



(c)



(d)



Answer: (d)

8.

In a certain code language, 'CHEW' is coded as '39' and 'FORE' is coded as '44'. What is the code for 'GLIT' in the given code language?

(a)
48

(b)
51

(c)
50

(d)
52

Answer: (a)

9.

What will come in the place of '?' in the following equation, if '+' and '–' are interchanged and '×' and '÷' are interchanged?
92 + 18 ÷ 2 – 125 × 25 = ?

(a)
61

(b)
41

(c)
51

(d)
71

Answer: (a)

10.

What should come in place of '?' in the given series?

22 24 28 36 52 ?

(a)
84

(b)
88

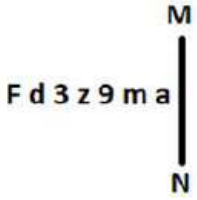
(c)
90

(d)
72

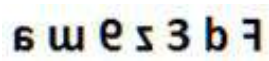
Answer: (a)

11.

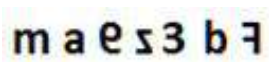
Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



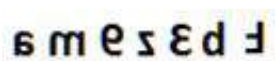
(a)



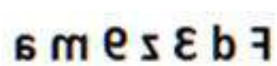
(b)



(c)



(d)



Answer: (d)

12.

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

$93 \div 5 + 4 - 45 \times 5 = ?$

(a)

490

(b)

470

(c)

495

(d)

480

Answer: (b)

13.

In a certain code language, 'OPEN' is coded as '4582' and 'PORE' is coded as '2385'. What is the code for 'R' in the given code language?

(a)
8

(b)
2

(c)
3

(d)
5

Answer: (c)

14.

What should come in place of '?' in the given series?

6 25 82 253 766 ?

(a)
2569

(b)
2491

(c)
2485

(d)
2305

Answer: (d)

15.

Six people, C, D, E, F, G and H are sitting in a straight line, facing north. Only three people sit to the right of G. Only two people sit between G and E. C sits to the immediate right of F and to the immediate left of G. H is not the immediate neighbour of E.

Who are sitting between G and E?

(a)
F and C

(b)
C and D

(c)
H and E

(d)
H and D

Answer: (d)

17.

Read the given statements and conclusions carefully. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. You have to decide which conclusion/s logically follow/s from the given statements.

Statements: Some sofas are teapots. All teapots are printers. Some printers are vases.

Conclusion I: Some teapots are sofas.

Conclusion II: Some vases are printers.

(a)

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

(b)

Only conclusion (II) is follow.

(c)

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

(d)

Only conclusion (I) is follow.

Answer: (c)

18.

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

(a)

Two

(b)

None

(c)

Four

(d)

One

Answer: (a)

19.

What should come in place of '?' in the given series?

5 8 17 44 125 ?

(a)

391

(b)

312

(c)

368

(d)

283

Answer: (c)

20.

Read the given statements and conclusions carefully. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. You have to decide which conclusion/s logically follow/s from the given statements.

Statements: All blenders are microwaves. Some microwaves are toasters. All toasters are lamps.

Conclusion I: Some blenders are microwaves.

Conclusion II: All toasters are blenders.

(a)

Only conclusion (II) is follow.

(b)

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

(c)

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

(d)

Only conclusion (I) is follow.

Answer: (d)

General Awareness

1. How many elements are listed in the modern periodic table?

(a) 107

(b) 81

(c) 91

(d) 118

Answer: (d)

2. In which of the following States was the third edition of Khelo India University Games held?

(a) Jharkhand
(b) Uttar Pradesh
(c) New Delhi
(d) Punjab

Answer: (b)

3. Which country did India beat in the final to win the 2023 Intercontinental Cup Football championship?

(a) Thailand
(b) Lebanon
(c) Mongolia
(d) Vanuatu

Answer: (b)

4. In which state of India is shifting cultivation known as Bringa?

(a) Andhra Pradesh
(b) Manipur
(c) Odisha
(d) Madhya Pradesh

Answer: (c)

5. What does the acronym 'ATM' stand for?

(a) Automated Teller Machine
(b) Automated Transaction Manageme
(c) Account Tracking Module
(d) All-Time Money

Answer: (a)

6. Who had founded the first Women's University in India?

(a) Dhondo Keshav Karve
(b) Ashutosh Mukherjee
(c) William Hunter
(d) Sayed Ahmed Khan

Answer: (a)

7. Devendra Jhajharia won which medal/place in World Para Athletics Grand Prix?

(a) Bronze
(b) Gold
(c) Silver
(d) Fourth

Answer: (c)

8. In the process of cell division, the formation of phragmoplast between the two daughter nuclei occurs during:

(a) the G0 phase
(b) the cytokinesis
(c) the S phase
(d) the karyokinesis

Answer: (b)

9. In which type of forests are Mahogany, Rosewood and Cinchona trees found in India?

(a) Tropical Evergreen forests
(b) Tropical Deciduous forests
(c) Mangrove forests
(d) Montane forests

Answer: (a)

10. Lebang Boomani dance is the harvest dance of _____.

(a) Mizoram
(b) Tripura
(c) Assam
(d) Meghalaya

Answer: (b)

12. Which of the following is NOT a directive principl / state policy?

(a) Separation of the judiciary from executive
(b) Reside in any part of India
(c) Uniform civil code
(d) Protection of monuments

Answer: (b)

13. In which state is the Sanchi Stupa situated?

(a) Bihar
(b) Uttar Pradesh
(c) Gujarat
(d) Madhya Pradesh

Answer: (d)

16.

The South China Sea is a part of which of the following oceans?

(a)

Arctic Ocean

(b)

Pacific Ocean

(c)

Southern Ocean

(d)

Indian Ocean

Answer: (b)

17. The official language of which neighbouring country of India is 'Dhivehi'?

(a) Maldives

(b) Sri Lanka

(c) Bhutan

(d) China

Answer: (a)

18. Under which scheme of Airport Authority of India d the Jammu and Kashmir Lieutenant Governor inaugurate UMEED Market Place at Srinaga ternational airport for supporting local art and artisans of Self Help Groups of J&K Rural Liveli d Mission?

(a) AVSAR Scheme

(b) AKASH Scheme

(c) AAKAR Scheme

(d) ASAR Scheme

Answer: (a)

19. Who was the Iranian ruler who attacked the city of Delhi and took away an immense amount of wealth in 1739?

(a) Ahmad Shah Qajar

(b) Nadir Shah

(c) Ahmad Shah Abdali

(d) Abbas I

Answer: (b)

20.

Pandit Bhimsen Joshi belonged to the _____ Gharana.

(a)

Banaras

(b)

Kirana

(c)

Agra

(d)

Dilli

Answer: (b)

21. Mahari Dance and Gotipua Dance belongs to which of the following states?

(a) Odisha

(b) Haryana

(c) Uttar Pradesh

(d) Bihar

Answer: (a)

22.

Identify the WRONG pair of dancer and the related dar form from the following.

(a)

Meenakshi Chitharanjan - Bhara n

(b)

Kumkum Dhar - Kuchipudi

(c)

Sruti Bandopadhay - Manipuri

(d)

Trilochan Mohanta - Chhau

Answer: (b)

23. Which of the following musicians is popularly known as 'Panchamda'?

(a) Ravi

(b) Khayam

(c) Naushad

(d) RD Burman

Answer: (d)

24. The 'Mukteshwar' dance festival is held from 14th to 16th January at the Mukteshwar temple in the state of _____.

(a) Uttarakhand

(b) Odisha

(c) Madhya Pradesh

(d) Himachal Pradesh

Answer: (b)

English Language and Comprehension

1. Parts of the following sentence have been underlined and given as options. Select the option that contains an error. For an all-too-brief period between the late 1980s and the late 2000s, a world was characterised by convergence.

(a) between the late

(b) For an all-too-brief

(c) characterised by

(d) a world was

Answer: (d)

2. The sentence given below has spelling errors. Select the sentence without spelling errors. Let us appriciate, support and contribute our might to the promotional efforts of the community in this direction.

(a) Let us appriciate, support and contribute our might to the promotional efforts of the comunity in this direction.

(b) Let us appreciate, suport and contribute our might to the promotional efforts of the community in this direction.

(c) Let us appriciate, support and contribute our might to the promotion all efforts of the community in this direction.

(d) Let us appreciate, support and contribute our might to the promotional efforts of the community in this direction.

Answer: (d)

3. Select the most appropriate option to fill in the blank. The team had a _____ with respect to the proposal given by Mr. Albert.

(a) descussion

(b) discusion

(c) disckassion

(d) discussion

Answer: (d)

4. Select the option that can be used as a one-word substitute for the given group of words. A thing which happens every two years

(a) Century
(b) Annual
(c) Biennial
(d) Bi-monthly

Answer: (c)

5. Select the most appropriate option that can substitute the underlined words in the following sentence. Ramya's shoes are polish by her granddaughter.

(a) polishes
(b) had polished
(c) are polished
(d) is polish

Answer: (c)

6. Select the most appropriate idiom to fill in the blank.

I don't think you should go out in the rain, it's _____.

(a) rain on cats and dogs
(b) storming cats and dogs
(c) raining cats and dogs
(d) raining dogs and puppies

Answer: (c)

7. Select the most appropriate meaning of the [illegible] diom. To keep one's temper

(a) To meet with disaster
(b) To become impatient
(c) To become angry
(d) To remain calm

Answer: (d)

8. Select the correct spelling of the underlined word in the following sentence.

Today's lecture had a profond impact on my friend.

(a) profoun
(b) prufound
(c) prefound
(d) profound

Answer: (d)

9. Select the most appropriate meaning of the given idiom. To get cold feet

(a) To be afraid
(b) To fall sick
(c) To be indifferent
(d) To run for life

Answer: (a)

10. Select the most appropriate ANTONYM of the underlined word. His amazing performance made him famous.

(a) Ordinary
(b) Colliery
(c) Adversary
(d) Binary

Answer: (a)

11. Select the most appropriate option that can substitute the underlined segment in the given sentence. The food was too salty eat this morning.

(a) eating
(b) ate
(c) to ate
(d) to eat

Answer: (d)

12. Select the most appropriate synonym of the given word. Elegant

(a) Mighty
(b) Graceful
(c) Ugly
(d) Tall

Answer: (b)

13. Parts of the following sentence have been underlined and given as options. Select the option that contains an error. I will going on an official tour next week.

(a) on
(b) will going
(c) next week
(d) an official tour

Answer: (b)

14. Parts of the following sentence have been given as options. Select the option that contains an error. Shelley and Keats are great writers, but I prefer the last.

(a) the last
(b) are great writers
(c) but I prefer
(d) Shelley and Keats

Answer: (a)

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

(a) Fabricate

(b) Destroy

(c) Inspect

(d) Copy

Answer: (a)

16. Select the option that can be used as a one-word substitute for the given phrase. A person who is known for his hatred towards the entire mankind.

(a) Insolvent

(b) Philogynist

(c) Mercenary

(d) Misanthrope

Answer: (d)

17. Parts of the following sentence have been given as options. Select the option that contains an error. Jaya said that she will become topper in her class.

(a) in her class

(b) she will become topper

(c) that

(d) Jaya said

Answer: (b)

18. The following sentence has been split into four segments. Identify the segment that contains a grammatical error. Some / private banks / pay their employees / good.

(a) private banks

(b) Some

(c) pay their employees

(d) good

Answer: (d)

20. Select the option that can be used as a one-word substitute for the given phrase. A poem of lamentation on the death of someone loved and admired.

(a) Soliloquy

(b) Elegy

(c) Tragedy

(d) Epitaph

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. Language is (1)_____ of the most fundamental aspects of human communication and interaction. It allows people from different cultures to connect and (2) _____ ideas. While many individuals grow up learning just one language, there are a variety of reasons why learning a second language can be beneficial. (3) _____, it can improve cognitive abilities, enhance job prospects and facilitate travel and cultural immersion. (4)_____ proficiency in a second language is an invaluable asset for personal growth as well as professional development. Audio-video mediums such as (5)_____ are among the best ways to learn a second language as they allow learners to engage with cultural content.

21. Select the most appropriate option to fill in blank number 1.
    (a) three
    (b) four
    (c) two
    (d) one

    Answer: (d)

22. Select the most appropriate option to fill in blank number 2.
    (a) sharing
    (b) share
    (c) shares
    (d) shared

    Answer: (b)

23. Select the most appropriate option to fill in blank number 3.
    (a) Therefore
    (b) As it is
    (c) However
    (d) For example

    Answer: (d)

24. Select the most appropriate option to fill in blank number 4.
    (a) Acquiring
    (b) Acquires
    (c) Acquire
    (d) Acquired

    Answer: (a)

25. Select the most appropriate option to fill in blank number 5.
    (a) podcasts
    (b) images
    (c) books
    (d) films

    Answer: (d)

Answer key

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

Numerical and Mathematical Ability

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

Reasoning Ability and Problem Solving

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

General Awareness

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

English Language and Comprehension

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