

Dear Aspirant

Analyze Your today



It Will help you to

Improve Future Attempts



Some Observations :

- 1) Most of the questions were made easy , few were moderate & very few questions were made tough
- 2) Tough questions may be present anywhere in the paper, means they maybe in the starting or in the middle etc.
- 3) One question can break confidence and hence has potential to ruin the entire paper.
- 4) When we are tense, we tend to commit more mistakes.

Strategy To Be Followed :

- 1) Paper should be done in two rounds.
- 2) In fist round we have to try to ensure that very easy and less time taking questions are solved without any calculation mistake.
- 3) Order of subject should be as per your own convenience but chemistry or bio should attempt first as they contains many questions which can be answered without calculations & It will boost confidence.
- 4) During first round one should immediately leave tough or lengthy questions (to ensure that easier ones are not left unattempted).
- 5) Once first round is complete then we can try lengthy questions.
- 6) If a seemingly easy question is taking too much time then leave it immediately.

**All The Best For Your Next Attempt**

Test Name : 11th C JEE Main [27.06.2021]  
Difficulty Level : Medium  
Test Type : Paid

Total Questions : 75  
Total Marks : 300.00  
Duration : 180.00 mins

Q.1 Covert  $45^\circ$  to radians

- A.  $4/\pi$  rad
- B.  $\pi/4$  rad
- C.  $\pi/6$  rad
- D.  $6/\pi$  rad

**Answer : B,**

**Solution :** Solution is not available

Q.2 Evaluate  $\sin 120^\circ$

- A.  $\frac{\sqrt{3}}{2}$
- B.  $\frac{1}{2}$
- C. 1
- D. 0

**Answer : A,**

**Solution :** Solution is not available

Q.3 Function  $f(x)$  is defined as  $f(x) = x^2 + 3$ , Find  $f(0)$

- A. 0
- B. 1
- C. 2
- D. 3

**Answer : D,**

**Solution :** Solution is not available

Q.4 The volume of a ball of radius 3m is ?

- A.  $36\pi$  meter<sup>3</sup>
- B.  $32\pi$  meter<sup>3</sup>
- C.  $38\pi$  meter<sup>3</sup>

D. 46 p meter<sup>3</sup>

**Answer : A,**

**Solution :** Solution is not available

Q.5  $\frac{d8}{dx} = ?$

- A. 0
- B. 1
- C. 8
- D. 16

**Answer : A,**

**Solution :** Solution is not available

Q.6  $\frac{d\sqrt{x}}{dx} ?$

- A.  $\frac{1}{\sqrt{x}}$
- B.  $\frac{1}{2\sqrt{x}}$
- C.  $\frac{2\sqrt{x}}{3}$
- D.  $\frac{3}{2\sqrt{x}}$

**Answer : B,**

**Solution :** Solution is not available

Q.7  $\frac{d3x^3}{dx} ?$

- A. 3x
- B. 6x<sup>2</sup>
- C.  $\frac{3}{2}x^3$
- D. 6x

**Answer : D,**

**Solution :** Solution is not available

Q.8 Find  $\frac{dy}{dx}$  if  $y = x^4 + 12x$

- A.  $4x + 12$
- B.  $4x$
- C.  $4x^3 + 12$
- D.  $4x^3$

**Answer : C,**

**Solution :** Solution is not available

Q.9  $\frac{d(\sin x)}{dx}$  ?

- A.  $\cos x$
- B.  $\sin x$
- C.  $-\cos x$
- D.  $-\sin x$

**Answer : A,**

**Solution :** Solution is not available

Q.10 Find the derivation of  $y = \sqrt{x^2 + 1}$

- A.  $\frac{1}{\sqrt{x^2+1}}$
- B.  $\frac{1}{\sqrt{x^2}}$
- C.  $\frac{x}{2\sqrt{x^2+1}}$
- D.  $\frac{x}{\sqrt{x^2+1}}$

**Answer : D,**

**Solution :** Solution is not available

Q.11  $\sin 300$

- A.  $\frac{1}{2}$
- B.  $\frac{\sqrt{3}}{2}$
- C. 1
- D.  $-\frac{\sqrt{3}}{2}$

**Answer : D,**

**Solution :** Solution is not available

Q.12  $\sin 210$

- A.  $\frac{1}{2}$
- B.  $\frac{\sqrt{3}}{2}$
- C. 1
- D.  $-\frac{\sqrt{3}}{2}$

**Answer :** A,

**Solution :** Solution is not available

Q.13  $\cos (225)$

- A.  $-\frac{1}{\sqrt{2}}$
- B.  $\frac{1}{\sqrt{2}}$
- C.  $\frac{1}{2}$
- D. 1

**Answer :** A,

**Solution :** Solution is not available

Q.14  $\cos (-45)$

- A.  $-\frac{1}{\sqrt{2}}$
- B.  $\frac{1}{\sqrt{2}}$
- C.  $\frac{1}{2}$
- D. 1

**Answer :** B,

**Solution :** Solution is not available

Q.15  $|x + 1| = 3$ , Then the value of x will be ?

- A. 2 & -4
- B. 2 & 4
- C. -2 & -4
- D. -2 & 4

**Answer : A,**

**Solution :** Solution is not available

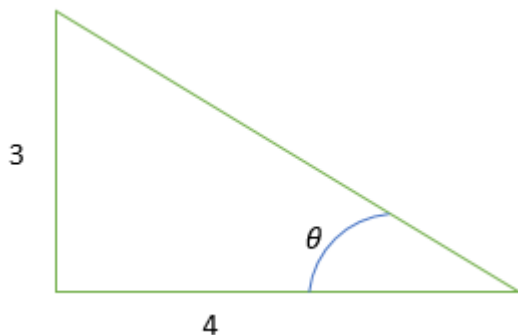
Q.16  $\frac{\log\sqrt{12}}{\log 12} = ?$

- A.  $\frac{1}{2}$
- B. 8
- C. 12
- D. 1

**Answer : A,**

**Solution :** Solution is not available

Q.17 Then the value of  $\sin \theta$  will be ?



- A.  $\frac{3}{4}$
- B.  $\frac{3}{5}$
- C.  $\frac{4}{5}$
- D.  $\frac{5}{3}$

**Answer : B,**

**Solution :** Solution is not available

Q.18 If 4 buffalo gives 12 litres of milk, Then 3 buffalo gives how much milk, (assume all buffalos are uniform)

- A. 4L
- B. 10L
- C. 9L
- D. 6L

**Answer : C,**

**Solution :** Solution is not available

Q.19 The shortest distance of the point P (2, 3) from the x-axis is

- A. 2
- B. 3
- C. 1
- D. 5

**Answer : B,**

**Solution :** Solution is not available

Q.20 Equation of the line that passes through the point (1 , 1) is ?

- A.  $x+y=2$
- B.  $2x+2y=4$
- C.  $X=1$
- D. All of the above

**Answer : D,**

**Solution :** Solution is not available

Q.21 Evaluate  $\cos 5760^\circ$

**Answer : 1,**

**Solution :** Solution is not available

Q.22  $x^2+1-2x = 0$ , Then the value of x will be ?

**Answer : 1,**

**Solution :** Solution is not available

Q.23 Distance between the points (1,1) & (5,4) will be ?

**Answer : 5,**

**Solution :** Solution is not available

Q.24  $\sin(-90)$

**Answer :** -1,

**Solution :** Solution is not available

Q.25  $y = 9 - (x - 3)^2$  Maximum value of Y will be ?

**Answer :** 9,

**Solution :** Solution is not available

Q.26 ..... is used in treatment of cancer.

(A) Paracetamol

(B) Taxol

(C) Aspirine

(D) Peniciline

A. A,

B. B,

C. C,

D. D,

**Answer :** B,

**Solution :** Solution is not available

Q.27 Which one is not element ?

(A) Diamond

(B) Graphite

(C) Silica

(D) Oxygen

A. A,

B. B,

C. C,

D. D,

**Answer :** C,

**Solution :** Solution is not available

Q.28  $\text{H}_2\text{C}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$  its molecular mass .....

(A) 90 u

(B) 126 u

(C) 124 u

(D) 136 u

A. A,

B. B,

C. C,



D. D,

**Answer : B,**

**Solution :** Solution is not available

Q.29 % of H in H<sub>2</sub>O is .....

(A) 11.11

(B) 88.89

(C) 2

(D) 20

A. A,

B. B,

C. C,

D. D,

**Answer : A,**

**Solution :** Solution is not available

Q.30 The law of multiple proportions is illustrated by-

A. Carbon monoxide and carbon dioxide

B. Potassium bromide and potassium chloride

C. Water and heavy water

D. Calcium hydroxide and barium hydroxide.

**Answer : A,**

**Solution :** Solution is not available

Q.31 % of H in CH<sub>3</sub>COOH = .....

(A) 40

(B) 6.66

(C) 10

(D) 15

A. A,

B. B,

C. C,

D. D,

**Answer : B,**

**Solution :** Solution is not available

Q.32 The law of conservation of mass is given by study of which reaction .....

(A) combustion

(B) fusion

(C) endothermic

(D) vaporization

- A. A,
- B. B,
- C. C,
- D. D,

**Answer : A,**

**Solution :** Solution is not available

Q.33 **The atomic mass is with respect to mass of .....**

- (A)  $C^{12}$                       (B)  $C^{13}$                       (C)  $C^{14}$                       (D)  $C^{16}$

- A. A,
- B. B,
- C. C,
- D. D,

**Answer : C,**

**Solution :** Solution is not available

Q.34 **The purpose of chemistry can be understood and described by.....**

- (A) fundamental particles                      (B) atoms  
(C) molecules                      (D) all of the above

- A. A,
- B. B,
- C. C,
- D. D,

**Answer : D,**

**Solution :** Solution is not available

Q.35 **Which is not an element ?**

- (A) Carbon                      (B) Sodium                      (C) Oxygen                      (D) NaCl

- A. A,
- B. B,
- C. C,
- D. D,

**Answer : D,**

**Solution :** Solution is not available

Q.36 **Chemistry is a science of ..... of the substance.**

- (A) composition                      (B) structure                      (C) properties                      (D) all of the above

- A. A,  
B. B,  
C. C,  
D. D,

**Answer :** D,

**Solution :** Solution is not available

Q.37 **Chemistry is not useful in .....**

- (A) digestion of food                      (B) functioning of brain  
(C) gravitational force                      (D) operation of computer

- A. A,  
B. B,  
C. C,  
D. D,

**Answer :** C,

**Solution :** Solution is not available

Q.38 **Which compounds are included in chemistry ?**

- (A) Natural                      (B) Semisynthetic                      (C) Synthetic                      (D) All of the above

- A. A,  
B. B,  
C. C,  
D. D,

**Answer :** D,

**Solution :** Solution is not available

Q.39 **..... used in refrigerator is hazardous to ozone layer.**

- (A) CFC                      (B) CMC                      (C) CNC                      (D) FCC

- A. A,

- B. B,
- C. C,
- D. D,

**Answer : A,**

**Solution :** Solution is not available

Q.40 Nowadays in refrigerator ..... is used which is less hazardous.

- (A) CFC (B) HFC (C) CNG (D) CNC

- A. A,
- B. B,
- C. C,
- D. D,

**Answer : B,**

**Solution :** Solution is not available

Q.41 Which chemistry is involved in production of chemicals without damaging the environment ?

- (A) Yellow chemistry (B) Ideal chemistry (C) Green chemistry (D) Pure chemistry

- A. A,
- B. B,
- C. C,
- D. D,

**Answer : C,**

**Solution :** Solution is not available

Q.42 What is Matter ?

- (A) All substances (B) Chemical substances  
(C) Anything that has mass and occupies space (D) All of the above

- A. A,
- B. B,
- C. C,
- D. D,

**Answer : C,**

**Solution :** Solution is not available

Q.43 In which state matters have definite volume and definite shape ?

- (A) Solid (B) Liquid (C) Gaseous (D) All of the above

- A. A,  
B. B,  
C. C,  
D. D,

**Answer : A,**

**Solution :** Solution is not available

Q.44 In which state of matter do not have definite shape ?

- (A) Solid (B) Liquid (C) Gaseous (D) All of these

- A. A,  
B. B,  
C. C,  
D. D,

**Answer : B,**

**Solution :** Solution is not available

Q.45 ..... is made up of same kind of atoms.

- (A) Element (B) Compound (C) Mixture (D) All of above

- A. A,  
B. B,  
C. C,  
D. D,

**Answer : A,**

**Solution :** Solution is not available

Q.46 What is the mass number of most abundant isotope of Carbon?

**Answer : 12,**

**Solution :** Solution is not available

Q.47 The number of fundamental particles present inside an atom is...?

**Answer : 3,**

**Solution :** Solution is not available

Q.48 The charge on 100 neutrons will be...?

**Answer :**

**Solution :** Solution is not available

Q.49 How many states of matter exist in the universe?

**Answer :**

**Solution :** Solution is not available

Q.50 Our chemistry is divided in how many parts?

**Answer : 3,**

**Solution :** Solution is not available

Q.51 If  $(x + 2)$ ,  $2x$ ,  $(2x + 3)$  are three consecutive terms of an AP, then  $x =$

- A. 3
- B. 4
- C. 5
- D. 6

**Answer : C,**

**Solution :** Solution is not available

Q.52 If 4,  $x_1$ ,  $x_2$ ,  $x_3$ , 28 are in AP, then  $x_3 = ?$

- A. 19
- B. 23
- C. 22
- D. cannot be determined

**Answer : C,**

**Solution :** Solution is not available

Q.53 How many terms of the AP 3, 7, 11, 15, ... will make the sum 406?

- A. 10
- B. 12

- C. 14
- D. 20

**Answer : C,**

**Solution :** Solution is not available

- Q.54 How many numbers lie between 10 and 300, which when divided by 4 leave a remainder 3?
- A. 71
  - B. 72
  - C. 73
  - D. 74

**Answer : C,**

**Solution :** Solution is not available

- Q.55 Two APs have the same common difference. Their first terms are - 1 and - 8 respectively. The difference between their 4th terms is
- A. - 1
  - B. - 8
  - C. 7
  - D. - 9

**Answer : C,**

**Solution :** Solution is not available

- Q.56 The sum of all 2-digit numbers divisible by 5 is
- A. 1035
  - B. 1245
  - C. 1230
  - D. 945

**Answer : D,**

**Solution :** Solution is not available

- Q.57 30th term of the AP : 10, 7, 4, ..., is
- A. 97
  - B. 77

- C. - 77
- D. - 87

**Answer : C,**

**Solution :** Solution is not available

Q.58

If arithmetic mean of  $a$  and  $b$  is  $\frac{a^n + b^n}{a^{n-1} + b^{n-1}}$  then value of  $n$  is

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

**Answer : C,**

**Solution :** Solution is not available

Q.59 If the  $n$ th term of an A.P. be  $(2n - 1)$ , then the sum of its first  $n$  terms will be

- A.  $n^2 - 1$
- B.  $(2n - 1)2$
- C.  $n^2$
- D.  $n^2 + 1$

**Answer : C,**

**Solution :** Solution is not available

Q.60 If  $a, b, c$  are in A.P. as well as in G.P. then

- A.  $a = b \neq c$
- B.  $a \neq b = c$
- C.  $a \neq b \neq c$
- D.  $a = b = c$

**Answer : D,**

**Solution :** Solution is not available

Q.61 If the sum of the series  $2 + 5 + 8 + 11 \dots$  is 60100, then the number of terms are -

- A. 100
- B. 200



- C. 150  
D. 250

**Answer : B,**

**Solution :** Solution is not available

Q.62

If the  $p$ th term of an A.P. be  $\frac{1}{q}$  and  $q$ th term be  $\frac{1}{p}$ , then the sum of its  $pq$ th terms will be -

- A.  $\frac{pq-1}{2}$   
B.  $\frac{1-pq}{2}$   
C.  $\frac{pq+1}{2}$   
D.  $-\frac{pq+1}{2}$

**Answer : C,**

**Solution :** Solution is not available

Q.63 For an A.P.,  $T_2 + T_5 - T_3 = 10$ ,  $T_2 + T_9 = 17$ , then common difference is

- A. 0  
B. 1  
C. -1  
D. 13

**Answer : C,**

**Solution :** Solution is not available

Q.64 If the  $p^{\text{th}}, q^{\text{th}}$  and  $r^{\text{th}}$  term of an arithmetic sequence are  $a, b$  and  $c$  respectively, then the value of  $[a(q-r) + b(r-p) + c(p-q)] =$

- A. 1  
B. -1  
C. 0  
D.  $\frac{1}{2}$

**Answer : C,**

**Solution :** Solution is not available

- Q.65 If  $p$  times the  $p^{\text{th}}$  term of an A.P. is equal to  $q$  times the  $q^{\text{th}}$  term of an A.P., then  $(p+q)^{\text{th}}$  term is
- A. 0
  - B. 1
  - C. 2
  - D. 3

**Answer :** A,

**Solution :** Solution is not available

- Q.66 The sum of first  $n$  natural numbers is
- A.  $n(n-1)$
  - B.  $\frac{n(n-1)}{2}$
  - C.  $n(n+1)$
  - D.  $\frac{n(n+1)}{2}$

**Answer :** D,

**Solution :** Solution is not available

- Q.67 If the sum of three consecutive terms of an A.P. is 51 and the product of last and first term is 273, then the numbers are
- A. 21, 17, 13
  - B. 20, 16, 12
  - C. 22, 18, 14
  - D. 24, 20, 16

**Answer :** A,

**Solution :** Solution is not available

- Q.68 The minimum number of terms of  $1+3+5+7+\dots$  that add up to a number exceeding 1357 is
- A. 15
  - B. 37
  - C. 35
  - D. 17

**Answer : B,**

**Solution :** Solution is not available

Q.69 If  $2x$ ,  $x + 8$ ,  $3x + 1$  are in A.P., then the value of  $x$  will be

- A. 3
- B. 7
- C. 5
- D. - 2

**Answer : C,**

**Solution :** Solution is not available

Q.70 If  $a$ ,  $b$ ,  $c$  are in A.P. then  $\frac{(a-c)^2}{(b^2 - ac)} =$

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

**Answer : D,**

**Solution :** Solution is not available

Q.71 The sum of first 20 terms of the AP 1, 3, 5, 7, 9 ..... is

**Answer : 563,**

**Solution :** Solution is not available

Q.72 In an AP, the first term is 8,  $n$ th term is 33 and the sum of first  $n$  terms is 123. Then,  $d = ?$

**Answer : 5,**

**Solution :** Solution is not available

Q.73 If  $a$ ,  $b$ ,  $c$ ,  $d$ ,  $e$  are in A.P. then the value of  $a - 4b + 6c - 4d + e$  in terms of  $a$ , if possible is

**Answer :**

**Solution :** Solution is not available

Q.74 If the 9<sup>th</sup> term of an A.P. is 35 and 19<sup>th</sup> is 75, then its 20<sup>th</sup> term will be

**Answer : 79,**

**Solution :** Solution is not available

Q.75 There are 15 terms in an arithmetic progression. Its first term is 5 and their sum is 390. The middle term is

**Answer : 26,**

**Solution :** Solution is not available