



**TEXTILE INSTITUTE OF PAKISTAN**

**TIP**

# **MODEL TEST PAPER**

**BS**

**Textile Science (TS)**

**BS**

**Industrial Manufacturing &  
Management (IMM)**

# General Instructions

1. Candidates shall only use the stationery provided by the institute.
2. The use of calculator is prohibited.
3. Mobile sets must be switched off and handed over to the invigilator staff before the test.
4. The test is divided into four parts. Each part consists of many short items.
5. Carefully read separate instructions provided for each part.
6. The total allowed time for the test is 90 minutes and suggested time for completing each part is also mentioned. However candidates can attempt questions in any sequence.
7. Any evidence of cheating or non-compliance with instructions will disqualify you from the test.
8. All answers must be given on a separate answer sheet provided. Indicate the answer by encircling the correct alphabet (A, B, C or D). If more than one alphabet is encircled for any question, it will be treated as incorrect.
9. Two blank sheets are also provided, one to do rough work and the other for paragraph writing. Both these sheets must be returned along with the answer sheet.
10. You must write your name and roll number on the answer sheet, rough work sheet and paragraph writing sheet
11. **You must not write any thing anywhere on the test booklet. All answers must be given on the answer sheet.**
12. Negative marking does not apply to this test.

## **PART I**

### **ENGLISH**

Section A	Academic Reading	05 Questions
Section B	Sentence Structure	10 Questions
Section C	Vocabulary	10 Questions
Section D	Writing (100 words)	05 Marks
Number of questions		25
All Questions (1 mark each)		25 Marks
Writing		05 Marks
Total Marks		30 Marks
Suggested time		20 Minutes

## Section A - Academic Reading

**Questions: 05**

**Marks: 10**

**Read the two passages given below and answer the questions that follow:**

### **Passage 1**

It is relatively hazardous if your food stuck between your teeth for long. It eventually creates germs, they produce acid, and this acid is relatively harmful for whole moth especially for teeth and gums. A cleaning regime, brushing besides flossing provides aid to get rid of these rotten food particles. It clarifies why flossing helps to keep your mouth healthy, according to doctors it's a healthy for your heart too.

Initially It could be difficult to understand that flossing could have a positive effect on heart. There are clear evidences about this concept. One idea is that the microorganisms that hurt your teeth could leave the mouth and travel into your blood. These tiny organisms that get into the blood can then attack your heart. Another idea is based on the fact that when there are too many germs in your mouth, the body tries to fight against these germs. For some reason, the way the body fights these mouth germs may end up weakening the heart over time.

However it's a debatable issue, a group of doctors are against it by their verdict of a link between flossing habits and good heart health is only a coincidence. A coincidence is the occurrence of two or more events at one time apparently by mere chance. The incidence of these events is completely random, as they do not admit of any reliable cause and effect relationship between them. For example, every time I wash my car, it rains. This does not mean that when I wash my car, I somehow change the weather. This is only a coincidence.

Likewise, some doctors think that people who have bad flossing habits just happen to also have heart problems, and people who have good flossing habits just happen to have healthy hearts. The theory that flossing your teeth helps to keep your heart healthy might not be true. But every doctor agrees that flossing is a great way to keep your teeth healthy. So even if flossing does not help your heart, it is sure to help your teeth. This is enough of a reason for everyone to floss their teeth every day.

### **Choose the best answer**

#### **Q-1) Choose the title that best fits the passage?**

- A. Why Doctors Disagree about Flossing
- B. How to Keep Your Teeth Healthy
- C. Flossing Your Way to a Healthy Heart
- D. Flossing by Coincidence

#### **Q-2) Brushing efficiently promotes healthy mouth by preventing.**

- A. germs from producing acid
- B. food from entering your body
- C. germs from entering into your blood
- D. acid from contacting your teeth and gums

**Q-3) How many ideas does the author put forth in this paragraph about cleaning?**

- A. 1
- B. 2
- C. 3
- D. 4

**Q-4) In paragraph 2, the author explains how having too many germs in your mouth can "end up weakening the heart." Using the passage as a guide, it can be understood that with respect to the actual way in which this occurs, doctors are**

- A. reluctant to imagine
- B. confident in their estimations
- C. extremely knowledgeable
- D. uncertain but speculative

**Q-5) Which of the following best states the main idea of the final paragraph**

- A. Because doctors do not agree that flossing will help your heart, it is useless to floss.
- B. It is a fact that flossing can help your heart as well as your teeth.
- C. Even if flossing is only good for your teeth, you should still do it every day.
- D. There is no good reason to believe that flossing will help your heart, but it is still a good idea to do it every day.

## **Section B – Sentence Structure**

**Total Questions: 10**

**Marks: 10**

**Choose the best word or phrase:**

- 6- We should be disgusted ..... people who tell lies.  
a. from                      b. with                      c. for                      d. At
- 7. According ..... this recipe, you must melt the butter.  
a. for                      b. by                      c. to                      d. Of
- 8. Ali has a dislike .....sour fruits.  
a. about                      b. Disagree                      c. among                      d. for
- 9. The egg is .....the plate.  
a. above                      b. between                      c. near                      d. on
- 10. I always watch T.V ..... my dinner.  
a. as                      b. after                      c. Before                      d. Until
- 11. My sister does not cook .....well ..... mother.  
a. here, there                      b. so, as                      c. even, whether                      d. now, after.
- 12. Please write to me .....you can.  
a. whenever                      b.always                      c.now                      d.if
- 13. Sentosa island is larger .....Lazarus island.  
a.then                      b.from                      c.beyond                      d.exactly
- 14. The costume ..... by her in week's time.  
a. will have been made                      b.should have been made

c. could have been made                      d. should not be made

15. Oh no! There is ..... in the box to show all.  
a. everything                      b. nothing                      c. bundles                      d. each thing

### Section C – Vocabulary

**Questions: 10**

**Marks: 10**

**Select the most suitable word or expression:**

16. A man can't be too careful in the choice of his.....  
a. enemies                      b. friends                      c. relatives                      d. officers
17. She accepted it as the ..... of surgeons knife.  
a. cruelty                      b. friendship                      c. forgiveness                      d. Stupidity
18. The .....of judges had gathered for final verdict.  
a. group                      b. bench                      c. bunch                      d. Team
19. An ambassador is an honest man who.....abroad for the good of his country.  
a. lay                      b. lies                      c. lied                      d. Lye
20. The whole .....went to see the victorious general.  
a. Crowd                      b. Gathering                      c. City                      d. Town

**Choose the word or expression closest in meaning to the underlined word**

21. Variety is the spice of life.  
a. Age                      b. Tenure                      c. Years                      d. Period
22. He makes no friend who never made a foe.  
a. Relatives                      b. Group                      c. Friendship                      d. Enemy
23. From the cradle to the grave.  
a. young                      b. toddler                      c. old                      d. infancy
24. Fools rush in, where angels fear to tread.  
a. walk                      b. run                      c. sleep                      d. go away
25. Nobody is supposed to threaten anybody.  
a. expiates                      b. intimidate                      c. spade                      d. state

## Section D – Writing

**Marks: 05**

**Write about 100 words on any one of the given topics.**

**(Use ONLY the sheet provided for writing)**

- 1) Dignity and integrity are the roots of success.
- 2) Women education empowers a State.

Do Not Write Here  
on page 27  
USE ONLY THE SHEET PROVIDED FOR WRITING

## **PART II**

### **Mathematics**

Section A	Word Problems	10 Questions
Section B	Series	05 Questions
Section C	Pure Mathematics	15 Questions
Total questions		30
Total Marks (1 mark each)		30 Marks
Suggested time		30 Minutes



## Section A–Word Problems

**Questions: 10**

**Marks: 10**

- (1) A man walked for  $\frac{1}{3}$  hour and then got an automobile ride for  $\frac{1}{2}$  hour. What part of time consumed he ride on automobile.
- A.  $\frac{1}{3}$   
B.  $\frac{3}{5}$   
C.  $\frac{1}{2}$   
D.  $\frac{5}{6}$
- (2) If an inlet pipe fills a tank in 10 hrs and another inlet pipe fills the same tank in 5 hrs then time required to fill the tank when both pipes are opened.
- A.  $\frac{10}{3}$   
B.  $\frac{3}{10}$   
C.  $\frac{1}{3}$   
D. 3
- (3) One liquid contains 20% of water another Contains 35% of water. A glass filled with 5 parts of first liquid and 10 parts of second the percentage of water in the new mixture
- A. 37%  
B. 20%  
C. 45%  
D. 30%
- (4) There are 40 students in a class of which 25 are boys and 15 are girls the teacher Sir Abid writes the name of each student on slip of papers. What is the probability that the name on the slip is of a boy.
- A.  $\frac{5}{8}$   
B.  $\frac{3}{8}$   
C.  $\frac{3}{5}$   
D. 0
- (5) If  $m$  is an even integer and  $3m < 48$  and  $2m > 24$  then  $m = ?$
- A. 12  
B. 13  
C. 14  
D. 16

- (6) Maria has taken 6 exams and her average marks so far are 89. If she gets 100, a perfect score on the remaining 2 exams. What will her new average be?
- A. 89.25
  - B. 90.50
  - C. 91.75
  - D. None of these
- (7). A sum of money is to be distributed among A, B, C, D in the proportion of 5 : 2 : 4 : 3. If C gets Rs. 2000 more than B, what is B's share?
- A. 9000
  - B. 4000
  - C. 5000
  - D. 2000
- (8). In a class of Entry test preparation at KIPS there are 80% girls. If there are 25 boys how many total students are there in the class?
- A. 125
  - B. 100
  - C. 120
  - D. 160
- (9). The ratio of income and expenditure of a man is 4 : 3 while the ratio of his saving and income is 1 : 4. Find the ratio among his income, expenditure and saving?
- A. 1:4:3
  - B. 3:4:4
  - C. 4:3:1
  - D. 4:1:3
- (10) If a mobile phone costing Rs. 18,000 was sold for Rs. 15,500. Calculate the percentage loss?
- A. 11.06%
  - B. 13.89%
  - C. 15.75%
  - D. None of these

## Section B–Series

**Questions: 05**

**Marks: 05**

**Indicate the next item of the series:**

(11) 3 46 9 18

- A. 24
- B. 27
- C. 21
- D. 25

(12) 7 49 6 36 5

- A. 20
- B. 4
- C. 23
- D. 25

(13) 7 10 8 11 9 12

- A. 10
- B. 12
- C. 13
- D. 7

(14) 22 21 23 22 24 23

- A. 22
- B. 24
- C. 25
- D. 26

(15) 36 34 30 28 24

- A. 20
- B. 22
- C. 23
- D. 26

## Section C–Pure Mathematics

**Questions: 15**

**Marks: 15**

(16) If A is the subset of the universal set U then  $(A')' =$

- A.  $\phi$
- B. A
- C. U
- D. none of these

(17) The function  $f ; R \rightarrow R$  defined by  $f = \{(x, y) \mid y = mx + c\}$

- A. a constant function
- B. linear function
- C. quadratic function
- D. None of these

(18) Roots of the equation  $x^2+7x+12=0$  are

- A.  $\{3,-4\}$
- B.  $\{3,4\}$
- C.  $\{-3,4\}$
- D.  $\{-3,-4\}$

(19) If  $x - 2$  is a factor of  $ax^2-12x+4=0$ , then  $a=$

- A. -5
- B. 5
- C. 0
- D. 1

(20)  $\int \ln e^{2x} dx = ?$

- A.  $x + c$
- B.  $x^2 + c$
- C.  $\ln x + c$
- D.  $e^x + c$

(21) If  $f \circ g(x) = (x^2 + 1)^{10}$ , then  $f(x)$

- A.  $x^5$
- B.  $x^{10}$
- C.  $x^2 + 1$
- D.  $(x^2 + 1)^2$

(22) The differentiation of  $\sin x$  with respect to  $x$  is ?

- A.  $\tan x$
- B.  $-\tan x$
- C.  $\cot x$
- D.  $\cos x$

(23)  $(1 - \cos^2 \alpha)(1 + \cot^2 \alpha) =$

- A.  $\sin^2 \alpha$
- B.  $\cos^2 \alpha$
- C.  $\operatorname{cosec}^2 \alpha$
- D. None of these

(24)  $\lim_{x \rightarrow 0} \frac{\sin 3x}{3x}$

- A. 2
- B. 1
- C. 0
- D. None of these

(25) The vectors  $u = 2i - 4k$  and  $v = 6i - 4j + ak$  are perpendicular. The value of  $a$  is

- A. 3
- B. -3
- C. 2
- D. -2

(26) If  $U = \{1, 2, \dots, 10\}$  and  $A = \{3, 4, 5, 7, 9\}$  then  $A^c$

- A.  $\{1, 2\}$
- B.  $\{6, 10\}$
- C.  $\{1, 2, 6, 8, 10\}$
- D. None of these

(27) If  $n(A) = 8$ ;  $n(A \times B) = 56$  then  $n(B) =$

- A. 8
- B. 7
- C. 48
- D. None of these

(28)  $\frac{1}{2} \log_2 36 - \log_2 3$  is equal to

- A. 3
- B. 1
- C. 0
- D. 6

(29) What is the derivative of  $(3x - 5)^4$

- A.  $4(3x - 5)^3$
- B.  $12(3x - 5)^3$
- C.  $(3x - 5)^5/5$
- D.  $(3x - 5)^5/15$

(30)  $\cos(\emptyset)$  is =

- A. Even function
- B. Odd function
- C. Hybrid
- D. None of these

## **PART III**

### **General Science**

Section A	Physics	10 Questions
Section B	Chemistry	20 Questions
Total questions		30
Total Marks		30 Marks
Suggested time		30 Minutes

## Section A – Physics

**Questions: 10**

**Marks: 10**

(1) The relationship between velocity, wave length and frequency is:

- A.  $v = \lambda/f$
- B.  $v = \lambda f$
- C.  $v = f/\lambda$
- D.  $v = 1/\lambda f$

(2) Which one of the following is a vector quantity:

- A. Energy
- B. Speed
- C. Force
- D. Pressure

(3) The slope of displacement-time graph gives us:

- A. Torque
- B. Velocity
- C. Momentum
- D. Acceleration

(4) Which one of the following is a unit of heat:

- A. Degree Kelvin
- B. Calorie
- C. Watt
- D. Centigrade

(5) The speed of light in vacuum is:

- A.  $3 \times 10^8$  m/s
- B.  $3 \times 10^6$  m/s
- C.  $3 \times 10^4$  m/s
- D.  $3 \times 10^2$  m/s



(6) The trajectory of a projectile is:

- A. Circle
- B. Ellipse
- C. Hyperbola
- D. Parabola

(7) The index of refraction of light in some material is given by:

- A.  $n = v/c$
- B.  $n = c/v$
- C.  $n = cv$
- D.  $n = 1/cv$

(8) The fundamental unit of electrical charge is:

- A. Volt
- B. Ampere
- C. Coulomb
- D. Watt

(9) Which one of the following is a good electrical conductor:

- A. Silicone
- B. Wood
- C. Silicone dioxide
- D. Plastic

(10) Photoelectric effect was discovered by

- A. Newton
- B. Einstein
- C. Al-Khawrizimi
- D. Maxwell

## Section B – Chemistry

**Questions: 20**

**Marks: 10**

- (11) In the reaction  $A + B \longrightarrow AB$ , if the concentration of A is doubled, the rate of reaction will
- A. Increase 4 times
  - B. Increasing 2 times
  - C. No effect on reaction
  - D. Decrease to half
- (12) In the following equation which component acts as a catalyst:  
 $CH_3COOH + CH_3OH + H_2SO_4 \rightleftharpoons CH_3COOCH_3 + H_2O + H_2SO_4$
- A.  $CH_3COOH$
  - B.  $CH_3OH$
  - C.  $CH_3COOCH_3$
  - D.  $H_2SO_4$
- (13) The molecular mass of anhydrous Copper Sulphate is:  
(Relative atomic masses of Cu = 63.5, S = 32.0 and O = 16.0)
- A. 250
  - B. 200
  - C. 159.5
  - D. 100.5
- (14) The Avogadro's number is:
- A.  $6.02 \times 10^{10}$
  - B.  $6.02 \times 10^{20}$
  - C.  $6.02 \times 10^{23}$
  - D.  $6.02 \times 10^{40}$
- (15) The thermal changes during a reaction are determined by:
- A. avo meter
  - B. thermometer
  - C. calorimeter
  - D. ampere meter

- (16) The atom as a whole is:
- A. positively charged
  - B. negatively charged
  - C. both positive and negative charged
  - D. neutral
- (17) Atoms with different atomic number are called:
- A. elements
  - B. compounds
  - C. Isotopes
  - D. Isomers
- (18) Complete the equation,  $\text{Na}_2\text{CO}_3 + \text{HCl} \rightarrow$
- A.  $\text{Na}_2\text{Cl} + \text{H}_2\text{O} + \text{CO}_2$
  - B.  $\text{NaCl} + \text{H}_2\text{O}$
  - C.  $\text{NaCl} + \text{CO}_2$
  - D.  $\text{NaCl} + \text{H}_2\text{O} + \text{CO}_2$
- (19) Which of the following is a secondary force:
- A. Hydrogen bond
  - B. Covalent bond
  - C. Ionic bond
  - D. Dative bond
- (20) Which of the following molecules possesses dipole-dipole?
- A.  $\text{H}_2$
  - B.  $\text{O}_2$
  - C.  $\text{CH}_4$
  - D.  $\text{HCl}$
- (21) The volume of 0.5N NaOH solution required to completely neutralize 10 ml of 0.5N  $\text{H}_2\text{SO}_4$  solution is:
- A. 5ml
  - B. 50ml
  - C. 20ml
  - D. 10ml

- (22) A solution that contains greater amount of solute than can be dissolved at a certain temperature in normal condition is called:
- A. Saturated solution
  - B. Concentrated solution
  - C. Super saturated solution
  - D. Dilute solution
- (23) Which one of the following is expected to be an ionic compound:
- A.  $\text{CH}_4$
  - B.  $\text{CH}_3\text{Cl}$
  - C.  $\text{CH}_2\text{Cl}_2$
  - D.  $\text{CH}_3\text{MgCl}$
- (24) Ammonia Solvay process is used for the manufacture of
- A. Sodium Carbonate
  - B. Sodium
  - C. Chlorine gas
  - D. Sodium hydroxide
- (25) The process of evaporation of liquid is:
- A. Exothermic process
  - B. Endothermic process
  - C. Sublimation
  - D. Condensation
- (26) Isotopes of same elements have same number of \_\_\_\_\_ but different number of \_\_\_\_\_.
- A. electrons, protons
  - B. protons, neutrons
  - C. neutrons, protons
  - D. neutrons, electrons
- (27) The reaction,  $\text{HCl} + \text{NaOH} \rightarrow \text{NaCl} + \text{H}_2\text{O} + \text{Heat}$ , is an example of
- A. Neutralization reaction
  - B. Endothermic reaction
  - C. Organic reaction
  - D. None of above

(28) Ether is a/an:

- A. Saturated compound
- B. Ionic compound
- C. Unsaturated compound
- D. Coordinate compound

(29) Electronic configuration of Na (atomic no. = 11) is:

- A.  $1s^2, 2s^2, 2p^7$
- B.  $1s^2, 2s^2, 3s^2, 2p^5$
- C.  $1s^2, 2s^2, 3s^1, 2p^6$
- D.  $1s^2, 2s^2, 2p^6, 3s^1$

(30) Which one of the following is the lightest compound?

- A.  $NH_3$
- B.  $O_2$
- C.  $H_2$
- D.  $SO_3$

## **PART IV**

### **General Knowledge**

**&**

### **Current Affairs**

Section A	General Knowledge	10 Questions
Section B	Current Affairs	10 Questions
Total questions		20
Total Marks (0.5 mark each)		10 Marks
Suggested time		10 Minutes

## Section A - General Knowledge

**Questions: 10**

**Marks: 10**

- (1) How President of Pakistan is elected?
- A. National Assembly
  - B. Senate
  - C. Provincial Assemblies
  - D. National Assembly, Senate and Provincial Assemblies
- (2) Which Continent has the highest number of Countries?
- A. Asia
  - B. Europe
  - C. North America
  - D. Africa
- (3) SUPARCO stand for\_\_\_\_\_?
- A. The Space and Upper Atmosphere Research Commission
  - B. The Space and Upper Atmosphere Research Company
  - C. The Space and Upper Atmosphere Research Cooperation
  - D. The Space and Upper Atmosphere Research Contents
- (4) The capital of Iraq is:
- A. Baghdad
  - B. Kabul
  - C. Khartoum
  - D. Ankara
- (5) Taka is the Currency of?
- A. Bhutan
  - B. Bangladesh
  - C. Indonesia
  - D. Nepal
- (6) Pakistan came into being 27 Ramadan\_\_\_\_\_A.H?
- A. 1361 A.H
  - B. 1362 A.H
  - C. 1365 A.H
  - D. 1366 A.H

- (7)** Which of the following is the most traded currency in the world?  
A. U.S dollar  
B. Euro  
C. Japanese Yen  
D. British Pound
- (8)** Emirates is an airline of \_\_\_\_\_.  
A. Saudi Arabia  
B. Qatar  
C. UAE  
D. Malaysia
- (9)** The largest ocean of the world is \_\_\_\_\_?  
A. Atlantic  
B. Pacific  
C. Indian  
D. None of these
- (10)** The motto of UNO is \_\_\_\_\_?  
A. It's your world!  
B. Life for All!  
C. Peace!  
D. Love and Peace!



## Section B - Current Affairs

**Questions: 10**

**Marks: 10**

(11) Who Won the FIFA World Cup 2018 ?

- A. Croatia
- B. Argentina
- C. Pakistan
- D. France

(12) The General Elections 2018 were held on \_\_\_\_\_ in Pakistan.

- A. July 25
- B. July 26
- C. July 27
- D. July 28

(13) Who has become the first cricketer to play 100 T20 Internationals?

- A. MS Dhoni
- B. Shahid Afridi
- C. Virat Kohli
- D. Shoaib Malik

(14) Who is Current Chief justice of Pakistan?

- A. Justice Anwar Zaheer Jamali
- B. Justice Iftikhar Muhammad Chaudhry
- C. Justice Nasir-ul-Mulk
- D. Justice Mian Saqib Nisar

(15) In Pakistan, monetary policy is controlled by:

- A. Ministry of Interior Affairs
- B. Prime Minister House

- C. State Bank of Pakistan
- D. National Bank

(16) Current Prime Minister of China is:

- A. Li Keqiang
- B. Wen Jiabao
- C. Zhu Rongji
- D. Li Peng

(17) Which country announced new NATO training Centre?

- A. Malaysia
- B. Germany
- C. Bhutan
- D. Canada

(18) Which country is in the 1st position of Global Innovation Index 2018?

- A. Finland
- B. Netherland
- C. Switzerland
- D. Denmark

(19) NRO stands for:

- A. National Reconciliation Ordinance
- B. National Reconstruction Organization
- C. New Railway Ordinance
- D. Nation Reward Ordinance

(20) Current Chief of Army staff Pakistan is

- A. General Pervez Musharraf
- B. General Ashfaq Parvez Kayani
- C. General Raheel Sharif
- D. General Qamar Javed Bajwa

# TEXTILE INSTITUTE OF PAKISTAN

## BS Textile Science

### ANSWER SHEET

Name: \_\_\_\_\_ Roll # \_\_\_\_\_

<b>Part-I (English)</b>	<b>Part-II (Mathematics)</b>	<b>Part-III (G. Science)</b>	<b>Part-IV (GK &amp; Current Affairs)</b>
<b>Section A</b>	<b>Section A</b>	<b>Section A</b>	<b>Section A</b>
(1) A B C D	(1) A B C D	(1) A B C D	(1) A B C D
(2) A B C D	(2) A B C D	(2) A B C D	(2) A B C D
(3) A B C D	(3) A B C D	(3) A B C D	(3) A B C D
(4) A B C D	(4) A B C D	(4) A B C D	(4) A B C D
(5) A B C D	(5) A B C D	(5) A B C D	(5) A B C D
<b>Section B</b>	<b>Section B</b>	<b>Section B</b>	<b>Section B</b>
(6) A B C D	(6) A B C D	(6) A B C D	(6) A B C D
(7) A B C D	(7) A B C D	(7) A B C D	(7) A B C D
(8) A B C D	(8) A B C D	(8) A B C D	(8) A B C D
(9) A B C D	(9) A B C D	(9) A B C D	(9) A B C D
(10) A B C D	(10) A B C D	(10) A B C D	(10) A B C D
<b>Section C</b>	<b>Section C</b>	<b>Section C</b>	<b>Section C</b>
(11) A B C D	(11) A B C D	(11) A B C D	(11) A B C D
(12) A B C D	(12) A B C D	(12) A B C D	(12) A B C D
(13) A B C D	(13) A B C D	(13) A B C D	(13) A B C D
(14) A B C D	(14) A B C D	(14) A B C D	(14) A B C D
(15) A B C D	(15) A B C D	(15) A B C D	(15) A B C D
(16) A B C D	(16) A B C D	(16) A B C D	(16) A B C D
(17) A B C D	(17) A B C D	(17) A B C D	(17) A B C D
(18) A B C D	(18) A B C D	(18) A B C D	(18) A B C D
(19) A B C D	(19) A B C D	(19) A B C D	(19) A B C D
(20) A B C D	(20) A B C D	(20) A B C D	(20) A B C D
(21) A B C D	(21) A B C D	(21) A B C D	(21) A B C D
(22) A B C D	(22) A B C D	(22) A B C D	(22) A B C D
(23) A B C D	(23) A B C D	(23) A B C D	(23) A B C D
(24) A B C D	(24) A B C D	(24) A B C D	(24) A B C D
(25) A B C D	(25) A B C D	(25) A B C D	(25) A B C D
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