

SAMPLE PAPER
CHEMICAL PLANT OPERATOR
(FSC PRE ENGG)

ENGLISH

Choose the best option, from the given choices below each sentence.

1. I plan to go _____ England next year.

- A) to
- B) at
- C) on
- D) in

2. The musical instrument _____ is six feet long.

- A) is called the bass
- B) it is called the bass
- C) called the bass
- D) calls the bass

Each question below consists of a related pair of words, followed by five lettered pairs of words. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair.

3. **GLARING: BRIGHT::**

- A) iridescent: colorful
- B) perceptible: visible
- C) discordant: harmonious
- D) peppery: salty
- E) deafening: loud

Choose the lettered word or phrase that is most nearly opposite in meaning to the word in capital letters.

4. **SURPRISE:**

- A) confound
- B) startle
- C) astound
- D) forewarn

5. **BRAVE:**

- A) daring
- B) bright
- C) anxious
- D) scared

Read the following passage to answer question (6-7)

"The history of science is the real history of mankind." In this striking epigram a nineteenth century writer links science with its background. Like most epigrams, its power lies in emphasizing by contrast an aspect of truth which may be easily overlooked. In this case it is easy to overlook the relations between science and mankind and to treat the former as some abstract third party, which can sometimes be praised for its beneficial influences, but frequently and conveniently blamed for the horrors of war. Science and mankind cannot be divorced from time to time at men's convenience. Yet we have seen that, inspite of countless opportunities of improvement, the opening years of the present period of civilisation have been dominated by international conflict.

Is this the inevitable result of the progress of science or does the fault lie elsewhere?

6. The science "The history of science is the real history of mankind" means:

- A) science has given man countless opportunities for improvement**
- B) science and mankind cannot always be divorced**
- C) mankind has progressed as science has developed**
- D) the good and bad uses of science reflect the character of man**

7. The epigram given in, the passage highlights:

- A) the evolution of science**
- B) the real history of man**
- C) the contrast between science and civilization**
- D) an elusive truth about human nature**

ANALYTICAL REASONING

Questions 8-11

A workshop that restores used pieces of furniture operates according to the following schedule:

A piece of furniture is examined three calendar days after it is received in the workshop. (Thus, if it is received on the first day of the month, it is examined on the fourth.) On the next Monday following the examination, the piece of furniture is delivered to the restoration room.

Restoration work may be finished one, two, or three calendar days after a piece of furniture is delivered to the restoration room. On the next Wednesday following the completion of the restoration work, a piece of furniture is varnished. Two calendar days later, the varnish is dry and a piece of furniture may be shipped. All restored pieces of furniture are shipped at the close of business on the 15th or the 30th day of the month.

This year, the first day of the month of January is a Friday.

8. If the workshop receives a steady supply of used pieces of furniture, on how many days during January will piece of furniture varnishing take place?

- A) Two
- B) Three
- C) Four
- D) Five
- E) Six

9. If a used piece of furniture is received at the workshop on Tuesday January 5th, its restoration work will be completed no later than:

- A) Monday the 11th
- B) Wednesday the 13th
- C) Thursday the 14th
- D) Friday the 15th
- E) Wednesday the 20th

10. In order to be certain that a restored piece of furniture will be shipped from the workshop on January 30th, what is the latest date by which it may be received at the workshop?

- A) Thursday the 14th
- B) Friday the 15th
- C) Saturday the 16th
- D) Monday the 18th
- E) Tuesday the 19th

11. The longest delay in shipping a restored piece of furniture will involve a piece of furniture whose cover varnish dries on:

- A) January 1st**
- B) January 8th**
- C) January 15th**
- D) January 22nd**
- E) January 29th**

Social security law is an evolving law that tries as far as possible to reflect reality, to adjust to changes in and the needs of society.

12. Which of the following statements best summarizes the above?

- A) Legislation lags behind reality.**
- B) Social security law gradually adapts itself to societal demands.**
- C) A good social security system ought to reflect every change in social values.**
- D) Changes in social conditions and needs imply the necessity for changes in social security legislation.**
- E) We need to study social needs.**

QUANTITATIVE

13. Suppose $x = y - 2 = \frac{y + 5}{2}$. Then x equals:

- A) $\frac{1}{3}$
- B) 1
- C) $\frac{7}{6}$
- D) 2
- E) 7

14. In January, 55 percent of a hospital's 300 patients were women. In February, 30 percent of its 440 patients were women. What was the percent change in the number of women patients from January to February?

- A) decrease of 20%
- B) increase of 20%
- C) decrease of 25%
- D) increase of 25%
- E) increase of 46.67%

15. A room is 16 feet in length, 15 feet in width, and 12 feet in height. What is the maximum distance possible in feet along a straight line between any two points in the room?

- A) 15
- B) 20
- C) 25
- D) $10\sqrt{2}$
- E) $10\sqrt{3}$

IQ

**16. 5 3 1 8 7 5 1 5 6 3 5 2 0 9 5 3 5 1 0 2 5 8 7 1 5 3 3
5 0 1 3 5 5 3 2 5**

Count each 5 above that has a 3 next after it. Tell how many 5's you count.

- A) 3**
- B) 4**
- C) 5**
- D) 6**

17. Complete the given series 6, 13, 28, ...:

- A) 56**
- B) 57**
- C) 58**
- D) 59**

18. If X is the brother of the son of Y's son, how is X related to Y?

- A) son**
- B) brother**
- C) cousin**
- D) grandson**
- E) uncle**

SUBJECT

19. The temperature where kinetic energy of gas molecules become zero is known as:

- A) Zero temperature
- B) Absolute temperature
- C) Absolute zero temperature
- D) Lowest comparative temperature

20. Hydrocarbons are studied in:

- A) Organic chemistry
- B) Inorganic chemistry
- C) Biochemistry
- D) Industrial chemistry

21. emf of a cell is called:

- A) Ampere
- B) Voltage
- C) Potential difference
- D) current

22. The speed at which a chemical reaction proceeds is:

- A) Law of mass action
- B) Velocity of reaction
- C) Rate of reaction
- D) Velocity constant

23. Reversible reaction is represented by:

- A) \rightarrow
- B) \rightleftharpoons
- C) $=$
- D) \neq

24. A neutral body is rubbed and its charge becomes positive. It must have

- A) gained protons
- B) gained neutrons
- C) lost protons
- D) lost electrons

25. For measuring resistance quickly, the most useful device is the:

- A) resistometer
- B) voltmeter
- C) ohmmeter
- D) potentiometer

26. The most common isotope of each of the following elements is radioactive EXCEPT:

- A) lead
- B) radium
- C) radon
- D) uranium

27. When a body reaches its terminal velocity, the acceleration of the body becomes:

- A) maximum
- B) minimum
- C) zero
- D) constant

28. Slow cooling of hot saturated solution yields:

- A) Large sized crystals
- B) Medium sized crystals
- C) Premature crystallization of the solute
- D) Immiscible liquids

29. Ozone is an allotropic form of:

- A) Sulphur
- B) Phosphorous
- C) Oxygen
- D) Carbon

ANSWER KEY

Q #	ANSWER CHOICE
1	A
2	C
3	E
4	D
5	D
6	B
7	A
8	C
9	C
10	A
11	A
12	B
13	E
14	D
15	C
16	B
17	D
18	D
19	C
20	A
21	C
22	C
23	B
24	D
25	C
26	A
27	C
28	A
29	C