DU PhD in Computer Science

Topic:- CS PHD S2N_P1

1) Consider the following recursive function fun(x, y). What is the value of fun(4, 3)

```
int fun(int x, int y)
{
        if (x ==1)
                return y;
        return fun(x-1,  y+1);
}
```

[Question ID = 10768]

1. 13
   [Option ID = 43066]
2. 4
   [Option ID = 43068]
3. 6
   [Option ID = 43071]
4. 10
   [Option ID = 43072]

Correct Answer :-

- 6
  [Option ID = 43071]

2) What will be the value of x after execution of the following loop, if the initial value of x was 11?

```
for(int i=x--; i<2*x; x--)   {   i=i+x;   }
```

[Question ID = 10771]

1. 11
   [Option ID = 43078]
2. 0
   [Option ID = 43079]
3. Infinite loop
   [Option ID = 43080]
4. 9
   [Option ID = 43081]

Correct Answer :-

- 9
  [Option ID = 43081]

3) What will be the output of the following code?

```
#include
using namespace std;

int fun(int x = 0, int y = 0, int z)
{  return (x + y + z); }
```

```
int main()
{
    cout << fun(10);
    return 0;
}
```

[Question ID = 10772]

1. 10

[Option ID = 43082]

2. 0

[Option ID = 43084]

3. 20

[Option ID = 43086]

4. Compilation Error

[Option ID = 43088]

Correct Answer :-

- Compilation Error

[Option ID = 43088]

4) Which of the following type of class allows only one object of it to be created?

[Question ID = 10775]

1. Virtual class

[Option ID = 43093]

2. Abstract class

[Option ID = 43095]

3. Singleton class

[Option ID = 43096]

4. Friend class

[Option ID = 43097]

Correct Answer :-

- Singleton class

[Option ID = 43096]

5) What will be the value of z after execution of d = x && y || z++; if initial values of x, y and z are 1, 0 and 5 respectively.

[Question ID = 10776]

1. 6

[Option ID = 43098]

2. 5

[Option ID = 43100]

3. 0

[Option ID = 43102]

4. undefined

[Option ID = 43104]

Correct Answer :-

- 6

[Option ID = 43098]

6) A B-tree of order 4 is built from scratch by 10 successive insertions. What is the maximum number of node splitting operations that may take place?

[Question ID = 10779]

[Option ID = 43109]

2. 4

[Option ID = 43111]

3. 5

[Option ID = 43112]

4. 6

[Option ID = 43113]

Correct Answer :-

- 5

[Option ID = 43112]

7) Given two max heaps of size n each, what is the minimum possible time complexity to make a one max-heap of size 2n from elements of two max heaps?

[Question ID = 10780]

1. Θ (log n)

[Option ID = 43114]

2. O(log n) but not Θ (log n)

[Option ID = 43116]

3. O(n)

[Option ID = 43118]

4. $O(n^2)$ but not O(n)

[Option ID = 43120]

Correct Answer :-

- O(n)

[Option ID = 43118]

8) Suppose that we have numbers between 1 and 100 in a binary search tree and want to search for the number 55. Which of the following sequences CANNOT be the sequence of nodes examined?

[Question ID = 10783]

1. {10, 75, 64, 43, 60, 57, 55}

[Option ID = 43125]

2. {90, 12, 68, 34, 62, 45, 55}

[Option ID = 43127]

3. {9, 85, 47, 68, 43, 57, 55}

[Option ID = 43128]

4. {79, 14, 72, 56, 16, 53, 55}

[Option ID = 43129]

Correct Answer :-

- {9, 85, 47, 68, 43, 57, 55}

[Option ID = 43128]

9) Which of the following permutation can be obtained in the same order using a stack assuming that input is the sequence 5, 6, 7, 8, 9 in that order?

[Question ID = 10784]

1. 7, 8, 9, 5, 6

[Option ID = 43130]

2. 5, 9, 6, 7, 8

[Option ID = 43133]

3. 7, 8, 9, 6, 5

[Option ID = 43135]
7, 8, 9, 6, 5
[Option ID = 43137]

Correct Answer :-

- 7, 8, 9, 6, 5

[Option ID = 43135]

10) The following function reverse() is supposed to reverse a singly linked list.
There is one line missing at the end of the function.

```
/* Link list node */

struct node

{

        int data;

        struct node* next;

};


/* head_ref is a double pointer which points to head (or start) pointer

        of linked list */


static void reverse(struct node** head_ref)

{

        struct node* prev   = NULL;

        struct node* current = *head_ref;

        struct node* next;

        while (current != NULL)

        {

                next  = current->next;

                current->next = prev;

                prev = current;

                current = next;

        }

        /*ADD A STATEMENT HERE*/

}
```

What should be added in place of "/*ADD A STATEMENT HERE*/", so that the function correctly reverses a linked list.

[Question ID = 10787]

1. *head_ref = prev;

[Option ID = 43141]

2. *head_ref = current;

[Option ID = 43144]

4. *head_ref = NULL;

[Option ID = 43145]

Correct Answer :-

- *head_ref = prev;

[Option ID = 43141]

11) The recurrence relation

T(1) = 2

T(n) =3T(n/4)+n

has solution T(n) equal to

[Question ID = 10788]

1. O(n)

[Option ID = 43146]

2. O(log n)

[Option ID = 43148]

3. $O(n^{\log_4(3)})$

[Option ID = 43150]

4. None of these

[Option ID = 43152]

Correct Answer :-

- O(n)

[Option ID = 43146]

12) The characters a to h have the set of frequencies based on the first 8 Fibonacci numbers as follows:

a:1, b:1, c:2, d:3, e:5, f:8, g:13, h:21

A Huffman code is used to represent the characters. What is the sequence of characters corresponding to the following code : 110111100111010

[Question ID = 10791]

1. fdheg

[Option ID = 43158]

2. ecgdf

[Option ID = 43159]

3. dchfg

[Option ID = 43160]

4. fehdg

[Option ID = 43161]

Correct Answer :-

- fdheg

[Option ID = 43158]

13) If the tower of Hanoi problem is solved using divide and conquer approach then the running time to solve the problem with 'n' disks is

[Question ID = 10793]

1. O(n)

[Option ID = 43163]

[Option ID = 43165]

3. $O(2^n)$

[Option ID = 43167]

4. $O((1/2)^n)$

[Option ID = 43169]

Correct Answer :-

- $O(2^n)$

[Option ID = 43167]

---

14) Suppose we have a O(n) time algorithm that finds median of an unsorted array. Now consider a QuickSort implementation where we first find median using the above algorithm, then use median as pivot. What will be the worst case time complexity of this modified QuickSort.

[Question ID = 10794]

1. $O(n^2 \log n)$ but not $O(n^2)$

[Option ID = 43170]

2. $O(n^2)$ but not $O(n \log n)$

[Option ID = 43172]

3. $O(n \log \log n)$

[Option ID = 43174]

4. $O(n \log n)$

[Option ID = 43176]

Correct Answer :-

- $O(n \log n)$

[Option ID = 43176]

---

15) There are three members: x, y and z; in a committee. An issue will be decided 'yes' if and only if all three of them say 'yes'. Which of the following Boolean expression represents the above problem?

[Question ID = 10797]

1. x + y + z

[Option ID = 43181]

2. xy + xyz + yz

[Option ID = 43183]

3. xyz

[Option ID = 43184]

4. x' + y' + z'

[Option ID = 43185]

Correct Answer :-

- xyz

[Option ID = 43184]

---

16) _____ shift operation multiplies a signed binary number by 2.

[Question ID = 10798]

1. logical left

[Option ID = 43187]

2. logical right

[Option ID = 43189]

3. arithmetic left

[Option ID = 43191]

4. arithmetic right

[Option ID = 43193]

Answer :-

- arithmetic left

[Option ID = 43191]

17) In a byte-addressable RAM, an instruction at address 1206 is under execution. The address field of this instruction has the value 1755. The value at location 1755 is 2000. Size of an instruction is 2 bytes. What will be the contents of the Program Counter after the fetch phase of the instruction cycle?

[Question ID = 10801]

1. 1207

[Option ID = 43197]

2. 1208

[Option ID = 43199]

3. 1755

[Option ID = 43200]

4. 2000

[Option ID = 43201]

Correct Answer :-

- 1208

[Option ID = 43199]

18) Let P and Q be two propositions, $\neg (P \leftrightarrow Q)$ is equivalent to:

(I) $P \leftrightarrow \neg Q$

(II) $\neg P \leftrightarrow Q$

(III) $\neg P \leftrightarrow \neg Q$

(IV) $Q \rightarrow P$

[Question ID = 10802]

1. Only (I) and (II)

[Option ID = 43202]

2. Only (II) and (III)

[Option ID = 43204]

3. Only (III) and (IV)

[Option ID = 43206]

4. Only (III)

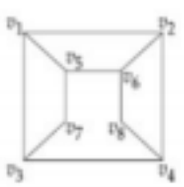
[Option ID = 43208]

Correct Answer :-

- Only (I) and (II)

[Option ID = 43202]

19) Consider the graph given below. The two distinct sets of vertices, which make the graph bipartite are:



[Question ID = 10805]

1. (v1,v4,v6) ; (v2, v3, v5, v7, v8)

[Option ID = 43214]

2. (v1, v4, v7, v8) ; (v2, v3, v5, v6)

[Option ID = 43215]

[Option ID = 43216]

4. (v1, v4, v6, v7, v8) ; (v2, v3, v5)

[Option ID = 43217]

Correct Answer :-

- (v1, v4, v6, v7) ; (v2, v3, v5, v8)

[Option ID = 43216]

20) Let S be a set of n elements. The number of ordered pairs in the largest and the smallest equivalence relation defined on the set S, respectively, are:

[Question ID = 10806]

1. n^2 and n

[Option ID = 43218]

2. n and n

[Option ID = 43220]

3. n^2 and 0

[Option ID = 43221]

4. n and 1

[Option ID = 43223]

Correct Answer :-

- n^2 and n

[Option ID = 43218]

21) How many time is "yes" printed by the following program ?

```
main()
{
   fork();
   fork();
    cout << "yes";
}
```

[Question ID = 10809]

1. Once

[Option ID = 43229]

2. Twice

[Option ID = 43231]

3. Four times

[Option ID = 43232]

4. Eight times

[Option ID = 43233]

Correct Answer :-

- Four times

[Option ID = 43232]

22) Consider a system with 32 bit virtual addresses and 1 KB page size. Why is it not possible to use one - level page tables for virtual to physical address translation?

[Question ID = 10810]

1. The large computation overhead in the translation process

[Option ID = 43236]

3. The amount of external fragmentation

[Option ID = 43238]

4. The amount of internal fragmentation

[Option ID = 43240]

Correct Answer :-

- The large memory overhead in maintaining page tables

[Option ID = 43236]

23) What is the maximum length of the cable (in km) for transmitting data at a rate of 500 Mbps in an Ethernet LAN with frames of size 10,000 bits? Assume the signal speed in the cable to be 2,00,000 km/s.

[Question ID = 10813]

1. 1

[Option ID = 43245]

2. 2

[Option ID = 43246]

3. 2.5

[Option ID = 43248]

4. 5

[Option ID = 43249]

Correct Answer :-

- 2

[Option ID = 43246]

24) Consider the following activities related to email

m1: Send an email from mail client to mail server

m2: Download an email from mailbox server to mail client

m3: Checking email on a browser

Which application level protocol is used in each of the activity:

[Question ID = 10814]

1. m1: HTTP; m2: SMTP; m3:POP

[Option ID = 43250]

2. m1:SMTP; m2:FTP; m3:HTTP

[Option ID = 43252]

3. m1:SMTP; m2: POP; m3: HTTP

[Option ID = 43254]

4. m1:POP; m2:SMTP; m3: HTTP

[Option ID = 43256]

Correct Answer :-

- m1:SMTP; m2: POP; m3: HTTP

[Option ID = 43254]

25) There are three coins in a box. One is a two-headed coin, another is a fair coin, and third is a biased coin that comes up heads 75% of the time. When one of the three coins is selected at random and flipped, it shows heads. What is the probability that it was two headed coin?

[Question ID = 10817]

1. $\frac{1}{3}$

[Option ID = 43261]

2. $\frac{2}{9}$

[Option ID = 43263]

3. $\frac{4}{9}$

[Option ID = 43264]

4. $\frac{5}{9}$

[Option ID = 43265]

Correct Answer :-

- $\frac{4}{9}$

[Option ID = 43264]

26) An examination paper has 100 multiple choice questions of three mark each, with each question having four choices. Each incorrect answer fetches -1 mark. Suppose 100 students choose all their answers randomly with uniform probability. The sum total of the expected marks obtained by all these students is

[Question ID = 10818]

1. 0

[Option ID = 43266]

2. 250

[Option ID = 43267]

3. 752

[Option ID = 43268]

4. 975

[Option ID = 43270]

Correct Answer :-

- 0

[Option ID = 43266]

27) Which of the following is an ethical violation in research?

i. Duplicate publication of research papers
ii. Duplicate submission of research papers
iii. Unrevealed conflicts of interest
iv. Use of selective data to support claims

[Question ID = 10821]

1. Only i

[Option ID = 43275]

2. Only ii

[Option ID = 43276]

3. Only i , ii and iv

[Option ID = 43279]

4. All i,ii,iii and iv

[Option ID = 43281]

[Option ID = 43281]

28) Which of the following is not a research funding agency in India?

[Question ID = 10822]

1. Science and Engineering Research Board

   [Option ID = 43282]
2. Indian Council of Historical Research

   [Option ID = 43283]
3. National Science Foundation

   [Option ID = 43285]
4. Indian Council of Social Science Research

   [Option ID = 43287]

Correct Answer :-

- National Science Foundation

  [Option ID = 43285]

29) Which of the following is not part of the research design strategy?

[Question ID = 10825]

1. Data collection

   [Option ID = 43292]
2. Data analysis

   [Option ID = 43294]
3. Algorithm development

   [Option ID = 43296]
4. Sampling

   [Option ID = 43297]

Correct Answer :-

- Data analysis

  [Option ID = 43294]

30) During research, review of relevant literature means

[Question ID = 10827]

1. To know about the already work done on the topic

   [Option ID = 43302]
2. To know the concepts and theories applied on the topic

   [Option ID = 43303]
3. The authors who contributed on the topic

   [Option ID = 43304]
4. All of the above

   [Option ID = 43306]

Correct Answer :-

- All of the above

  [Option ID = 43306]

31) The abbreviation et.al., refers to

[Question ID = 10830]

1. and others

[Option ID = 43314]

[Option ID = 43315]

3. almost

[Option ID = 43316]

4. extra almost

[Option ID = 43317]

Correct Answer :-

- and others

[Option ID = 43314]

32) Consider the following publication data of a journal:

Year	No. of Citations	No. of Articles Published
2017	121	52
2018	162	50

This journal has _____ impact factor in the year _____.

[Question ID = 10832]

1. 2.77, 2018

[Option ID = 43320]

2. 2.77, 2019

[Option ID = 43321]

3. 2.32, 2017

[Option ID = 43323]

4. 3.24, 2018

[Option ID = 43325]

Correct Answer :-

- 2.77, 2019

[Option ID = 43321]

33) The number of linearly independent eigen vector(s) of a matrix $A=\begin{pmatrix}3 & 5\\ 0 & 3\end{pmatrix}$ is

[Question ID = 10833]

1. 0

[Option ID = 43326]

2. 1

[Option ID = 43328]

3. 2

[Option ID = 43330]

4. Infinite

[Option ID = 43331]

Correct Answer :-

- 1

[Option ID = 43328]

Let $A = 3 \times 3$ matrix and $AX = B$ is an inconsistent system of equations. The highest possible rank of A is

[Question ID = 10836]

1. 1

[Option ID = 43336]

2. 2

[Option ID = 43338]

3. 3

[Option ID = 43340]

4. 4

[Option ID = 43341]

Correct Answer :-

- 2

[Option ID = 43338]

35) In the software testing, the cumulative number of faults $m(t)$ can be modelled using an ODE $\frac{d}{dt}m(t) = \frac{b^2 t}{1+bt}[a - m(t)]$; where '$a$' is initial fault in the software and 'b' is constant. Assuming $m(0) = 0$; the solution of the differential equation is given by

[Question ID = 10837]

1. $m(t) = a[1 - e^{-bt}]$

[Option ID = 43342]

2. $m(t) = a[1 - (1 + bt)e^{-bt}]$

[Option ID = 43343]

3. $m(t) = a(1 + bt)e^{bt}$

[Option ID = 43344]

4. $m(t) = \frac{a}{1+bt}$

[Option ID = 43345]

Correct Answer :-

- $m(t) = a[1 - (1 + bt)e^{-bt}]$

[Option ID = 43343]

36) Which of the following is a possible solution of the differential equation $\frac{d^2y}{dx^2} + 4\frac{dy}{dx} + 4y = 0$

[Question ID = 10840]

1. e^{-3x}

[Option ID = 43353]

2. xe^{-x}

[Option ID = 43355]

3. xe^{-2x}

[Option ID = 43356]

4. x^2e^{-2x}

[Option ID = 43357]

Correct Answer :-

- xe^{-2x}

[Option ID = 43356]

37) Consider the real vector space R^3. Then the coordinate vector of (3,1, -4) relative to the basis {(1,1,1), (0,1,1), (0,0,1)} is

[Question ID = 10842]

1. (3, 1, -4)

[Option ID = 43361]

3. (3, -2, -5)

[Option ID = 43363]

4. (3, -2, -6)

[Option ID = 43365]

Correct Answer :-

- (3, -2, -5)

[Option ID = 43363]

38) $lim_{x\to 0}\frac{tan\ x - sin\ x}{x^3}$ equals

[Question ID = 10843]

1. $-\frac{1}{2}$

[Option ID = 43366]

2. $\frac{1}{2}$

[Option ID = 43368]

3. $\frac{5}{6}$

[Option ID = 43370]

4. $-\frac{5}{6}$

[Option ID = 43372]

Correct Answer :-

- $\frac{1}{2}$

[Option ID = 43368]

39) The condition for the system of equations $x+2y-3z = a$, $2x+6y-11z = b$, $x-2y+7z = c$ to be consistent is

[Question ID = 10846]

1. a + b – c = 0

[Option ID = 43376]

2. 3a + 2b + c = 0

[Option ID = 43378]

3. 5a – 2b – c = 0

[Option ID = 43380]

4. None of these

[Option ID = 43381]

Correct Answer :-

- 5a – 2b – c = 0

[Option ID = 43380]

40) The inverse of the matrix $\begin{pmatrix} 2 & 6 \\ 3 & 5 \end{pmatrix}$ in $GL(2, Z_{11})$ is

[Question ID = 10847]

$\begin{pmatrix} 9 & 7 \\ \end{pmatrix}$

[Option ID = 43382]

2. $\begin{pmatrix} 9 & 9 \\ 10 & 8 \end{pmatrix}$

[Option ID = 43384]

3. $\begin{pmatrix} 7 & 8 \\ 10 & 4 \end{pmatrix}$

[Option ID = 43386]

4. none of these

[Option ID = 43388]

Correct Answer :-

- $\begin{pmatrix} 9 & 9 \\ 10 & 8 \end{pmatrix}$

[Option ID = 43384]

---

41) $\lim_{x \to 0+} x^2 \ln x$ equals

[Question ID = 10850]

1. 1

[Option ID = 43392]

2. 0

[Option ID = 43394]

3. -1

[Option ID = 43396]

4. does not exist

[Option ID = 43397]

Correct Answer :-

- 0

[Option ID = 43394]

---

42) Choose the correct statement for the sequence $\{(-1)^{n-1}\}$:

[Question ID = 10851]

1. sequence is monotonically increasing

[Option ID = 43398]

2. sequence is monotonically decreasing

[Option ID = 43399]

3. sequence is bounded

[Option ID = 43400]

4. limit of the sequence exists

[Option ID = 43401]

Correct Answer :-

- sequence is bounded

[Option ID = 43400]

---

43) What is the value of the integral $\int_0^a \frac{\sqrt{x}}{\sqrt{x}+\sqrt{a-x}} dx$?

[Question ID = 10854]

1. 0

[Option ID = 43409]

[Option ID = 43411]

3. a

[Option ID = 43412]

4. $2a$

[Option ID = 43413]

Correct Answer :-

- $\frac{a}{2}$

[Option ID = 43411]

44) The area enclosed between the curves $y^2 = 4x$ and $x^2 = 4y$ is

[Question ID = 10855]

1. $\frac{16}{3}$

[Option ID = 43414]

2. 8

[Option ID = 43416]

3. $\frac{32}{3}$

[Option ID = 43417]

4. 16

[Option ID = 43419]

Correct Answer :-

- $\frac{16}{3}$

[Option ID = 43414]

Topic:- CS PHD S2N_P2

1) Next Question is based on the following passage

According to philosopher J. Krishnamurthi, "Listening is an art not easily come by, but in it there is beauty and great understanding. We listen with the various depths of our being, but our listening is always with a preconception or from a particular point of view. We do not listen simply; there is always the intervening screen of our own thoughts, conclusions, and prejudices. To listen there must be an inward quietness, a freedom from the strain of acquiring, a relaxed attention. This alert yet passive state is able to hear what is beyond the verbal conclusion. Words confuse; they are only the outward means of communication; but to commune beyond the noise of words, there must be in listening, an alert passivity. However, most of us are after results, achieving goals; we are forever overcoming and conquering, and so there is no listening. It is only in listening that one hears the song of the words."

J. Krishnamurthi says it is not easy to learn the art of listening because,

[Question ID = 10862]

1. We do not listen with an open and receptive mind

[Option ID = 43442]

2. We do not realize the beauty and great understanding it brings to us

[Option ID = 43443]

3. We only hear but do not listen

[Option ID = 43444]

[Option ID = 43445]

Correct Answer :-

- We do not listen with an open and receptive mind

[Option ID = 43442]

2) **Next Question is based on the following passage**

According to philosopher J. Krishnamurthi, "Listening is an art not easily come by, but in it there is beauty and great understanding. We listen with the various depths of our being, but our listening is always with a preconception or from a particular point of view. We do not listen simply; there is always the intervening screen of our own thoughts, conclusions, and prejudices. To listen there must be an inward quietness, a freedom from the strain of acquiring, a relaxed attention. This alert yet passive state is able to hear what is beyond the verbal conclusion. Words confuse; they are only the outward means of communication; but to commune beyond the noise of words, there must be in listening, an alert passivity. However, most of us are after results, achieving goals; we are forever overcoming and conquering, and so there is no listening. It is only in listening that one hears the song of the words."

A good listener is one who,

[Question ID = 10863]

1. Lets his own thoughts, conclusions, and prejudices influence his judgment

[Option ID = 43446]

2. Listens with absolute attention to what the speaker is saying

[Option ID = 43447]

3. Listens with an inward quietness and relaxed attention

[Option ID = 43448]

4. Constantly evaluates the speaker's ideas in the light of his own experience

[Option ID = 43449]

Correct Answer :-

- Listens with an inward quietness and relaxed attention

[Option ID = 43448]

Topic:- CS PHD S2N_P3

1) **Next Question is based on the following passage**

Environmentally, plastics have a good deal to recommend them. Plastic requires only one-tenth of the energy required to produce aluminium. But plastics also present some special problems. Although the basic resin-manufacturing process presents a much cleaner face than a steel mill (there is little smoke and soot), it is also true that many of the ingredients are dangerous. Benzene, which goes into the manufacture of styrene, epoxy, polyester and nylon, is a member of the dangerous family of carcinogens. Common types of plastic produce toxic gases in fires, including hydrogen cyanide and hydrogen chloride. The plastics industry counter-argues that natural materials such as wood also produce toxic gases when burned, and that non-plastics may be more prone to catching fire or starting fires. But carbon-reinforced plastics create a particular problem – when burned, they release clouds of tiny fibres that can get into electrical equipment and cause short circuits.

Plastic requires only one-tenth of the energy required to produce aluminium' implies:

[Question ID = 10865]

1. Plastic uses much less energy to produce aluminium than the conventional materials

[Option ID = 43454]

2. Aluminium requires more energy to produce than does plastic

[Option ID = 43455]

3. Plastic production requires more energy than aluminium production

[Option ID = 43456]

4. None of the above

[Option ID = 43457]

Correct Answer :-

- Aluminium requires more energy to produce than does plastic

[Option ID = 43455]

2) **Next Question is based on the following passage**

Environmentally, plastics have a good deal to recommend them. Plastic requires only one-tenth of the energy required to produce aluminium. But plastics also present some special problems. Although the basic resin-manufacturing process presents a much cleaner face than a steel mill (there is little smoke and soot), it is also true that many of the ingredients are dangerous. Benzene, which goes into the manufacture of styrene, epoxy, polyester and nylon, is a member of the dangerous family of carcinogens. Common types of plastic produce toxic gases in fires, including hydrogen cyanide and hydrogen chloride. The plastics industry counter-argues that natural materials such as wood also produce toxic gases when burned, and that non-plastics may be more prone to catching fire or starting fires. But carbon-reinforced plastics create a particular problem – when burned, they release clouds of tiny fibres that can get into electrical equipment and cause short circuits.

Benzene is considered to be dangerous because

[Question ID = 10866]

1. it produces toxic gases in fires

[Option ID = 43458]

2. it can cause cancer

[Option ID = 43459]

3. it is poisonous

[Option ID = 43460]

4. it can easily catch fire

[Option ID = 43461]

Correct Answer :-

- it can cause cancer

[Option ID = 43459]

Topic:- CS PHD S2N_P4

1) **Next Question is based on the following passage**

It is an open secret that big newspapers are relentlessly driving out the small local players. Since the consumers of the dailies in languages other than English are typically paying more money than the readers of English language papers, and still get fewer pages, media establishments must create and enforce inviolable advertisement-editorial ratios, ideally around the principle of 70 per cent editorial matter to 30 per cent advertisements. Another little-known fact is that small newspaper journalists, often called stringers, mostly receive a pittance as allowance. However, most of them are compensated by a hefty commission to solicit local advertising on behalf of the area manager. This opens the floodgates to paid news in some of the least editorially-policed editions, local or national, especially at election-time. These two issues merit close scrutiny by the Press Council of India.

The writer suggests that 'media establishments must create and enforce inviolable advertisement-editorial ratios' *so that,*

[Question ID = 10868]

1. 1) small newspapers can increase their revenue

[Option ID = 43466]

2. 2) their readers get sufficient reading material in terms of editorial matter and news etc.

[Option ID = 43467]

3. 3) small newspapers can compete with larger English newspapers

[Option ID = 43469]

Correct Answer :-

- 2) their readers get sufficient reading material in terms of editorial matter and news etc..

[Option ID = 43467]

2) **Next Question is based on the following passage**

It is an open secret that big newspapers are relentlessly driving out the small local players. Since the consumers of the dailies in languages other than English are typically paying more money than the readers of English language papers, and still get fewer pages, media establishments must create and enforce inviolable advertisement-editorial ratios, ideally around the principle of 70 per cent editorial matter to 30 per cent advertisements. Another little-known fact is that small newspaper journalists, often called stringers, mostly receive a pittance as allowance. However, most of them are compensated by a hefty commission to solicit local advertising on behalf of the area manager. This opens the floodgates to paid news in some of the least editorially-policed editions, local or national, especially at election-time. These two issues merit close scrutiny by the Press Council of India.

'*This opens the floodgates to paid news...especially at election-time.*' What does 'this' refer to here?

[Question ID = 10869]

1. Big newspapers driving out smaller ones and getting all the advertisements

[Option ID = 43470]

2. Readers of small newspapers paying more for less reading material

[Option ID = 43471]

3. Low-paid stringers procuring paid news in order to receive hefty commissions from their employers

[Option ID = 43472]

4. Enforcing inviolable advertisement-editorial ratios

[Option ID = 43473]

Correct Answer :-

- Low-paid stringers procuring paid news in order to receive hefty commissions from their employers

[Option ID = 43472]