

DU MSc Computer Science

Topic:- DU_J18_MSC_CS_Topic01

1) With reference to cache memory, the hit ratio is defined as:

[Question ID = 896]

1. No. of hits / (No. of hits + No. of miss) [Option ID = 3583]
2. No. of hits / No. of miss [Option ID = 3581]
3. No. of miss / (No. of hits + No. of miss) [Option ID = 3584]
4. No. of miss / No. of hits [Option ID = 3582]

Correct Answer :-

- No. of hits / (No. of hits + No. of miss) [Option ID = 3583]

2) How many address/data lines are required to access 64k x 8 memory? [Question ID = 897]

1. 16/8 [Option ID = 3585]
2. 8/16 [Option ID = 3587]
3. 16/16 [Option ID = 3586]
4. 8/8 [Option ID = 3588]

Correct Answer :-

- 16/8 [Option ID = 3585]

3) In a sliding window ARQ scheme, the transmitter's window size is N and the receiver's window size is M. The minimum number of distinct sequence numbers required to ensure correct operation of the ARQ scheme is: [Question ID = 887]

1. $\max(M, N)$ [Option ID = 3546]
2. $M + N$ [Option ID = 3547]
3. $\min(M, N)$ [Option ID = 3545]
4. $M * N$ [Option ID = 3548]

Correct Answer :-

- $M + N$ [Option ID = 3547]

4) Consider a disk pack with a seek time of 4 milliseconds and rotational speed of 10000 rotations per minute (RPM). It has 600 sectors per track and each sector can store 512 bytes of data. Consider a file stored in the disk. The file contains 2000 sectors. Assume that every sector access necessitates a seek, and the average rotational latency for accessing each sector is half of the time for one complete rotation. The total time (in milliseconds) needed to read the entire file is _____. [Question ID = 890]

1. 14020 [Option ID = 3559]
2. 14200 [Option ID = 3558]
3. 14400 [Option ID = 3557]
4. 14040 [Option ID = 3560]

Correct Answer :-

- 14020 [Option ID = 3559]

5) Consider a complete binary tree where the left and the right subtrees of the root are min-heaps. The lower bound for the operations to convert the tree to a heap is: [Question ID = 882]

1. $\Omega(n)$ [Option ID = 3527]
2. $\Omega(\lg n)$ [Option ID = 3526]
3. $\Omega(n \lg n)$ [Option ID = 3528]
4. $\Omega(1)$ [Option ID = 3525]

Correct Answer :-

- $\Omega(\lg n)$ [Option ID = 3526]

6) Let the content of address part of instruction be 1234H and the content of base register be 0236H. Give the address of memory location addressed if base register addressing mode is used. [Question ID = 895]

1. 146BH [Option ID = 3580]
2. 1234H [Option ID = 3577]
3. 146AH [Option ID = 3579]
4. 1470H [Option ID = 3578]

Correct Answer :-

- 146AH [Option ID = 3579]

7) In which routing method do all the routers have a common database? [Question ID = 885]

1. Link State [Option ID = 3538]
2. Link Vector [Option ID = 3539]
3. Distance Vector [Option ID = 3537]
4. Shortest Path Routing [Option ID = 3540]

Correct Answer :-

- Link State [Option ID = 3538]

8) If a network designer wants to connect 5 routers as point-to-point simplex line, then total number of lines required would be: [Question ID = 884]

1. 32 [Option ID = 3536]
2. 5 [Option ID = 3533]
3. 20 [Option ID = 3535]
4. 10 [Option ID = 3534]

Correct Answer :-

- 10 [Option ID = 3534]

9) PM-CMM stands for: [Question ID = 894]

1. Project Management Capability Maturity Model [Option ID = 3576]
2. Process Management Capability Maturity Model [Option ID = 3574]
3. People Management Capability Maturity Model [Option ID = 3573]
4. Product Management Capability Maturity Model [Option ID = 3575]

Correct Answer :-

- People Management Capability Maturity Model [Option ID = 3573]

10) What scheduling policy will you use when the system's efficiency is measured by the percentage of jobs completed? [Question ID = 889]

1. All of the these [Option ID = 3556]
2. Round Robin [Option ID = 3554]
3. FCFS [Option ID = 3553]
4. Shortest Job First [Option ID = 3555]

Correct Answer :-

- Shortest Job First [Option ID = 3555]

11) A binary ripple counter is required to count 0 to 16383. How many flip-flops are required? [Question ID = 899]

1. 8191 [Option ID = 3594]
2. 512 [Option ID = 3595]
3. 14 [Option ID = 3596]
4. 16382 [Option ID = 3593]

Correct Answer :-

- 14 [Option ID = 3596]

12) Which model in system modelling depicts the dynamic behaviour of the system? [Question ID = 893]

1. Object Model [Option ID = 3572]
2. Context Model [Option ID = 3569]
3. Data Model [Option ID = 3571]
4. Behavioural Model [Option ID = 3570]

Correct Answer :-

- Behavioural Model [Option ID = 3570]

13) Let S_3 be the group of permutations on $S = \{1, 2, 3\}$. Let $H = \{I, (12)\}$ and $\{I, (1,2,3), (1, 3, 2)\}$. Then which of the following is true?

[Question ID = 53420]

1. HK is a subgroup of S_3 and HK is not commutative. [Option ID = 93667]
2. $HK \neq S_3$ [Option ID = 93665]
3. HK is a commutative subgroup of S_3 . [Option ID = 93668]
4. HK is not a subgroup of S_3 [Option ID = 93666]

Correct Answer :-

14) The height of a tree is the length of the longest root-to-leaf path in it. The maximum and minimum number of nodes in a binary tree of height 7 are: [Question ID = 881]

1. 255 and 8, respectively [Option ID = 3521]
2. 127 and 8, respectively [Option ID = 3523]
3. 256 and 7, respectively [Option ID = 3522]
4. 128 and 7, respectively [Option ID = 3524]

Correct Answer :-

- 255 and 8, respectively [Option ID = 3521]

15)

The simplified function in product of sums of Boolean function $F(W, X, Y, Z) = \sum(0, 1, 2, 5, 8, 9, 10)$ is:

[Question ID = 898]

1. $(W' + X')(Y' + Z)(X' + Z)$ [Option ID = 3591]
2. $(W' + X')(Y' + Z')(X' + Z)$ [Option ID = 3589]
3. $(W' + X')(Y' + Z')(X' + Z')$ [Option ID = 3590]
4. $(W' + X')(Y + Z')(X' + Z)$ [Option ID = 3592]

Correct Answer :-

- $(W' + X')(Y' + Z')(X' + Z)$ [Option ID = 3589]

16)

If $a = \cos\left(\frac{2\pi}{7}\right) + i \sin\left(\frac{2\pi}{7}\right)$, $b = a + a^2 + a^4$ and $c = a^3 + a^5 + a^6$, then b^2 and c^2 are the roots of the equation:

[Question ID = 903]

1. $x^3 + 3x - 4 = 0$. [Option ID = 3611]
2. $x^3 - 3x - 4 = 0$. [Option ID = 3609]
3. $x^3 - 3x + 4 = 0$. [Option ID = 3612]
4. $x^3 + 3x + 4 = 0$. [Option ID = 3610]

Correct Answer :-

- $x^3 + 3x + 4 = 0$. [Option ID = 3610]

17)

If $z = \cot^{-1}\left(\frac{x-y}{\sqrt{x}+\sqrt{y}}\right)$ satisfies $x \frac{\partial z}{\partial x} + y \frac{\partial z}{\partial y} = k \sin 2z$, then k is equal to:

[Question ID = 906]

1. $\frac{1}{4}$ [Option ID = 3624]
2. $\frac{-1}{4}$ [Option ID = 3621]
3. $\frac{1}{2}$ [Option ID = 3623]
4. $\frac{-1}{2}$ [Option ID = 3622]

Correct Answer :-

- $\frac{-1}{4}$ [Option ID = 3621]

18) If $\vec{u} = \frac{\hat{r}}{r}$, where $r = |\vec{r}| = |x\hat{i} + y\hat{j} + z\hat{k}|$, then $\text{curl } \vec{u}$ is equal to:

[Question ID = 912]

1. $-\hat{k}$ [Option ID = 3648]
2. $\vec{0}$ [Option ID = 3645]
3. \hat{i} [Option ID = 3646]
4. $-\hat{j}$ [Option ID = 3647]

Correct Answer :-

- $\vec{0}$ [Option ID = 3645]

19)

Two circles are drawn passing through the points (0, 1) and (0, -1). Both these circles touch the line, $y = mx + n$. If they intersect orthogonally, then n^2 is equal to:

[Question ID = 909]

1. $m^2 - 2$ [Option ID = 3636]
2. $m^2 + 1$ [Option ID = 3634]
3. $m^2 - 1$ [Option ID = 3635]
4. $m^2 + 2$ [Option ID = 3633]

Correct Answer :-

- $m^2 + 2$ [Option ID = 3633]

20) Let I be an ideal of a ring R . If $A = \{x \in R: rx \in I \forall r \in R\}$, then A is

[Question ID = 901]

1. An ideal of R but $I \not\subseteq A$. [Option ID = 3603]
2. An ideal of R and $I \subseteq A$. [Option ID = 3604]
3. Not a subring of R . [Option ID = 3601]
4. A subring of R but not an ideal of R . [Option ID = 3602]

Correct Answer :-

- An ideal of R and $I \subseteq A$. [Option ID = 3604]

21)

The following postfix expression with single digit operands is evaluated using a Stack:

$$8\ 2\ 3\ ^\ / \ 2\ 4\ * \ + \ 6\ 2\ * \ -$$

Not that $^$ is the exponentiation operator. The top two elements of the stack, after the first $*$ is evaluated, are

[Question ID = 875]

1. 8, 1 [Option ID = 3497]
2. 3, 2 [Option ID = 3500]
3. 9, 5 [Option ID = 3499]
4. 5, 9 [Option ID = 3498]

Correct Answer :-

- 8, 1 [Option ID = 3497]

22)

Consider a list of recursive algorithms and a list of recurrence relations as given below, and indicate which list correctly maps the recurrence relations to the list of algorithms: a, b, c, d:

List-I

- a. Binary Search
- b. Merge Sort
- c. Quicksort
- d. Tower of Hanoi

List-II

- i. $T(n) = T(n-k) + T(k) + cn$
- ii. $T(n) = 2T(n/2) + kn$
- iii. $T(n) = 2t(n/2) + 1$
- iv. $T(n) = T(n/2) + 1$

[Question ID = 878]

1. iv, ii, i, iii [Option ID = 3511]
2. iv, i, ii, iii [Option ID = 3512]
3. iii, i, iv, ii [Option ID = 3510]
4. iii, ii, i, iv [Option ID = 3509]

Correct Answer :-

- iv, ii, i, iii [Option ID = 3511]

23)

Let A and B be sets and A' and B' denote compliments of the sets A and B. The set $(A - B) \cup (B - A) \cup (A \cap B)$

[Question ID = 883]

1. $A' \cup B'$ [Option ID = 3532]

2. $A' \cap B'$ [Option ID = 3530]
3. $A \cap B$ [Option ID = 3529]
4. $A \cup B$ [Option ID = 3531]

Correct Answer :-

- $A \cup B$ [Option ID = 3531]

24)

If on an average, one vessel in every ten is wrecked, and the probability that out of 5 vessels expected to arrive, at least 4 vessels reach safely is $K \cdot \left(\frac{9}{10}\right)^4$, then K is equal to:

[Question ID = 914]

1. 1.6 [Option ID = 3656]
2. 1.3 [Option ID = 3654]
3. 1.2 [Option ID = 3653]
4. 1.4 [Option ID = 3655]

Correct Answer :-

- 1.4 [Option ID = 3655]

25) An array A of size 50×50 is defined as follows:

$$A[i, j] = i - j, 1 \leq i \leq 50, 1 \leq j \leq 50$$

The sum of the elements of the array A is

[Question ID = 876]

1. 49 [Option ID = 3503]
2. 0 [Option ID = 3504]
3. 2352 [Option ID = 3502]
4. 63750 [Option ID = 3501]

Correct Answer :-

- 0 [Option ID = 3504]

26)

If the products of two roots of the equation, $x^4 - 10x^2 + 9x - 2 = 0$ is unity, then the remaining two roots of this equation are:

[Question ID = 904]

1. both conjugate complex numbers. [Option ID = 3616]
2. both irrational numbers. [Option ID = 3615]
3. both rational numbers, other than integers. [Option ID = 3614]
4. integers of unlike signs [Option ID = 3613]

Correct Answer :-

- both irrational numbers. [Option ID = 3615]

27)

The line $\theta = \frac{\pi}{3}$ divides the length of the curve, $r = 2(1 + \cos \theta)$ in the first quadrant, in the ratio:

[Question ID = 908]

1. $1 : 3$ [Option ID = 3630]
2. $1 : 1$ [Option ID = 3632]
3. $1 : 2$ [Option ID = 3631]
4. $2 : 3$ [Option ID = 3629]

Correct Answer :-

28)

If a variable plane passing through a fixed point (a, b, c) cuts the coordinate axes at the points P, Q and R, then the locus of the centres of the spheres through O (origin), P, Q, and R, is:

[Question ID = 910]

1. $\frac{x}{a} + \frac{y}{b} + \frac{z}{c} = 1$ [Option ID = 3637]
2. $\frac{a}{x} + \frac{b}{y} + \frac{c}{z} = 2$ [Option ID = 3640]
3. $\frac{x}{a} + \frac{y}{b} + \frac{z}{c} = 2$ [Option ID = 3638]
4. $\frac{a}{x} + \frac{b}{y} + \frac{c}{z} = 1$ [Option ID = 3639]

Correct Answer :-

- $\frac{a}{x} + \frac{b}{y} + \frac{c}{z} = 2$ [Option ID = 3640]

29)

Consider the relation scheme $R=(A, B, C, D, E, F, G, H, I, J)$ and the set of functional dependencies $\{\{A, B\} \rightarrow \{C\}, \{B\} \rightarrow \{E, F\}, \{A, D\} \rightarrow \{G, H\}, \{G\} \rightarrow \{I\}, \{H\} \rightarrow \{J\}\}$ on R . What is the key for R ?

[Question ID = 892]

1. $\{A, B, D\}$ [Option ID = 3566]
2. $\{A\}$ [Option ID = 3568]
3. $\{A, B, D, G, H\}$ [Option ID = 3567]
4. $\{A, B\}$ [Option ID = 3565]

Correct Answer :-

- $\{A, B, D\}$ [Option ID = 3566]

30) The SQL expression:

Select distinct T.branch_name
from branch T, branch S

where T. assets > S.assets and S.branch_city = "Patna"

finds the names of

[Question ID = 891]

1. All branches that have greater assets than all branches in Patna. [Option ID = 3562]
2. The branch that has greatest asset in Patna [Option ID = 3563]
3. All branches that have greater assets than some branch located in Patna. [Option ID = 3561]
4. Any branch that has greater assets than any branch in Patna. [Option ID = 3564]

Correct Answer :-

- All branches that have greater assets than some branch located in Patna. [Option ID = 3561]

31)

Which of the following sequences $\langle a_n \rangle$ is not a Cauchy sequence where a_n is equal to:

[Question ID = 913]

1. $\frac{1}{n}$ [Option ID = 3649]
2. $\frac{n}{n+1}$ [Option ID = 3650]
3. $1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \dots + \frac{1}{n}$ [Option ID = 3651]
4. $\frac{1}{1!} + \frac{1}{2!} + \frac{1}{3!} + \dots + \frac{1}{n!}$ [Option ID = 3652]

Correct Answer :-

• $1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \dots + \frac{1}{n}$ [Option ID = 3651]

32) The Wronskian of the set $\{\sin 2t, 2, \cos 2t\}$ is:

[Question ID = 911]

1. 2^3 [Option ID = 3643]
2. 2^4 [Option ID = 3644]
3. -2^4 [Option ID = 3642]
4. -2^3 [Option ID = 3641]

Correct Answer :-

- 2^4 [Option ID = 3644]

33)

If $T : \mathbb{R}^4 \rightarrow \mathbb{R}^3$ be a linear transformation defined by $T(x_1, x_2, x_3, x_4) = (x_1 - x_4, x_2 + x_3, x_3 - x_4)$, then

[Question ID = 902]

1. Rank of T is 3. [Option ID = 3606]
2. Rank of T is 2. [Option ID = 3605]
3. Nullity of T is 2. [Option ID = 3608]
4. Nullity of T is 3. [Option ID = 3607]

Correct Answer :-

- Rank of T is 3. [Option ID = 3606]

34) If x, y and z be three numbers satisfying

$$x + y + z = 1,$$

$$x^2 + y^2 + z^2 = 2,$$

$$\text{and } x^3 + y^3 + z^3 = 3,$$

then the value of $x^5 + y^5 + z^5$ is:

[Question ID = 905]

1. 6 [Option ID = 3618]
2. 7 [Option ID = 3617]
3. 5 [Option ID = 3619]
4. 4 [Option ID = 3620]

Correct Answer :-

- 6 [Option ID = 3618]

35)

If we use Radix sort to sort n integers in the range $(n^{\frac{k}{12}}, n^k)$ for some $k > 0$ which is independent of n , the time taken would be

[Question ID = 877]

1. $\Theta(k \lg n)$ [Option ID = 3508]
2. $\Theta(kn)$ [Option ID = 3505]
3. $\Theta(n \lg k)$ [Option ID = 3507]
4. $\Theta(k+n)$ [Option ID = 3506]

Correct Answer :-

- $\Theta(kn)$ [Option ID = 3505]

36)

If $f(x) = 2x - [x]$, where $[x]$ stands for the greatest integer less than or equal to x , then $\int_0^3 f(x) dx$ is equal to:

[Question ID = 907]

1. 6 [Option ID = 3625]
2. 5 [Option ID = 3626]
3. 3 [Option ID = 3628]
4. 4 [Option ID = 3627]

Correct Answer :-

- 6 [Option ID = 3625]

37) Consider a main memory with five page frames and the following sequence of page references: 3, 8, 2, 3, 9, 1, 6, 3, 8, 9, 3, 6, 2, 1, 3. Which one of the following is true with respect to page replacement policies First In First Out (FIFO) and Least Recently Used (LRU)? [Question ID = 888]

1. FIFO incurs 2 more page faults than LRU [Option ID = 3550]
2. FIFO incurs 1 more page faults than LRU [Option ID = 3552]
3. Both incur the same number of page faults [Option ID = 3549]
4. LRU incurs 2 more page faults than FIFO [Option ID = 3551]

Correct Answer :-

- Both incur the same number of page faults [Option ID = 3549]

38) Consider a hash table with 9 slots. The hash function is $h(k) = k \bmod 9$. The collisions are resolved by chaining. The following 9 keys are inserted in the order: 5, 28, 19, 15, 20, 33, 12, 17, 10. The maximum, minimum, and average chain lengths in the hash table, respectively, are [Question ID = 879]

1. 3, 3, and 3 [Option ID = 3514]
2. 4, 0, and 1 [Option ID = 3515]
3. 3, 0, and 1 [Option ID = 3513]
4. 3, 0, and 2 [Option ID = 3516]

Correct Answer :-

- 3, 0, and 1 [Option ID = 3513]

39) How many 8-bit characters can be transmitted per second over a 7200 baud serial communication link using asynchronous mode of transmission with one start bit, eight data bits, one parity bit, and two stop bits: [Question ID = 886]

1. 800 [Option ID = 3543]
2. 600 [Option ID = 3541]
3. 900 [Option ID = 3544]
4. 700 [Option ID = 3542]

Correct Answer :-

- 600 [Option ID = 3541]

40) Let G be a graph with n vertices and m edges. What is the upper bound on the running time of depth first search on G, when G is represented as an adjacency matrix?

[Question ID = 880]

1. $O(m)$ [Option ID = 3519]
2. $O(n+m)$ [Option ID = 3518]
3. $O(n)$ [Option ID = 3517]
4. $O(n^2)$ [Option ID = 3520]

Correct Answer :-

- $O(n^2)$ [Option ID = 3520]

Topic:- DU_J18_MSC_CS_Topic02

1)

A pilot project of Maharashtra Emergency Medical Services (MEMS) runs the 108 ambulance service, to provide first-aid faster in the traffic-worn Mumbai. On getting a call on 108, the control room dispatches the nearest bike and four-wheeler ambulance. The bike beats the ambulance by 20 to 30 minutes. The head start allows for the patient's vitals to be checked and initial treatment-like cutting umbilical cords and administering intravenous (IV) drips.

So far, ten rides have rushed to over a 1000 medical emergencies, nearly 200 accident spots and close to 30 pregnant women. The bikes now attend to an average of 30 calls a day- enough to recently induce the state to think of introducing a similar service in remote rural and tribal areas.

A similar service also exists in Bengaluru where 20 bike ambulances are operated by the state government. In Punjab's Panckula district, a bike ambulance with a side-car stretcher was launched last year to assist anganwadi workers in vaccination in remote areas. In Dhulabari village of West Bengal's Jalpaiguri, 50-year-old Karimul Haque is known as 'Bike ambulance dada' for his one-man hospital ferrying service.

In Mumbai, most calls come from slums. But locating shanties also means finding landmarks ranging from paan stalls to dairies: "Our first aid is both medical and psychological," says Dr. Ahmed. Once he was sent to Goregaon's Peru Baug following a call that a tribal man had immolated himself following a family feud. On reaching the spot, he saw half the house burning. The man's wife and children were inside. After convincing the man to let him help, Ahmed enlisted his family's help to take him on a stretcher down a hill.

For some reason, the free service has still remained relatively low-key, evident from the fact that people still ask them about charges. But a tiny development has convinced Yadav that awareness is rising.

How does Maharashtra plan to expand the service further? [Question ID = 1024]

1. All of the these. [Option ID = 4096]
2. The state is looking to extend this service to more areas. [Option ID = 4093]
3. It is now planning to introduce this service in remote rural and tribal areas in the state. [Option ID = 4094]
4. It may provide this service in other states as well. [Option ID = 4095]

Correct Answer :-

- It is now planning to introduce this service in remote rural and tribal areas in the state. [Option ID = 4094]

2)

A pilot project of Maharashtra Emergency Medical Services (MEMS) runs the 108 ambulance service, to provide first-aid faster in the traffic-worn Mumbai. On getting a call on 108, the control room dispatches the nearest bike and four-wheeler ambulance. The bike beats the ambulance by 20 to 30 minutes. The head start allows for the patient's vitals to be checked and initial treatment-like cutting umbilical cords and administering intravenous (IV) drips.

So far, ten rides have rushed to over a 1000 medical emergencies, nearly 200 accident spots and close to 30 pregnant women. The bikes now attend to an average of 30 calls a day- enough to recently induce the state to think of introducing a similar service in remote rural and tribal areas.

A similar service also exists in Bengaluru where 20 bike ambulances are operated by the state government. In Punjab's Panckula district, a bike ambulance with a side-car stretcher was launched last year to assist anganwadi workers in vaccination in remote areas. In Dhulabari village of West Bengal's Jalpaiguri, 50-year-old Karimul Haque is known as 'Bike ambulance dada' for his one-man hospital ferrying service.

In Mumbai, most calls come from slums. But locating shanties also means finding landmarks ranging from paan stalls to dairies: "Our first aid is both medical and psychological," says Dr. Ahmed. Once he was sent to Goregaon's Peru Baug following a call that a tribal man had immolated himself following a family feud. On reaching the spot, he saw half the house burning. The man's wife and children were inside. After convincing the man to let him help, Ahmed enlisted his family's help to take him on a stretcher down a hill.

For some reason, the free service has still remained relatively low-key, evident from the fact that people still ask them about charges. But a tiny development has convinced Yadav that awareness is rising.

Mark the statement that is NOT true: [Question ID = 1025]

1. Not many people know that the service is quite free. [Option ID = 4100]
2. Locating the place from where the call has come is often a challenge in Mumbai [Option ID = 4099]
3. The service is meant for and availed of by people living in slums. [Option ID = 4098]
4. The free service has still remained relatively low-key. [Option ID = 4097]

Correct Answer :-

- The service is meant for and availed of by people living in slums. [Option ID = 4098]

3)

A pilot project of Maharashtra Emergency Medical Services (MEMS) runs the 108 ambulance service, to provide first-aid faster in the traffic-worn Mumbai. On getting a call on 108, the control room dispatches the nearest bike and four-wheeler ambulance. The bike beats the ambulance by 20 to 30 minutes. The head start allows for the patient's vitals to be checked and initial treatment-like cutting umbilical cords and administering intravenous (IV) drips.

So far, ten rides have rushed to over a 1000 medical emergencies, nearly 200 accident spots and close to 30 pregnant women. The bikes now attend to an average of 30 calls a day- enough to recently induce the state to think of introducing a similar service in remote rural and tribal areas.

A similar service also exists in Bengaluru where 20 bike ambulances are operated by the state government. In Punjab's Panckula district, a bike ambulance with a side-car stretcher was launched last year to assist anganwadi workers in vaccination in remote areas. In Dhulabari village of West Bengal's Jalpaiguri, 50-year-old Karimul Haque is known as 'Bike ambulance dada' for his one-man hospital ferrying service.

In Mumbai, most calls come from slums. But locating shanties also means finding landmarks ranging from paan stalls to dairies: "Our first aid is both medical and psychological," says Dr. Ahmed. Once he was sent to Goregaon's Peru Baug following a call that a tribal man had immolated himself following a family feud. On reaching the spot, he saw half the house burning. The man's wife and children were inside. After convincing the man to let him help, Ahmed enlisted his family's help to take him on a stretcher down a hill.

For some reason, the free service has still remained relatively low-key, evident from the fact that people still ask them about charges. But a tiny development has convinced Yadav that awareness is rising.

What advantage does Ambulance 108 enjoy over regular ambulance?

[Question ID = 53418]

1. It is far more user-friendly. [Option ID = 93658]
2. It provides medical aid that regular ambulance cannot. [Option ID = 93657]
3. It consists of dedicated medical practitioners. [Option ID = 93660]
4. It can reach the patient in need of ambulance earlier. [Option ID = 93659]

Correct Answer :-

- It can reach the patient in need of ambulance earlier. [Option ID = 93659]

4)

A pilot project of Maharashtra Emergency Medical Services (MEMS) runs the 108 ambulance service, to provide first-aid faster in the traffic-worn Mumbai. On getting a call on 108, the control room dispatches the nearest bike and four-wheeler ambulance. The bike beats the ambulance by 20 to 30 minutes. The head start allows for the patient's vitals to be checked and initial treatment-like cutting umbilical cords and administering intravenous (IV) drips.

So far, ten rides have rushed to over a 1000 medical emergencies, nearly 200 accident spots and close to 30 pregnant women. The bikes now attend to an average of 30 calls a day- enough to recently induce the state to think of introducing a similar service in remote rural and tribal areas.

A similar service also exists in Bengaluru where 20 bike ambulances are operated by the state government. In Punjab's Panckula district, a bike ambulance with a side-car stretcher was launched last year to assist anganwadi workers in vaccination in remote areas. In Dhulabari village of West Bengal's Jalpaiguri, 50-year-old Karimul Haque is known as 'Bike ambulance dada' for his one-man hospital ferrying service.

In Mumbai, most calls come from slums. But locating shanties also means finding landmarks ranging from paan stalls to dairies: "Our first aid is both medical and psychological," says Dr. Ahmed. Once he was sent to Goregaon's Peru Baug following a call that a tribal man had immolated himself following a family feud. On reaching the spot, he saw half the house burning. The man's wife and children were inside. After convincing the man to let him help, Ahmed enlisted his family's help to take him on a stretcher down a hill.

For some reason, the free service has still remained relatively low-key, evident from the fact that people still ask them about charges. But a tiny development has convinced Yadav that awareness is rising.

What makes this ambulance service quite different from conventional ambulance service? [Question ID = 1023]

1. It has a more human touch as it renders both medical and psychological firstaid. [Option ID = 4091]
2. It is faster. [Option ID = 4089]
3. It is availed of mostly by people living in slums in Mumbai. [Option ID = 4090]
4. All of the these. [Option ID = 4092]

Correct Answer :-

- All of the these. [Option ID = 4092]

5)

A pilot project of Maharashtra Emergency Medical Services (MEMS) runs the 108 ambulance service, to provide first-aid faster in the traffic-worn Mumbai. On getting a call on 108, the control room dispatches the nearest bike and four-wheeler ambulance. The bike beats the ambulance by 20 to 30 minutes. The head start allows for the patient's vitals to be checked and initial treatment-like cutting umbilical cords and administering intravenous (IV) drips.

So far, ten rides have rushed to over a 1000 medical emergencies, nearly 200 accident spots and close to 30 pregnant women. The bikes now attend to an average of 30 calls a day- enough to recently induce the state to think of introducing a similar service in remote rural and tribal areas.

A similar service also exists in Bengaluru where 20 bike ambulances are operated by the state government. In Punjab's Panckula district, a bike ambulance with a side-car stretcher was launched last year to assist anganwadi workers in vaccination in remote areas. In Dhulabari village of West Bengal's Jalpaiguri, 50-year-old Karimul Haque is known as 'Bike ambulance dada' for his one-man hospital ferrying service.

In Mumbai, most calls come from slums. But locating shanties also means finding landmarks ranging from paan stalls to dairies: "Our first aid is both medical and psychological," says Dr. Ahmed. Once he was sent to Goregaon's Peru Baug following a call that a tribal man had immolated himself following a family feud. On reaching the spot, he saw half the house burning. The man's wife and children were inside. After convincing the man to let him help, Ahmed enlisted his family's help to take him on a stretcher down a hill.

For some reason, the free service has still remained relatively low-key, evident from the fact that people still ask them about charges. But a tiny development has convinced Yadav that awareness is rising.

What has been the impact of this scheme elsewhere? [Question ID = 1022]

1. Several other States have started similar service. [Option ID = 4085]
2. All of the these. [Option ID = 4088]
3. This service has been extended to some other States as well. [Option ID = 4086]
4. This service is now available in Karnataka, Punjab and West Bengal. [Option ID = 4087]

Correct Answer :-

- Several other States have started similar service. [Option ID = 4085]

Topic:- DU_J18_MSC_CS_Topic03

1)

You can lather your face with soap and a brush, or you can press down on a can of foam. The can is easier. It is convenient. That goes for instance coffee, too, TV Remote or Car window winders. Once we find an easier way to do something, we rarely go back to the old. Acting upon our society and culture, this massive force is changing the economy and politics in ways that hurt the 'little guy'.

We all want fair competition. But is it possible when we take the 'convenient' option of ordering online from Amazon or Flipkart? It works in a loop: "The easier it is to use amazon, the more powerful Amazon becomes – and thus the easier it becomes to use Amazon." How is the little guy to compete? "Convenience and monopoly seem to be natural bedfellows." Monopolies are bad for workers. There are fewer jobs and you are paid on the monopolist's terms.

Social media represent the second wave of convenience. The first promised to liberate us from physical labour with washing machines and microwave ovens, this one is all about freeing us from mental exertion. There's no queuing for tickets and

Bills. But there's a problem with getting everything easily: "when you skip the line and buy concert tickets on your phone, waiting in line to vote in an election is irritating." The thing about convenience is, it makes you intolerant of things that are not convenient. "As task after task becomes easier, the growing expectation of convenience exerts a pressure on everything else to be easy or get left behind."

Playing guitar is not easy. Growing your own vegetables isn't either. The creed of convenience teaches you to do neither. Schooled in convenience, we might be paradropping atop Mt. Everest soon.

Mark the statement that is NOT true: [Question ID = 1031]

1. Once we find an easier way to do something, we don't want to do it the earlier way. [Option ID = 4121]
2. We don't want to vote in election because waiting in a line irritates us. [Option ID = 4123]
3. The little guy cannot compete with the monopoly businesses. [Option ID = 4124]
4. Monopolies are bad for ordinary consumers and workers alike. [Option ID = 4122]

Correct Answer :-

- We don't want to vote in election because waiting in a line irritates us. [Option ID = 4123]

2)

You can lather your face with soap and a brush, or you can press down on a can of foam. The can is easier. It is convenient. That goes for instance coffee, too, TV Remote or Car window winders. Once we find an easier way to do something, we rarely go back to the old. Acting upon our society and culture, this massive force is changing the economy and politics in ways that hurt the 'little guy'.

We all want fair competition. But is it possible when we take the 'convenient' option of ordering online from Amazon or Flipkart? It works in a loop: "The easier it is to use amazon, the more powerful Amazon becomes – and thus the easier it becomes to use Amazon." How is the little guy to compete? "Convenience and monopoly seem to be natural bedfellows." Monopolies are bad for workers. There are fewer jobs and you are paid on the monopolist's terms.

Social media represent the second wave of convenience. The first promised to liberate us from physical labour with washing machines and microwave ovens, this one is all about freeing us from mental exertion. There's no queuing for tickets and

Bills. But there's a problem with getting everything easily: "when you skip the line and buy concert tickets on your phone, waiting in line to vote in an election is irritating." The thing about convenience is, it makes you intolerant of things that are not convenient. "As task after task becomes easier, the growing expectation of convenience exerts a pressure on everything else to be easy or get left behind."

Playing guitar is not easy. Growing your own vegetables isn't either. The creed of convenience teaches you to do neither. Schooled in convenience, we might be paradropping atop Mt. Everest soon.

How does convenience make us intolerant of things that are not convenient? [Question ID = 1030]

1. The creed of convenience teaches you to do nothing that demands effort. [Option ID = 4118]
2. We have got used to easy life and shun all inconvenience in life. [Option ID = 4119]
3. We don't want to do things we don't like. [Option ID = 4117]
4. We only like what others tell us. [Option ID = 4120]

Correct Answer :-

- The creed of convenience teaches you to do nothing that demands effort. [Option ID = 4118]

3)

You can lather your face with soap and a brush, or you can press down on a can of foam. The can is easier. It is convenient. That goes for instance coffee, too, TV Remote or Car window winders. Once we find an easier way to do something, we rarely go back to the old. Acting upon our society and culture, this massive force is changing the economy and politics in ways that hurt the 'little guy'.

We all want fair competition. But is it possible when we take the 'convenient' option of ordering online from Amazon or Flipkart? It works in a loop: "The easier it is to use amazon, the more powerful Amazon becomes – and thus the easier it becomes to use Amazon." How is the little guy to compete? "Convenience and monopoly seem to be natural bedfellows." Monopolies are bad for workers. There are fewer jobs and you are paid on the monopolist's terms.

Social media represent the second wave of convenience. The first promised to liberate us from physical labour with washing machines and microwave ovens, this one is all about freeing us from mental exertion. There's no queuing for tickets and

Bills. But there's a problem with getting everything easily: "when you skip the line and buy concert tickets on your phone, waiting in line to vote in an election is irritating." The thing about convenience is, it makes you intolerant of things that are not convenient. "As task after task becomes easier, the growing expectation of convenience exerts a pressure on everything else to be easy or get left behind."

Playing guitar is not easy. Growing your own vegetables isn't either. The creed of convenience teaches you to do neither. Schooled in convenience, we might be paradropping atop Mt. Everest soon.

This massive force is changing the economy and politics in ways that hurt the "little guy"? Who is this "little guy"? [Question ID = 1027]

1. The ordinary consumer. [Option ID = 4105]
2. The small businessman or manufacturer. [Option ID = 4106]
3. The ordinary citizen. [Option ID = 4107]
4. All of the these. [Option ID = 4108]

Correct Answer :-

- The small businessman or manufacturer. [Option ID = 4106]

4)

You can lather your face with soap and a brush, or you can press down on a can of foam. The can is easier. It is convenient. That goes for instance coffee, too, TV Remote or Car window winders. Once we find an easier way to do something, we rarely go back to the old. Acting upon our society and culture, this massive force is changing the economy and politics in ways that hurt the 'little guy'.

We all want fair competition. But is it possible when we take the 'convenient' option of ordering online from Amazon or Flipkart? It works in a loop: "The easier it is to use amazon, the more powerful Amazon becomes – and thus the easier it becomes to use Amazon." How is the little guy to compete? "Convenience and monopoly seem to be natural bedfellows." Monopolies are bad for workers. There are fewer jobs and you are paid on the monopolist's terms.

Social media represent the second wave of convenience. The first promised to liberate us from physical labour with washing machines and microwave ovens, this one is all about freeing us from mental exertion. There's no queuing for tickets and

Bills. But there's a problem with getting everything easily: "when you skip the line and buy concert tickets on your phone, waiting in line to vote in an election is irritating." The thing about convenience is, it makes you intolerant of things that are not convenient. "As task after task becomes easier, the growing expectation of convenience exerts a pressure on everything else to be easy or get left behind."

Playing guitar is not easy. Growing your own vegetables isn't either. The creed of convenience teaches you to do neither. Schooled in convenience, we might be paradropping atop Mt. Everest soon.

"Convenience and monopoly seem to be natural bedfellows." How? [Question ID = 1028]

1. Only big business monopolies can provide convenience in products and services. [Option ID = 4110]
2. They are always found together in business world. [Option ID = 4109]
3. They help each other. [Option ID = 4111]
4. All of the these. [Option ID = 4112]

Correct Answer :-

- Only big business monopolies can provide convenience in products and services. [Option ID = 4110]

5)

You can lather your face with soap and a brush, or you can press down on a can of foam. The can is easier. It is convenient. That goes for instance coffee, too, TV Remote or Car window winders. Once we find an easier way to do something, we rarely go back to the old. Acting upon our society and culture, this massive force is changing the economy and politics in ways that hurt the 'little guy'.

We all want fair competition. But is it possible when we take the 'convenient' option of ordering online from Amazon or Flipkart? It works in a loop: "The easier it is to use amazon, the more powerful Amazon becomes – and thus the easier it becomes to use Amazon." How is the little guy to compete? "Convenience and monopoly seem to be natural bedfellows." Monopolies are bad for workers. There are fewer jobs and you are paid on the monopolist's terms.

Social media represent the second wave of convenience. The first promised to liberate us from physical labour with washing machines and microwave ovens, this one is all about freeing us from mental exertion. There's no queuing for tickets and

Bills. But there's a problem with getting everything easily: "when you skip the line and buy concert tickets on your phone, waiting in line to vote in an election is irritating." The thing about convenience is, it makes you intolerant of things that are not convenient. "As task after task becomes easier, the growing expectation of convenience exerts a pressure on everything else to be easy or get left behind."

Playing guitar is not easy. Growing your own vegetables isn't either. The creed of convenience teaches you to do neither. Schooled in convenience, we might be paradropping atop Mt. Everest soon.

"Social media represent the second wave of convenience." "What is this second wave of convenience"?
[Question ID = 1029]

1. It has made our lives easier still. [Option ID = 4113]
2. It has freed us from mental exertion. [Option ID = 4114]
3. The convenience provided by internet services to do jobs like paying bills from home. [Option ID = 4115]
4. All of the these. [Option ID = 4116]

Correct Answer :-

- All of the these. [Option ID = 4116]