Guru Gobind Singh Indraprastha University
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Guru Gobind Singh Indraprastha University

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Test Center Name	Indraprastha Public School
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Test Time	5:00 PM - 7:30 PM
Subject	BCA

Section : **English Language and Comprehension**

Q.1 Each blank in the following sentences indicates that something has been omitted.

Consider the lettered words beneath the sentence and choose the word or set of words that best fits the whole sentence.

I do not want_____ of these books.

A. all

B. none

C. any

D. each

Ans ✗ A. A

✗ B. B

✔ C. C

✗ D. D

Question ID : **2233951014**
Status : **Answered**
Chosen Option : **C**

Q.2 In the following questions, a word is given followed by four alternatives marked

a–d. Select the alternative that <u>conveys the same meaning</u> as the word given.

COMPORT

A. abnormal; straying from the normal or usual path

B. fitting in

C. too dirty or discoloured

D. with no shape; unorganized

Ans ✗ A. A

✔ B. B

✗ C. C

✗ D. D

Question ID : **2233951010**
Status : **Answered**
Chosen Option : **D**

Q.3

The passage given below is followed by questions based on its content. After reading the passage, choose the best answer to each question. Answer all questions following the passage on the basis of what is stated or implied in the passage.

In *Raisin in the Sun*, Lorraine Hansberry does not reject integration or the economic and moral promise of the American dream; rather, she remains loyal to this dream while looking, realistically, at its incomplete realization. Once we recognize this dual vision, we can accept the play's ironic nuances as deliberate social commentaries by Hansberry rather than as the "unintentional" irony that Bigsby attributes to the work. Indeed, a curiously persistent refusal to credit Hansberry with a capacity for intentional irony has led some critics to interpret the play's thematic conflicts as mere confusion, contradiction, or eclecticism. Isaacs, for example, cannot easily reconcile Hansberry's intense concern for her race with her ideal of human reconciliation. But the play's complex view of Black self-esteem and human solidarity, as compatible is no more "contradictory" than Du Bios famous, well-considered ideal of ethnic self-awareness co-existing with human unity, or Fanon's emphasis on an ideal internationalism that also accommodates national identities and roles.

In which of the following does the author of the passage reinforce his criticism of responses such as Isaacs to *Raisin in the Sun*?

A. The statement that Hansberry's is "loyal" to the American dream.

B. The description of Hansberry's concern for Black Americans as "intense".

C. The assertion that Hansberry is concerned with "human solidarity".

D. The description of Du Bios ideal as "well-considered".

Ans   ✘ A. A

     ✘ B. B

     ✘ C. C

     ✔ D. D

Question ID : **2233951003**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.4

The passage given below is followed by questions based on its content. After reading the passage, choose the best answer to each question. Answer all questions following the passage on the basis of what is stated or implied in the passage.

In *Raisin in the Sun*, Lorraine Hansberry does not reject integration or the economic and moral promise of the American dream; rather, she remains loyal to this dream while looking, realistically, at its incomplete realization. Once we recognize this dual vision, we can accept the play's ironic nuances as deliberate social commentaries by Hansberry rather than as the "unintentional" irony that Bigsby attributes to the work. Indeed, a curiously persistent refusal to credit Hansberry with a capacity for intentional irony has led some critics to interpret the play's thematic conflicts as mere confusion, contradiction, or eclecticism. Isaacs, for example, cannot easily reconcile Hansberry's intense concern for her race with her ideal of human reconciliation. But the play's complex view of Black self-esteem and human solidarity, as compatible is no more "contradictory" than Du Bios famous, well-considered ideal of ethnic self-awareness co-existing with human unity, or Fanon's emphasis on an ideal internationalism that also accommodates national identities and roles.

It can be inferred from the passage that the author believes which of the following about Hansberry's use of irony in *Raisin the Sun*?

A. It reflects Hansberry's reservations about the extent to which the American dream has been realized.

B. It derives from Hansberry's eclectic approach to dramatic structure.

C. It is justified by Hansberry's loyalty to a favourable depiction of American life.

D. It is influenced by the themes of works by DU Bios and Fanon.

Ans   ✔ A. A

   ✘ B. B

   ✘ C. C

   ✘ D. D

Question ID : **2233951002**
Status : **Answered**
Chosen Option : **A**

Q.5

Each blank in the following sentences indicates that something has been omitted.

Consider the lettered words beneath the sentence and choose the word or set of words that best fits the whole sentence.

The doctor gave the medicine to _____ the pain.

A. bring down

B. reduce

C. relief

D. relieve

Ans   ✗ A. A

          ✗ B. B

          ✗ C. C

          ✔ D. D

Question ID : **2233951015**
Status : **Answered**
Chosen Option : **D**

Q.6

In each of the statements below, a part of the sentence is highlighted. Out of the four options that follow, choose the one that best replaces the highlighted phrase.

The moment they saw me, they **were delight**.

A. was delight

B. were delighted

C. are delighted

D. no improvement

Ans   ✗ A. A

          ✔ B. B

          ✗ C. C

          ✗ D. D

Question ID : **2233951012**
Status : **Answered**
Chosen Option : **B**

Q.7

Each blank in the following sentences indicates that something has been omitted.

Consider the lettered words beneath the sentence and choose the word or set of words that best fits the whole sentence.

All matter _____ indestructible.

A. is

B. are

C. it

D. was

Ans   ✔ A. A

          ✗ B. B

          ✗ C. C

          ✗ D. D

Question ID : **2233951013**
Status : **Answered**
Chosen Option : **B**

Q.8

The passage given below is followed by questions based on its content. After reading the passage, choose the best answer to each question. Answer all questions following the passage on the basis of what is stated or implied in the passage.

In *Raisin in the Sun*, Lorraine Hansberry does not reject integration or the economic and moral promise of the American dream; rather, she remains loyal to this dream while looking, realistically, at its incomplete realization. Once we recognize this dual vision, we can accept the play's ironic nuances as deliberate social commentaries by Hansberry rather than as the "unintentional" irony that Bigsby attributes to the work. Indeed, a curiously persistent refusal to credit Hansberry with a capacity for intentional irony has led some critics to interpret the play's thematic conflicts as mere confusion, contradiction, or eclecticism. Isaacs, for example, cannot easily reconcile Hansberry's intense concern for her race with her ideal of human reconciliation. But the play's complex view of Black self-esteem and human solidarity, as compatible is no more "contradictory" than Du Bios famous, well-considered ideal of ethnic self-awareness co-existing with human unity, or Fanon's emphasis on an ideal internationalism that also accommodates national identities and roles.

The word 'solidarity' in the passage means:

A. comradeship

B. animosity

C. territory

D. discord

Ans ✅ A. A

❌ B. B

❌ C. C

❌ D. D

Question ID : **2233951005**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.9

In each of the statements below, a part of the sentence is highlighted. Out of the four options that follow, choose the one that best replaces the highlighted phrase.

The small child does whatever his father **was done**.

A. was done

B. did

C. had done

D. no improvement

Ans ❌ A. A

✅ B. B

❌ C. C

❌ D. D

Question ID : **2233951011**

Status : **Answered**

Chosen Option : **B**

Q.10

In each of the following sentences, a part of the sentence is underlined. Beneath each sentence, four/five different ways of phrasing the underlined part are indicated. Choose the best alternative from among the four/five.

I think *everybody in this office works faster than* me.

A. everybody in this office works faster than me

B. everybody in this office works faster than I

C. everybody in this office works more quickly than me

D. everybody in this office works more quickly than I do

Ans   ✗ A. A

  ✔ B. B

  ✗ C. C

  ✗ D. D

Question ID : **2233951008**
Status : **Answered**
Chosen Option : **A**

Q.11

The first and the last parts of the sentence are marked 1 and 6. The rest of the sentence is split into four parts and marked P, Q, R and S. These four parts are *not* given in their proper order. Read the sentences and find out which of the five combinations is correct.

1. The power and pride

P. for in the courage

Q. of Sparta was above all

R. discipline and skill of these troops

S. in its army,

6. it found its security and its ideal.

A. SPRQ

B. PQRS

C. QSPR

D. PRQS

Ans   ✗ A. A

  ✗ B. B

  ✔ C. C

  ✗ D. D

Question ID : **2233951007**
Status : **Answered**
Chosen Option : **C**

Q.12

In the following questions, a word is given followed by four alternatives marked a–d. Select the alternative that <u>conveys the same meaning</u> as the word given.

AMPLY

A. sufficiently

B. to dress

C. prior

D. a brief account of some interesting event or incident

Ans ✔ A. A

✗ B. B

✗ C. C

✗ D. D

Question ID : **2233951009**

Status : **Answered**

Chosen Option : **A**

Q.13

The passage given below is followed by questions based on its content. After reading the passage, choose the best answer to each question. Answer all questions following the passage on the basis of what is stated or implied in the passage.

In *Raisin in the Sun*, Lorraine Hansberry does not reject integration or the economic and moral promise of the American dream; rather, she remains loyal to this dream while looking, realistically, at its incomplete realization. Once we recognize this dual vision, we can accept the play's ironic nuances as deliberate social commentaries by Hansberry rather than as the "unintentional" irony that Bigsby attributes to the work. Indeed, a curiously persistent refusal to credit Hansberry with a capacity for intentional irony has led some critics to interpret the play's thematic conflicts as mere confusion, contradiction, or eclecticism. Isaacs, for example, cannot easily reconcile Hansberry's intense concern for her race with her ideal of human reconciliation. But the play's complex view of Black self-esteem and human solidarity, as compatible is no more "contradictory" than Du Bios famous, well-considered ideal of ethnic self-awareness co-existing with human unity, or Fanon's emphasis on an ideal internationalism that also accommodates national identities and roles.

The author's primary purpose in this passage is to:

A. explain some critics refusal to consider Raisin in the Sun a deliberately ironic play.

B. affirm the thematic coherence underlying Raisin in the Sun.

C. analyze the fundamental dramatic conflicts in Raisin in the Sun.

D. justify the inclusion of contradictory elements in Raisin in the Sun.

Ans ✗ A. A

✔ B. B

✗ C. C

✗ D. D

Question ID : **2233951001**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.14

The passage given below is followed by questions based on its content. After reading the passage, choose the best answer to each question. Answer all questions following the passage on the basis of what is stated or implied in the passage.

In *Raisin in the Sun*, Lorraine Hansberry does not reject integration or the economic and moral promise of the American dream; rather, she remains loyal to this dream while looking, realistically, at its incomplete realization. Once we recognize this dual vision, we can accept the play's ironic nuances as deliberate social commentaries by Hansberry rather than as the "unintentional" irony that Bigsby attributes to the work. Indeed, a curiously persistent refusal to credit Hansberry with a capacity for intentional irony has led some critics to interpret the play's thematic conflicts as mere confusion, contradiction, or eclecticism. Isaacs, for example, cannot easily reconcile Hansberry's intense concern for her race with her ideal of human reconciliation. But the play's complex view of Black self-esteem and human solidarity, as compatible is no more "contradictory" than Du Bios famous, well-considered ideal of ethnic self-awareness co-existing with human unity, or Fanon's emphasis on an ideal internationalism that also accommodates national identities and roles.

The author of the passage would probably consider which of the following judgments to be most similar to the reasoning of critics described:

A. The world is certainly flat; therefore, the person proposing to sail around it is unquestionably foolhardy.

B. Radioactivity cannot be directed perceived, therefore, a scientist could not possibly control it in a laboratory.

C. The painter of this picture could not intend it to be funny; therefore, its humor must result from a lack of skill.

D. Traditional social mores are beneficial to culture; therefore, anyone who deviates from them acts destructively.

Ans   ✗ A. A

       ✗ B. B

       ✓ C. C

       ✗ D. D

Question ID : **2233951004**
Status : **Answered**
Chosen Option : **D**

Q.15

There are few sentences in each question. Each sentence has pairs of words/ phrases that are italicized/ highlighted. From the italicized/ highlighted word(s)/phrase(s), select the most appropriate word(s)/phrase(s) to form correct sentences. Then choose the best option.

i. Malaria is *pandemic [A]/endemic [B]* to the areas where mosquitoes breed.

ii. *The cleaner scunged [A]/ scrunched [B]* the trash cans for reuse.

iii. His work consists *in [A]/of [B]* dealing with people.

iv. The child *tumbled [A]/stumbled [B]* over the stone.

v. He and I intend to leave *to [A]/for [B]* USA after two days.

A. BBABB

B. ABABB

C. BBABA

D. BAABB

Ans   ✔ A. A

✘ B. B

✘ C. C

✘ D. D

Question ID : **2233951006**
Status : **Answered**
Chosen Option : **B**

Section : **Mathematics**

Q.1

The vectors $AB = 3i + 4k$ and $AC = 5i - 2j + 4k$ are the sides of a triangle ABC,

the length of the median through 'A' is:

A. $\sqrt{18}$

B. $\sqrt{72}$

C. $\sqrt{33}$

D. $\sqrt{288}$

Ans   ✘ A. A

✘ B. B

✔ C. C

✘ D. D

Question ID : **2233951042**
Status : **Not Attempted and Marked For Review**
Chosen Option : **--**

Q.2

The common tangent to the conic $x^2 = 6y$ and $2x^2 - 4y^2 = 9$

A. $x - y = \dfrac{3}{2}$

B. $x + y = 1$

C. $x + y = \dfrac{9}{2}$

D. $x - y = 1$

Ans   ✔ A. A

 ✘ B. B

 ✘ C. C

 ✘ D. D

Question ID :	**2233951035**
Status :	**Not Attempted and Marked For Review**
Chosen Option :	--

Q.3

If the two circles $(x-1)^2 + (y-3)^2 = r^2$ and $x^2 + y^2 - 8x + 2y + 8 = 0$ intersect

in two distinct points then

A. $r > 2$

B. $2 < r < 8$

C. $r < 2$

D. $r = 2$

Ans   ✘ A. A

 ✔ B. B

 ✘ C. C

 ✘ D. D

Question ID :	**2233951033**
Status :	**Not Attempted and Marked For Review**
Chosen Option :	--

Q.4

$$\sum_{m=1}^{n} \tan^{-1}\left(\frac{2m}{m^4 + m^2 + 2}\right) =$$

A. $\tan^{-1}\left(n^2 + n + 1\right)$

B. $\tan^{-1}\left(n^2 - n + 1\right)$

C. $\tan^{-1}\left(\frac{n^2 + n}{n^2 + n + 2}\right)$

D. None of these

Ans ✗ A. A

✗ B. B

✔ C. C

✗ D. D

Question ID :	**2233951040**
Status :	**Not Attempted and Marked For Review**
Chosen Option :	**--**

Q.5

$$\int \frac{\sin^8 x - \cos^8 x}{1 - 2\sin^2 x \cos^2 x}\, dx = \underline{\quad}$$

A. $\frac{1}{2}\sin 2x$

B. $-\frac{1}{2}\sin 2x$

C. $\frac{1}{2}\cos 2x$

D. $-\sin^2 x$

Ans ✗ A. A

✔ B. B

✗ C. C

✗ D. D

Question ID :	**2233951027**
Status :	**Not Attempted and Marked For Review**
Chosen Option :	**--**

Q.6 The point $(3,4)$ is the focus and $2x - 3y + 5 = 0$ is the directrix of a parabola. Its

latus rectum is

A. $\dfrac{2}{\sqrt{13}}$

B. $\dfrac{4}{\sqrt{13}}$

C. $\dfrac{1}{\sqrt{13}}$

D. $\dfrac{3}{\sqrt{13}}$

Ans ✔ A. A

✘ B. B

✘ C. C

✘ D. D

Question ID : **2233951034**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.7 If $x_1 x_2 \ldots\ldots x_n$ are n observations such that $\sum_{i=1}^{n} x_i^2 = 400$, and $\sum_{i=1}^{n} x_i = 80$ then the

least value of $n =$

A. 12

B. 15

C. 16

D. 18

Ans ✘ A. A

✘ B. B

✔ C. C

✘ D. D

Question ID : **2233951036**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.8

The equation of a straight line passing through the point $(1, 2)$ and inclined at 45^0 to

the line $y = 2x + 1$ is:

A. $5x + y = 7$

B. $3x + y = 5$

C. $x + y = 3$

D. $x - y + 1 = 0$

Ans ✗ A. A

✔ B. B

✗ C. C

✗ D. D

Question ID : **2233951031**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.9

The area enclosed between the curve $y^2 = x$ and $y = |x|$ is

A. 2/3

B. 1

C. 1/6

D. 1/3

Ans ✗ A. A

✗ B. B

✗ C. C

✔ D. D

Question ID : **2233951029**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.10

If $P = \begin{bmatrix} 1 & \alpha & 3 \\ 1 & 3 & 3 \\ 2 & 4 & 4 \end{bmatrix}$ is the adjoint of a 3×3 matrix 'A' and $|A| = 4$ then 'α' is

equal to

A. 5

B. 0

C. 4

D. 11

Ans ✗ A. A

✗ B. B

✗ C. C

✔ D. D

Question ID : **2233951016**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.11   Let α and β be the roots of the equation $px^2 + qx + r = 0$, $p \neq 0$. If p, q, r in A.P

and $\dfrac{1}{\alpha} + \dfrac{1}{\beta} = 4$ then the value of $|\alpha - \beta|$ is

A. $\dfrac{\sqrt{34}}{9}$

B. $\dfrac{2\sqrt{13}}{9}$

C. $\dfrac{\sqrt{61}}{9}$

D. $\dfrac{2\sqrt{17}}{9}$

Ans   ✗ A. A

     ✔ B. B

     ✗ C. C

     ✗ D. D

Question ID :	**2233951018**
Status :	**Not Attempted and Marked For Review**
Chosen Option :	**--**

Q.12

The symbolic form of p and **not** q is:

A. $p \wedge (\sim q)$

B. $p \vee (\sim q)$

C. $(\sim p) \wedge q$

D. $(\sim p) \vee q$

Ans   ✔ A. A

     ✗ B. B

     ✗ C. C

     ✗ D. D

Question ID :	**2233951045**
Status :	**Answered**
Chosen Option :	**A**

Q.13

The lines $\dfrac{x-2}{1} = \dfrac{y-3}{1} = \dfrac{z-4}{-k}$ and $\dfrac{x-1}{k} = \dfrac{y-4}{2} = \dfrac{z-5}{1}$ are coplanar if

A. $k = 1$ or -1

B. $k = 0$ or -3

C. $k = 3$ or -3

D. $k = 0$ or-1

Ans ✖ A. A

　　　 ✔ B. B

　　　 ✖ C. C

　　　 ✖ D. D

Question ID :	**2233951043**
Status :	**Not Attempted and Marked For Review**
Chosen Option :	**--**

Q.14

$$3\sin x + 4\cos x = 5 \text{ then } 6\tan\frac{x}{2} - 9\tan^2\frac{x}{2} =$$

A. 0

B. 1

C. 3

D. 4

Ans ✖ A. A

　　　 ✔ B. B

　　　 ✖ C. C

　　　 ✖ D. D

Question ID :	**2233951039**
Status :	**Answered**
Chosen Option :	**A**

Q.15

If $f(x) = \begin{vmatrix} \cos x & 1 & 0 \\ 1 & 2\cos x & 1 \\ 0 & 1 & 2\cos x \end{vmatrix}$ then $\int_0^{\pi/2} f(x)\,dx = $ ___

A. 1/4

B. -1/3

C. 1/2

D. None

Ans ✗ A. A

✔ B. B

✗ C. C

✗ D. D

Question ID : **2233951028**
Status : **Answered**
Chosen Option : **D**

Q.16

The system of equations $3x + 2y + z = 6, 3x + 4y + 3z = 14, \ 6x + 10y + 8z = a$

has infinite number of solutions if $a = $ ___

A. 8

B. 12

C. 24

D. 36

Ans ✗ A. A

✗ B. B

✗ C. C

✔ D. D

Question ID : **2233951017**
Status : **Not Attempted and Marked For Review**
Chosen Option : **--**

Q.17 The mean and variance of binomial variate X are 4 and $\sqrt{3}$ respectively the

$P(x \geq 1) =$

A. $1 - \left(\dfrac{1}{4}\right)^{16}$

B. $1 - \left(\dfrac{3}{4}\right)^{16}$

C. $1 - \left(\dfrac{2}{3}\right)^{16}$

D. $1 - \left(\dfrac{1}{3}\right)^{16}$

Ans ✗ A. A

✔ B. B

✗ C. C

✗ D. D

Question ID :	**2233951038**
Status :	**Not Attempted and Marked For Review**
Chosen Option :	**--**

Q.18 In $\triangle ABC$, If $\dfrac{\sin 3B}{\sin B} = \left(\dfrac{a^2 - c^2}{2ac}\right)^2$, then a^2, b^2, c^2 are in:

A. A.P

B. G.P

C. H.P

D. None

Ans ✔ A. A

✗ B. B

✗ C. C

✗ D. D

Question ID :	**2233951041**
Status :	**Answered**
Chosen Option :	**C**

Q.19 If 'Δ' is the area of the triangle formed by the positive X-axis and the normal and

tangent to the circle $x^2 + y^2 = 4$ at $\left(1, \sqrt{3}\right)$ then $\Delta =$

A. $\dfrac{\sqrt{3}}{2}$

B. $\sqrt{3}$

C. $2\sqrt{3}$

D. 6

Ans ✗ A. A

✗ B. B

✔ C. C

✗ D. D

Question ID : **2233951025**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.20

The value of 'P' for which the function $f(x) = \dfrac{\left(4^x - 1\right)^3}{\sin\dfrac{x}{p}\log\left(1 + \dfrac{x^2}{3}\right)}$ for

$x \neq 0,\ f(x) = 12\left(\log 4\right)^3$ for $x = 0$ is continuous at $x = 0$ is

A. $2\log 4$

B. $4\log 4$

C. 2

D. 4

Ans ✗ A. A

✗ B. B

✗ C. C

✔ D. D

Question ID : **2233951023**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.21

$$\lim_{x \to 0} \frac{\sqrt{1+x^2} - \sqrt{1-x+x^2}}{3^x - 1} = \underline{\hspace{1cm}}$$

A. $\log 9$

B. $\dfrac{1}{\log 9}$

C. $\log 3$

D. $\dfrac{1}{\log 3}$

Ans   ✗ A. A

    ✔ B. B

    ✗ C. C

    ✗ D. D

Question ID : **2233951022**
Status : **Answered**
Chosen Option : **C**

Q.22

The image of the point $(3, 2, 1)$ in the plane $2x - y + 3z = 7$ is:

A. $(1, 2, 3)$

B. $(2, 3, 1)$

C. $(3, 2, 1)$

D. $(2, 1, 3)$

Ans   ✗ A. A

    ✗ B. B

    ✔ C. C

    ✗ D. D

Question ID : **2233951044**
Status : **Not Attempted and Marked For Review**
Chosen Option : **--**

Q.23

It is given that the events A and B are such that $P(A) = \dfrac{1}{4}$, $P(A/B) = \dfrac{1}{2}$ and

$P(B/A) = \dfrac{2}{3}$ then $P(B)$ is:

A. 1/3

B. 2/3

C. 1/2

D. 1/6

Ans   ✔ A. A

     ✘ B. B

     ✘ C. C

     ✘ D. D

Question ID : **2233951037**
Status : **Answered**
Chosen Option : **A**

Q.24

If $x^2 + x + 1 = 0$ then the value of $\left(x + \dfrac{1}{x}\right)^2 + \left(x^2 + \dfrac{1}{x^2}\right)^2 + \ldots + \left(x^{27} + \dfrac{1}{x^{27}}\right)^2$

is

A. 27

B. 72

C. 45

D. 54

Ans   ✘ A. A

     ✘ B. B

     ✘ C. C

     ✔ D. D

Question ID : **2233951021**
Status : **Not Attempted and Marked For Review**
Chosen Option : **--**

Q.25

If $y = y(x)$ is the solution of the differential equation $\left(\dfrac{2 + \sin x}{y + 1} \right) \dfrac{dy}{dx} + \cos x = 0$

with $y(0) = 1$ then $y\left(\dfrac{\pi}{2} \right) =$

A. 1/3

B. 2/3

C. 1

D. 4/3

Ans ✔ A. A

✘ B. B

✘ C. C

✘ D. D

Question ID : **2233951030**

Status : **Answered**

Chosen Option : **C**

Q.26

If $x^y = e^{x-y}$ then $\dfrac{dy}{dx} =$

A. $\dfrac{\log x}{1 + \log x}$

B. $\dfrac{\log x}{(1 + \log x)^2}$

C. $\dfrac{1 - x}{y + x \log y}$

D. $\dfrac{x - y}{1 + \log x}$

Ans ✘ A. A

✔ B. B

✘ C. C

✘ D. D

Question ID : **2233951024**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.27

The integral part of $\left(\sqrt{2}+1\right)^{6}$ is

   A. 197

   B. 196

   C. 175

   D. 176

Ans ✔ A. A

   ✘ B. B

   ✘ C. C

   ✘ D. D

Question ID : **2233951019**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.28

The domains of $\dfrac{\sqrt{2+x}+\sqrt{2-x}}{x}$ is

   A. $\left[-2,2\right]$

   B. $\left(-2,2\right)$

   C. $\left[-2,0\right)\cup\left(0,2\right]$

   D. $R-\{0\}$

Ans ✘ A. A

   ✘ B. B

   ✔ C. C

   ✘ D. D

Question ID : **2233951020**

Status : **Answered**

Chosen Option : **B**

Q.29

The condition that $f(x) = ax^3 + bx^2 + cx + d$ has no extreme value is

A. $b^2 = 4ac$

B. $b^2 = 3ac$

C. $b^2 < 3ac$

D. $b^2 > 3ac$

Ans ✗ A. A

✗ B. B

✓ C. C

✗ D. D

Question ID : **2233951026**
Status : **Answered**
Chosen Option : **A**

Q.30

The length of the chord intercepted by the circle $x^2 + y^2 - 4x + 6y - 12 = 0$ on the line $4x + 3y + 1 = 0$ is:

A. 1

B. 4

C. 10

D. 8

Ans ✗ A. A

✗ B. B

✓ C. C

✗ D. D

Question ID : **2233951032**
Status : **Not Attempted and Marked For Review**
Chosen Option : **--**

Section : **Computer Awareness**

Q.1

To protect yourself from computer hacker intrusions you should install a _____.

A. Firewall

B. Maller

C. Macro

D. None of the above

Ans ✓ A. A

✗ B. B

✗ C. C

✗ D. D

Question ID : **2233951052**
Status : **Answered**
Chosen Option : **A**

Q.2

Manchester mark I computer was based on _____.

A. Stored program concept

B. Processing concept

C. Electronic change concept

D. All of the above

Ans ✔ A. A

✘ B. B

✘ C. C

✘ D. D

Question ID : **2233951066**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.3

Computers built in the first generation used _____ devices.

A. Transistor

B. Electro-mechanical

C. Electrical

D. All of the above

Ans ✘ A. A

✔ B. B

✘ C. C

✘ D. D

Question ID : **2233951067**

Status : **Answered**

Chosen Option : **B**

Q.4

One of the following units interprets program instructions and initiates operations?

A. Input-output unit

B. Memory unit

C. Arithmetic Logic unit

D. Control unit

Ans ✘ A. A

✘ B. B

✘ C. C

✔ D. D

Question ID : **2233951047**

Status : **Answered**

Chosen Option : **D**

Q.5

To access a supercomputer, users often used a _____.

A. Terminal

B. Node

C. Desktop

D. Handheld

Ans ✔ A. A

✘ B. B

✘ C. C

✘ D. D

Question ID : **2233951072**

Status : **Not Attempted and Marked For Review**

Chosen Option : --

Q.6

Binary-Coded-Decimal (BCD) numbers express each digit as a_____.

A. Bit

B. Byte

C. Nibble

D. All of the above

Ans ✘ A. A

✘ B. B

✔ C. C

✘ D. D

Question ID : **2233951070**

Status : **Not Attempted and Marked For Review**

Chosen Option : --

Q.7

A program designed to destroy data on a computer which can travel to infect other computers is called a_____.

A. Disease

B. Torpedo

C. Virus

D. None of these

Ans ✘ A. A

✘ B. B

✔ C. C

✘ D. D

Question ID : **2233951062**

Status : **Answered**

Chosen Option : **C**

Q.8 Most application software today come with an interface called _____.

A. Graphical user interface

B. Character user interface

C. Iron user interface

D. Button user interface

Ans   ✔ A. A

✘ B. B

✘ C. C

✘ D. D

Question ID : **2233951061**
Status : **Answered**
Chosen Option : **A**

Q.9 A device that connects to a network without the use of a cable is said to be _____.

A. Distributed

B. Non-wired

C. Centralized

D. Wireless

Ans   ✘ A. A

✘ B. B

✘ C. C

✔ D. D

Question ID : **2233951049**
Status : **Answered**
Chosen Option : **D**

Q.10 Computer networking devices are also called as _____.

A. Inter working unit

B. System equipment

C. Projecting unit

D. Software defined unit

Ans   ✔ A. A

✘ B. B

✘ C. C

✘ D. D

Question ID : **2233951057**
Status : **Not Attempted and Marked For Review**
Chosen Option : **--**

Q.11   A device that connects multiple network segments along the data link layer is called

as _____.

A. Multiplexer

B. Modem

C. Bridge

D. Hub

Ans   ✗ A. A

✗ B. B

✔ C. C

✗ D. D

Question ID : **2233951060**
Status : **Answered**
Chosen Option : **D**

Q.12   ASCII stands for_____.

A. American special computer for information interaction

B. American standard computer for information interchange

C. American standard code for information interchange

D. American special code for information interaction

Ans   ✗ A. A

✗ B. B

✔ C. C

✗ D. D

Question ID : **2233951058**
Status : **Answered**
Chosen Option : **B**

Q.13   What type of software is most useful for the creation of brochures, posters and

newsletters?

A. Spread sheet software

B. Web authorizing software

C. Multimedia authorizing software

D. Desktop publishing software

Ans   ✗ A. A

✗ B. B

✗ C. C

✔ D. D

Question ID : **2233951063**
Status : **Answered**
Chosen Option : **C**

Q.14   Data processing computer built using conventional architecture is known as:

A. Super computer

B. Mainframe

C. Micro computer

D. Mini computer

Ans   ✗ A. A

✓ B. B

✗ C. C

✗ D. D

Question ID : **2233951068**
Status : **Answered**
Chosen Option : **A**

Q.15   What type of computers are client computers (most of the time) in a client-server system?

A. Mainframe

B. Mini-computer

C. Macro computer

D. None of the above

Ans   ✗ A. A

✗ B. B

✓ C. C

✗ D. D

Question ID : **2233951051**
Status : **Answered**
Chosen Option : **A**

Q.16   The computer's capability of distinguishing spoken words is called _____.

A. Voice analysis

B. Voice recognition

C. Speech acknowledgement

D. Speech interpretation

Ans   ✗ A. A

✓ B. B

✗ C. C

✗ D. D

Question ID : **2233951054**
Status : **Answered**
Chosen Option : **A**

Q.17

Compiling creates a(n) _____.

A. Error-free program

B. Program specification

C. Subroutine

D. Executable program

Ans ✗ A. A

✗ B. B

✗ C. C

✓ D. D

Question ID : **2233951048**

Status : **Not Attempted and Marked For Review**

Chosen Option : --

Q.18

The ability of an OS to run more than one application at a time is called _____.

A. Multitasking

B. Object oriented programming

C. Multi-threading

D. Time sharing

Ans ✓ A. A

✗ B. B

✗ C. C

✗ D. D

Question ID : **2233951046**

Status : **Answered**

Chosen Option : **A**

Q.19

Punched cards read-write memory was primarily designed by _____.

A. Powers

B. Pascal

C. Jacquard

D. Herman Hollerith

Ans ✗ A. A

✗ B. B

✗ C. C

✓ D. D

Question ID : **2233951075**

Status : **Not Attempted and Marked For Review**

Chosen Option : --

Q.20   Which computer system is mainly used in weather forecasting and disaster control?

A. Super computer

B. Mainframe computer

C. Micro computer

D. Personal computer

Ans   ✔ A. A

✘ B. B

✘ C. C

✘ D. D

Question ID : **2233951073**

Status : **Answered**

Chosen Option : **B**

Q.21   A device for changing the connection on a connector to a different configuration

is _____ .

A. A converter

B. A component

C. An attachment

D. An adapter

Ans   ✘ A. A

✘ B. B

✘ C. C

✔ D. D

Question ID : **2233951055**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.22   Which of the following operating systems is *not* owned and licensed by a company?

A. Linux

B. Mac

C. Unix

D. None of these

Ans   ✘ A. A

✘ B. B

✔ C. C

✘ D. D

Question ID : **2233951059**

Status : **Answered**

Chosen Option : **A**

Q.23

A reusable CD is labelled as:

A. R

B. W

C. HD

D. RW

Ans ✗ A. A

✗ B. B

✗ C. C

✓ D. D

Question ID : **2233951069**

Status : **Answered**

Chosen Option : **D**

Q.24

In windows ME, What does M stand for?

A. Millennium

B. Micro Expert

C. Macro Expert

D. Multi Expert

Ans ✓ A. A

✗ B. B

✗ C. C

✗ D. D

Question ID : **2233951065**

Status : **Answered**

Chosen Option : **A**

Q.25

The unit in the communication receiver which generate data is called _____.

A. Data center equipment

B. Data receiving equipment

C. Data terminal equipment

D. Domain name server

Ans ✗ A. A

✗ B. B

✓ C. C

✗ D. D

Question ID : **2233951064**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.26

The main function of CPU is _____.

A. To provide external storage of text

B. To communicate with the operator

C. To read, interpret and process the information and instruction

D. To provide a hard copy

Ans ✗ A. A

    ✗ B. B

    ✔ C. C

    ✗ D. D

Question ID : **2233951074**
Status : **Answered**
Chosen Option : **C**

Q.27

Where is the disk put in a computer?

A. In the hard drive

B. In the disk drive

C. Into the CPU

D. In the modem

Ans ✗ A. A

    ✔ B. B

    ✗ C. C

    ✗ D. D

Question ID : **2233951071**
Status : **Answered**
Chosen Option : **C**

Q.28

To view information on the web you must have a _____.

A. Cable modem

B. Web browser

C. Domain name server

D. Hypertext viewer

Ans ✗ A. A

    ✔ B. B

    ✗ C. C

    ✗ D. D

Question ID : **2233951053**
Status : **Not Attempted and Marked For Review**
Chosen Option : **--**

Q.29   What is an e-mail attachment?

A. A receipt sent by the recipient.

B. A separate document from another program sent along with an e-mail.

C. A malicious parasite that feeds on your messages and destroys and contents.

D. A friend to whom e-mail is sent regularly.

Ans   ✗ A. A

✔ B. B

✗ C. C

✗ D. D

Question ID : **2233951050**

Status : **Answered**

Chosen Option : **B**

Q.30   Which of the following is **not** a telecommunication equipment?

A. Modem

B. Fax-Machine

C. Tele-Printer

D. Hub

Ans   ✗ A. A

✗ B. B

✗ C. C

✔ D. D

Question ID : **2233951056**

Status : **Answered**

Chosen Option : **A**

Section : **General Knowledge-IT and Science Related**

Q.1   Nuclear fission is caused by the impact of _____.

A. Proton

B. Electron

C. Neutron

D. None of these

Ans   ✗ A. A

✗ B. B

✔ C. C

✗ D. D

Question ID : **2233951076**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.2

Which object falls down faster in vacuum?

A. A wooden ball

B. A feather

C. A steel ball

D. All will fall with the same speed.

Ans   ✗ A. A

✗ B. B

✗ C. C

✓ D. D

Question ID : **2233951088**

Status : **Answered**

Chosen Option : **C**

Q.3

Optic fibres are mainly used for_____.

A. Transmitting light between source and receiver.

B. Transmitting light between receiver and source.

C. Transmitting RF energy from source and receiver.

D. Transmitting RF energy from receiver and source.

Ans   ✓ A. A

✗ B. B

✗ C. C

✗ D. D

Question ID : **2233951079**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.4

Old-written material, which _**cannot**_ be read easily, can be read by_____.

A. Cosmic rays

B. Ultraviolet rays

C. Infrared rays

D. None of these

Ans   ✗ A. A

✗ B. B

✓ C. C

✗ D. D

Question ID : **2233951080**

Status : **Answered**

Chosen Option : **C**

Q.5

Which of the following is used as a coolant in nuclear reactors?

A. Heavy water

B. Cadmium

C. Liquid Sodium

D. Graphite

Ans ✖ A. A

✖ B. B

✔ C. C

✖ D. D

Question ID : **2233951077**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.6

Devices on one network can communicate with devices on another network via a

_____ .

A. File server

B. Printer server

C. Utility server

D. Gateway server

Ans ✖ A. A

✖ B. B

✖ C. C

✔ D. D

Question ID : **2233951094**

Status : **Answered**

Chosen Option : **D**

Q.7

Which of the following is *not* a characteristic of the first generation of computers?

A. Vaccum tubes

B. Integrated circuits

C. Magnetic drums

D. Punched cards

Ans ✖ A. A

✔ B. B

✖ C. C

✖ D. D

Question ID : **2233951092**

Status : **Answered**

Chosen Option : **B**

Q.8

Which of the following has least penetrating power?

A. Alpha particles

B. Beta particles

C. Gamma rays

D. All have the same penetrating power

Ans   ✔ A. A

X B. B

X C. C

X D. D

Question ID : **2233951078**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.9

Convex mirror makes a good rear view mirror for a car because _____.

A. it does not form diminished images

B. it has no focal point

C. its images can be thrown on a screen

D. it forms erect, reduced images

Ans   X A. A

X B. B

X C. C

✔ D. D

Question ID : **2233951086**

Status : **Answered**

Chosen Option : **A**

Q.10

Validation in computers refers to _____.

A. process is checked

B. product is checked

C. developer's performance is checked

D. checking of software products.

Ans   X A. A

X B. B

X C. C

✔ D. D

Question ID : **2233951095**

Status : **Answered**

Chosen Option : **A**

Q.11

Who amongst the following laid the foundation of nuclear science in our country?

A. Vikram Sarabhai

B. Homi J. Bhabha

C. M. G. K. Menon

D. Raja Ramanna

Ans   ✗ A. A

         ✔ B. B

         ✗ C. C

         ✗ D. D

Question ID : **2233951082**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.12

When light passes from air into glass it experiences change in _____.

A. Frequency and wavelength

B. Frequency and speed

C. Wavelength and speed

D. Frequency, wavelength and speed

Ans   ✗ A. A

         ✗ B. B

         ✔ C. C

         ✗ D. D

Question ID : **2233951085**

Status : **Answered**

Chosen Option : **A**

Q.13

The nuclides having the same number of neutrons but different number of protons or mass number are known as _____.

A. Isobars

B. Isoelectronic

C. Isotopes

D. Isotones

Ans   ✗ A. A

         ✗ B. B

         ✗ C. C

         ✔ D. D

Question ID : **2233951087**

Status : **Answered**

Chosen Option : **C**

Q.14

Bariatric Surgery makes changes to a person's _____.

A. Heart

B. Lungs

C. Nasal passages

D. Digestive system

Ans ✗ A. A

✗ B. B

✗ C. C

✔ D. D

Question ID : **2233951097**
Status : **Answered**
Chosen Option : **D**

Q.15

In July 2019, the spacecraft Chandrayaan-2 was launched from which Indian state?

A. Gujarat

B. Andhra Pradesh

C. Karnataka

D. Maharashtra

Ans ✗ A. A

✔ B. B

✗ C. C

✗ D. D

Question ID : **2233951096**
Status : **Answered**
Chosen Option : **C**

Q.16

In 1974, the first nuclear test of Pokhran was code named as _____.

A. Dancing Buddha

B. Blessing Buddha

C. Smiling Buddha

D. Laughing Buddha

Ans ✗ A. A

✗ B. B

✔ C. C

✗ D. D

Question ID : **2233951099**
Status : **Answered**
Chosen Option : **D**

Q.17

What happens to the level of mercury in the barometer tube when it is taken down a coalmine?

A. Fall

B. Remains unaltered

C. Rises

D. Rises and then falls

Ans   ✗ A. A

   ✗ B. B

   ✔ C. C

   ✗ D. D

Question ID : **2233951083**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.18

Which layer of the OSI is responsible for data translation?

A. Application layer

B. Network layer

C. Presentation layer

D. Session layer

Ans   ✗ A. A

   ✗ B. B

   ✔ C. C

   ✗ D. D

Question ID : **2233951093**

Status : **Answered**

Chosen Option : **D**

Q.19

A Jaz drive is used to produce a _____.

A. Specific type of MPEG coding for MP3 files

B. Driver file that allows instruments to be hooked up to PC

C. Removable storage media

D. Optical music media

Ans   ✗ A. A

   ✗ B. B

   ✔ C. C

   ✗ D. D

Question ID : **2233951091**

Status : **Answered**

Chosen Option : **B**

Q.20 The major source of our energy basically comes from _____.

A. Ocean

B. Sun

C. Atmosphere

D. Space

Ans ✗ A. A

✔ B. B

✗ C. C

✗ D. D

Question ID : **2233951084**

Status : **Answered**

Chosen Option : **B**

Q.21 Which of the following cities hosted an international summit which adopted a declaration on digital health?

A. Dhaka

B. Paris

C. Delhi

D. Toronto

Ans ✗ A. A

✗ B. B

✔ C. C

✗ D. D

Question ID : **2233951100**

Status : **Not Attempted and Marked For Review**

Chosen Option : **--**

Q.22 Dolly, the first cloned living being created at Roslin Institute in Scotland was a _____.

A. Cow

B. Dog

C. Sheep

D. Cat

Ans ✗ A. A

✗ B. B

✔ C. C

✗ D. D

Question ID : **2233951098**

Status : **Answered**

Chosen Option : **D**

Q.23 The speed of printer is generally measured in _____.

   A. LPS

   B. PPM

   C. PPS

   D. DPI

Ans ✗ A. A

   ✓ B. B

   ✗ C. C

   ✗ D. D

Question ID : **2233951090**
Status : **Answered**
Chosen Option : **D**

Q.24 Digital design often starts by constructing a _____ table.

   A. Standard

   B. Truth

   C. Two-stage

   D. Two-dimensional

Ans ✗ A. A

   ✓ B. B

   ✗ C. C

   ✗ D. D

Question ID : **2233951089**
Status : **Not Attempted and Marked For Review**
Chosen Option : **--**

Q.25 The best colour(s) for a sun umbrella will be _____.

   A. Black

   B. Black on top & white on the inside

   C. White on top & black on the inside

   D. Printed with all the seven colours of the rainbow

Ans ✗ A. A

   ✗ B. B

   ✓ C. C

   ✗ D. D

Question ID : **2233951081**
Status : **Answered**
Chosen Option : **A**