National Testing Agency

Question Paper Name :	PGQP34 24th Sep 2021 Shift 2
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PGQP34

Group Number :	1
Group Id :	864351343
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	400
Is this Group for Examiner? :	No

PART A - General

Section Id :	8643511230
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory

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Number of Questions :	25
Number of Questions to be attempted :	25
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	8643511463
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 86435130030 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Select the correct option :

You may feel relieved when something bad _____.

1. happens
2. does not happen
3. is remembered
4. occurs

Options :

864351104571. 1

864351104572. 2

864351104573. 3

864351104574. 4

Question Number : 2 Question Id : 86435130031 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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Select the most suitable synonym :

BARBARIAN

1. impolite
2. unkind
3. uncivilized
4. unlikeness

Options :

864351104575. 1

864351104576. 2

864351104577. 3

864351104578. 4

Question Number : 3 Question Id : 86435130032 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which is the closest meaning of the phrase ***to be hard of hearing*** ?

1. deaf
2. deaf and dumb
3. careless
4. arrogant

Options :

864351104579. 1

864351104580. 2

864351104581. 3

864351104582. 4

Question Number : 4 Question Id : 86435130033 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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Identify the meaning of the idiom from the options given :

In black and white

1. useless
2. in short
3. in writing
4. in full swing

Options :

864351104583. 1

864351104584. 2

864351104585. 3

864351104586. 4

Question Number : 5 Question Id : 86435130034 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Select the most suitable antonym :

RAPTURE

1. despair
2. elation
3. ecstasy
4. hell

Options :

864351104587. 1

864351104588. 2

864351104589. 3

864351104590. 4

Question Number : 6 Question Id : 86435130035 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

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Correct Marks : 4 Wrong Marks : 1

Complete the second sentence by selecting the appropriate option :

One way to improve your health is to eat more fruit and vegetables.
Alternatively _____ .

1. you could fall ill
2. you could go on diet
3. you could exercise more
4. you could increase risk of your heart disease

Options :

864351104591. 1

864351104592. 2

864351104593. 3

864351104594. 4

Question Number : 7 Question Id : 86435130036 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Fill in the blank with right word :

An employee might be given a privilege as a form of _____.

1. punishment
2. reward
3. increment
4. commendation

Options :

864351104595. 1

864351104596. 2

864351104597. 3

864351104598. 4

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Question Number : 8 Question Id : 86435130037 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Select the correct option for use of 'the' :

1. the Delhi
2. the city of Delhi
3. the southern India
4. the long island

Options :

864351104599. 1

864351104600. 2

864351104601. 3

864351104602. 4

Question Number : 9 Question Id : 86435130038 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Fill in the blank with correct preposition :

I am worried _____ exam.

1. on
2. in
3. about
4. of

Options :

864351104603. 1

864351104604. 2

864351104605. 3

864351104606. 4

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Question Number : 10 Question Id : 86435130039 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Identify the meaning of the idiom from the options given :

Hit the road

1. end the journey
2. an accident
3. begin the journey
4. happy times

Options :

864351104607. 1

864351104608. 2

864351104609. 3

864351104610. 4

Question Number : 11 Question Id : 86435130040 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

What will come in place of the question mark (?) in the expression?

$4003 \times 77 - 21015 = ? \times 116$

1. 2467
2. 2476
3. 2477
4. 2478

Options :

864351104611. 1

864351104612. 2

864351104613. 3

864351104614. 4

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Question Number : 12 Question Id : 86435130041 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R :

Assertion A : For making statues, we are using bronze.

Reason R : Through the mixing of copper and tin, we produce bronze.

In the light of the above statements, choose the ***most appropriate answer*** from the options given below.

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options :

864351104615. 1

864351104616. 2

864351104617. 3

864351104618. 4

Question Number : 13 Question Id : 86435130042 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The sum of five numbers is 260. The average of the first two numbers is 30 and the average of the last two numbers is 70. What is the third number?

1. 40
2. 50
3. 55
4. 60

Options :

864351104619. 1

864351104620. 2

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864351104621. 3

864351104622. 4

Question Number : 14 Question Id : 86435130043 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Thirty-six workers can finish a piece of work in 14 days. If the work is to be completed in 8 days, how many extra workers are required?

1. 20
2. 23
3. 27
4. 29

Options :

864351104623. 1

864351104624. 2

864351104625. 3

864351104626. 4

Question Number : 15 Question Id : 86435130044 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

What should come in the blank space in the following number series?

0, 2, _____, 18, 32, 50

1. 5
2. 6
3. 7
4. 8

Options :

864351104627. 1

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864351104628. 2

864351104629. 3

864351104630. 4

Question Number : 16 Question Id : 86435130045 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Three of the following four are alike in certain way based on the English alphabetical series and so form a group. Which is the one that does not belong to that group?

1. WXST
2. HCDE
3. QRMN
4. IJEF

Options :

864351104631. 1

864351104632. 2

864351104633. 3

864351104634. 4

Question Number : 17 Question Id : 86435130046 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If every alternate Saturdays and all Sundays are holidays in a 30 days month beginning on Saturday, then how many working days are there in that month?

1. 21
2. 22
3. 23
4. 24

Options :

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864351104635. 1

864351104636. 2

864351104637. 3

864351104638. 4

Question Number : 18 Question Id : 86435130047 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Pointing to a woman in the photograph, Neetu said, "Her son's father is the son-in-law of my mother". How is Neetu related to the woman?

1. Mother
2. Sister
3. Aunt
4. Mother-in-law

Options :

864351104639. 1

864351104640. 2

864351104641. 3

864351104642. 4

Question Number : 19 Question Id : 86435130048 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Suneeta travelled 5 km towards east direction. She turned right and went for 3 km. Then she turned west and travelled for 1 km. How far is she from the starting point?

1. 3 km
2. 5 km
3. 9 km
4. 10 km

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Options :

864351104643. 1

864351104644. 2

864351104645. 3

864351104646. 4

Question Number : 20 Question Id : 86435130049 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

In a certain code, TEMPORAL is written as OLDSMBSP. How is CONSIDER written in that code?

1. RMNBSFEJ
2. BNMRSFEJ
3. RMNBJEFS
4. TOPDQDCH

Options :

864351104647. 1

864351104648. 2

864351104649. 3

864351104650. 4

Question Number : 21 Question Id : 86435130050 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Whose creations are *Harshacharita and Kadambari*?

1. Kalhana
2. Panini
3. Banabhatta
4. Patanjali

Options :

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864351104651. 1

864351104652. 2

864351104653. 3

864351104654. 4

Question Number : 22 Question Id : 86435130051 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Present-day Istanbul in Turkey was earlier known as

1. Ankara
2. Ottoman
3. Constantinople
4. Byzantine

Options :

864351104655. 1

864351104656. 2

864351104657. 3

864351104658. 4

Question Number : 23 Question Id : 86435130052 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Space X is

1. an Indian autogiant
2. a movie on space
3. name of a spy agency
4. an American private space company

Options :

864351104659. 1

864351104660. 2

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864351104661. 3

864351104662. 4

Question Number : 24 Question Id : 86435130053 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

UN day is celebrated on

1. 26th November
2. 24th November
3. 26th October
4. 24th October

Options :

864351104663. 1

864351104664. 2

864351104665. 3

864351104666. 4

Question Number : 25 Question Id : 86435130054 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The famous novel, *Middlemarch* was written by

1. George Eliot
2. William Wordsworth
3. William Shakespeare
4. Ruskin Bond

Options :

864351104667. 1

864351104668. 2

864351104669. 3

864351104670. 4

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PART B - ATMOSPHERIC SCIENCE

Section Id :	8643511231
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	75
Number of Questions to be attempted :	75
Section Marks :	300
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	8643511464
Question Shuffling Allowed :	Yes

Question Number : 26 Question Id : 86435130055 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The dimension $ML^{-1}T^{-2}$ represents

1. Moment of a force
2. Modulus of elasticity
3. Surface Tension
4. Coefficient of viscosity

Options :

864351104671. 1

864351104672. 2

864351104673. 3

864351104674. 4

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Question Number : 27 Question Id : 86435130056 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

SI unit of radioactivity is

1. Roentgen
2. Rutherford
3. Curie
4. Becquerel

Options :

864351104675. 1

864351104676. 2

864351104677. 3

864351104678. 4

Question Number : 28 Question Id : 86435130057 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Two cars of unequal masses use similar tyres. If they are moving at the same initial speed, the minimum stopping distance

1. is smaller for the heavier car
2. is smaller for the lighter car
3. is same for both cars
4. depends upon the volume of the car

Options :

864351104679. 1

864351104680. 2

864351104681. 3

864351104682. 4

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Question Number : 29 Question Id : 86435130058 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The phenomena of beats can take place

1. for longitudinal waves only
2. for transverse waves only
3. for both longitudinal and transverse waves
4. for sound waves only

Options :

864351104683. 1

864351104684. 2

864351104685. 3

864351104686. 4

Question Number : 30 Question Id : 86435130059 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Release of energy from sun is due to

1. nuclear fission
2. nuclear fusion
3. burning of gases
4. chemical reaction

Options :

864351104687. 1

864351104688. 2

864351104689. 3

864351104690. 4

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Question Number : 31 Question Id : 86435130060 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The optical phenomena, twinkling of stars, is due to

1. Atmospheric reflection
2. Total reflection
3. Total refraction
4. Atmospheric refraction

Options :

864351104691. 1

864351104692. 2

864351104693. 3

864351104694. 4

Question Number : 32 Question Id : 86435130061 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Global radiation =

1. Direct radiation – Diffuse Radiation
2. Direct radiation + Diffuse Radiation
3. Direct radiation / Diffuse Radiation
4. Diffuse Radiation / Direct radiation

Options :

864351104695. 1

864351104696. 2

864351104697. 3

864351104698. 4

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Question Number : 33 Question Id : 86435130062 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

A rocket or jet engine works on the principle of

1. Conservation of energy
2. Conservation of mass
3. Conservation of momentum
4. Newton's second law of motion

Options :

864351104699. 1

864351104700. 2

864351104701. 3

864351104702. 4

Question Number : 34 Question Id : 86435130063 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

One reason why the sky appears blue is because

1. Much more red light than blue light is absorbed by air atoms
2. Red light is reflected by the atmosphere
3. Higher energy light waves have more penetration through the atmosphere
4. Blue light is scattered to a greater extent than red light

Options :

864351104703. 1

864351104704. 2

864351104705. 3

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864351104706. 4

Question Number : 35 Question Id : 86435130064 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following is not electro-magnetic?

1. Infrared Ray
2. Cathode Ray
3. X-Ray
4. Gamma Ray

Options :

864351104707. 1

864351104708. 2

864351104709. 3

864351104710. 4

Question Number : 36 Question Id : 86435130065 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If a pendulum clock keeping correct time is taken to high altitudes

1. It will keep correct time
2. Its length should be increased to keep correct time
3. Its length should be decreased to keep correct time
4. It cannot keep correct time even if the length is changed

Options :

864351104711. 1

864351104712. 2

864351104713. 3

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864351104714. 4

Question Number : 37 Question Id : 86435130066 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Among the planets, acceleration due to gravity (g) is minimum on the

1. Earth
2. Neptune
3. Venus
4. Mercury

Options :

864351104715. 1

864351104716. 2

864351104717. 3

864351104718. 4

Question Number : 38 Question Id : 86435130067 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following parameters does not characterize the thermodynamic state of matter?

1. Temperature
2. Pressure
3. Work
4. Volume

Options :

864351104719. 1

864351104720. 2

864351104721. 3

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864351104722. 4

Question Number : 39 Question Id : 86435130068 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Real images formed by single convex lenses are always _____.

1. on the same side of the lens as the object
2. inverted
3. erect
4. smaller than the object

Options :

864351104723. 1

864351104724. 2

864351104725. 3

864351104726. 4

Question Number : 40 Question Id : 86435130069 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The relation derived for the total emissive power of the black body as a function of wavelength and based on quantum theory is known as

1. Planck's law
2. Kirchhoff's law
3. Stefan-Boltzmann law
4. Second law of thermodynamics

Options :

864351104727. 1

864351104728. 2

864351104729. 3

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864351104730. 4

Question Number : 41 Question Id : 86435130070 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

For an even periodic function, Fourier series can be written as

1. $A_0 + \sum_{k=1}^{\alpha} b_k \sin(2\pi \frac{k}{p} t)$

2. $\sum_{k=1}^{\alpha} b_k \sin(2\pi \frac{k}{p} t)$

3. $A_0 + \sum_{k=1}^{\alpha} a_k \cos(2\pi \frac{k}{p} t)$

4. $\sum_{k=1}^{\alpha} a_k \cos(2\pi \frac{k}{p} t)$

Options :

864351104731. 1

864351104732. 2

864351104733. 3

864351104734. 4

Question Number : 42 Question Id : 86435130071 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

For any periodic function *f(x)* with period p where $0 < p < \alpha$ and *k*, *n* are positive integers and *k*=*n*, the orthogonality relation is given by

1. $\int_0^p \cos\left(\frac{2\pi k}{p} x\right) \cos\left(\frac{2\pi n}{p} x\right) dx = 0$

2. $\int_0^p \cos\left(\frac{2\pi k}{p} x\right) \cos\left(\frac{2\pi n}{p} x\right) dx = 1$

3. $\int_0^p \cos\left(\frac{2\pi k}{p} x\right) \cos\left(\frac{2\pi n}{p} x\right) dx = \frac{p}{2}$

4. $\int_0^p \cos\left(\frac{2\pi k}{p} x\right) \cos\left(\frac{2\pi n}{p} x\right) dx = p$

Options :

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864351104735. 1

864351104736. 2

864351104737. 3

864351104738. 4

Question Number : 43 Question Id : 86435130072 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

What would be the value of Fourier Coefficient for function $f(t) = t^2$ with period = 2?

1. $A_o=4/3;\ A_k=4/k^2\pi^2\ ;\ B_k=-4/k\pi$
2. $A_o=0;\ A_k=4/k^2\pi^2\ ;\ B_k=-4/\pi$
3. $A_o=4/3;\ A_k=4/k^2\pi^2\ ;\ B_k=0$
4. $A_o=4/3;\ A_k=0\ ;\ B_k=-4/\pi$

Options :

864351104739. 1

864351104740. 2

864351104741. 3

864351104742. 4

Question Number : 44 Question Id : 86435130073 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Relations among classes can be represented graphically by means of a useful device known as

1. ROC diagram
2. Coordinate diagram
3. Venn diagram
4. Taylor diagram

Options :

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864351104743. 1

864351104744. 2

864351104745. 3

864351104746. 4

Question Number : 45 Question Id : 86435130074 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which is the infinite set among the following sets?

1. The set of days in week
2. $A = \{x : x \in N, x > 1\}$
3. $A = \{x : x \in Z, x < -1\}$
4. $A = \{x : x \text{ is the multiplier of } 30\}$

Options :

864351104747. 1

864351104748. 2

864351104749. 3

864351104750. 4

Question Number : 46 Question Id : 86435130075 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

What is the cardinal number of the following sets?

$A = \{x : x \text{ is the letter in the word MALAYALAM}\}$

1. 9
2. 4
3. 10
4. 5

Options :

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864351104751. 1

864351104752. 2

864351104753. 3

864351104754. 4

Question Number : 47 Question Id : 86435130076 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Suppose that the matrices A, B and C are so chosen that the matrix multiplications are defined. Which property does not satisfy by those matrices?

1. $(AB)C = A(BC)$
2. $k(AB) = A(kB)$ for any $k \in R$
3. $AB = BA$
4. $A(B + C) = AB + AC$

Options :

864351104755. 1

864351104756. 2

864351104757. 3

864351104758. 4

Question Number : 48 Question Id : 86435130077 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Determine the row rank of matrix $A = \begin{bmatrix} 1 & 2 & 1 \\ 2 & 3 & 1 \\ 1 & 1 & 0 \end{bmatrix}$

1. 2
2. 3
3. 1
4. 0

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Options :

864351104759. 1

864351104760. 2

864351104761. 3

864351104762. 4

Question Number : 49 Question Id : 86435130078 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Find the differential equation for following implicit solution $x + y + e^{xy} = 0$

1. $(1 + xe^{xy})\frac{dy}{dx} + 1 + e^{xy} = 0$
2. $(1 + e^{xy})\frac{dy}{dx} + 1 + ye^{xy} = 0$
3. $(1 + xe^{xy})\frac{dy}{dx} + 1 + ye^{xy} = 0$
4. $(1 + xe^{xy})\frac{dy}{dx} = 0$

Options :

864351104763. 1

864351104764. 2

864351104765. 3

864351104766. 4

Question Number : 50 Question Id : 86435130079 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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What would be the integrating factor for following differential equation?

$$y' + y = \sqrt{1 + cosx^2}$$

1. e^{cosx}
2. e^{x}
3. e^{1+x}
4. e^{1+sinx}

Options :

864351104767. 1

864351104768. 2

864351104769. 3

864351104770. 4

Question Number : 51 Question Id : 86435130080 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

For an ellipse, eccentricity would be

1. between 0 to 1
2. equal to 1
3. equal to 0
4. greater than 1

Options :

864351104771. 1

864351104772. 2

864351104773. 3

864351104774. 4

Question Number : 52 Question Id : 86435130081 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

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Correct Marks : 4 Wrong Marks : 1

Mark the wrong statement

1. The sum of the transpose is the transpose of the sum.
2. The inverse of the transpose is the transpose of inverse.
3. The transpose of diagonal matrix is triangular matrix.
4. A matrix that is equal to its transpose is called symmetric matrix.

Options :

864351104775. 1

864351104776. 2

864351104777. 3

864351104778. 4

Question Number : 53 Question Id : 86435130082 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If ω is an imaginary cube root of unity, then $(1 + \omega - \omega^2)^7$ equals

1. $128\ \omega$
2. $-128\ \omega$
3. $128\ \omega^2$
4. $-128\ \omega^2$

Options :

864351104779. 1

864351104780. 2

864351104781. 3

864351104782. 4

Question Number : 54 Question Id : 86435130083 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

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Correct Marks : 4 Wrong Marks : 1

Write the equation of the ellipse that has its center at the origin with focus at (0, ±4) and vertex at (0, ±7)

1. $\frac{x^2}{49}+\frac{y^2}{33}=1$
2. $\frac{x^2}{33}+\frac{y^2}{49}=-1$
3. $\frac{x^2}{33}-\frac{y^2}{49}=1$
4. $\frac{x^2}{33}+\frac{y^2}{49}=1$

Options :

864351104783. 1

864351104784. 2

864351104785. 3

864351104786. 4

Question Number : 55 Question Id : 86435130084 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Find the value of x if matrix $A=\begin{bmatrix}3-x & 2 & 2\\ 2 & 4-x & 1\\ -2 & -4 & -1-x\end{bmatrix}$ is singular

1. 0, 1
2. 1, 3
3. 0, 3
4. 3, 2

Options :

864351104787. 1

864351104788. 2

864351104789. 3

864351104790. 4

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Question Number : 56 Question Id : 86435130085 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

What is the residual for the point (7, 6) if the equation of the regression line is $\hat{y} = 1.2x - 3.4$?

1. −1
2. −2.2
3. 1
4. 2.2

Options :

864351104791. 1

864351104792. 2

864351104793. 3

864351104794. 4

Question Number : 57 Question Id : 86435130086 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If the standard deviation of a sample is 5 and each observation in the sample is doubled, the new value of standard deviation for the modified sample would be

1. 2.5
2. 5.0
3. 7
4. 10

Options :

864351104795. 1

864351104796. 2

864351104797. 3

864351104798. 4

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Question Number : 58 Question Id : 86435130087 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If the arithmetic mean is multiplied to coefficient of variation, then the resulting value is classified as

1. Coefficient of deviation
2. Coefficient of mean
3. Standard deviation
4. Variance

Options :

864351104799. 1

864351104800. 2

864351104801. 3

864351104802. 4

Question Number : 59 Question Id : 86435130088 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

A process by which we estimate the value of dependent variable on the basis of one or more independent variables is called

1. Correlation
2. Slope
3. Residual
4. Regression

Options :

864351104803. 1

864351104804. 2

864351104805. 3

864351104806. 4

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Question Number : 60 Question Id : 86435130089 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The selection of sample units at equal intervals, after all the units in the population have been arranged in same order is called

1. Simple random sampling
2. Purposive sampling
3. Stratified sampling
4. Systematic sampling

Options :

864351104807. 1

864351104808. 2

864351104809. 3

864351104810. 4

Question Number : 61 Question Id : 86435130090 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Coefficient of correlation is computed to be -0.90 means that

1. The relationship between two variables is weak
2. The relationship between two variables is weak and negative
3. The relationship between two variables is strong and negative
4. Correlation coefficient cannot have this value

Options :

864351104811. 1

864351104812. 2

864351104813. 3

864351104814. 4

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Question Number : 62 Question Id : 86435130091 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If a set of data has one mode and its value is less than mean, then the distribution is called

1. positively skewed
2. negatively skewed
3. symmetrical
4. normal

Options :

864351104815. 1

864351104816. 2

864351104817. 3

864351104818. 4

Question Number : 63 Question Id : 86435130092 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

In a moderately skewed distribution, mean = 45 and mode = 0, the value of median is

1. 30
2. 45
3. 0
4. 180

Options :

864351104819. 1

864351104820. 2

864351104821. 3

864351104822. 4

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Question Number : 64 Question Id : 86435130093 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The number of independent value in a set of values is called

1. Test-statistic
2. Degree of freedom
3. Level of significance
4. Level of confidence

Options :

864351104823. 1

864351104824. 2

864351104825. 3

864351104826. 4

Question Number : 65 Question Id : 86435130094 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following *p*-values will lead us to reject the null hypothesis if the confidence level of the test is 95%?

1. 0.12
2. 0.06
3. 0.02
4. 0.10

Options :

864351104827. 1

864351104828. 2

864351104829. 3

864351104830. 4

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Question Number : 66 Question Id : 86435130095 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The standard deviation calculated from a set of 32 observations is 5. If the sum of the observations is 80, what is the sum of the square of these observations?

1. 6400
2. 1000
3. 256
4. 400

Options :

864351104831. 1

864351104832. 2

864351104833. 3

864351104834. 4

Question Number : 67 Question Id : 86435130096 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The arithmetic mean and variance of n values $x_1, x_2, \ldots\ldots, x_n$ are 0 and σ^2 respectively. A variable y is defined by $y = x^2$. Which is the arithmetic mean of y?

1. σ^2
2. σ
3. $\sigma/2$
4. 2σ

Options :

864351104835. 1

864351104836. 2

864351104837. 3

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864351104838. 4

Question Number : 68 Question Id : 86435130097 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Find the mode of the calls received on 7 consecutive day 11,13,13,17,19,23,25

1. 11
2. 13
3. 17
4. 23

Options :

864351104839. 1

864351104840. 2

864351104841. 3

864351104842. 4

Question Number : 69 Question Id : 86435130098 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Suppose the mean and variance of the Binomial distribution is 6 and 2, respectively, the value of probability of success will be

1. 2/3
2. 1/3
3. 3/2
4. 1/2

Options :

864351104843. 1

864351104844. 2

864351104845. 3

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864351104846. 4

Question Number : 70 Question Id : 86435130099 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The standard deviation of a sampling distribution of a statistic is called its

1. Root mean square
2. Standard error
3. Second moment about mean
4. Parameter

Options :

864351104847. 1

864351104848. 2

864351104849. 3

864351104850. 4

Question Number : 71 Question Id : 86435130100 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

What would be the shortcut key to delete permanently a file or folder from a computer?

1. Delete
2. Alt-Delete
3. Shift-Delete
4. Ctrl-Delete

Options :

864351104851. 1

864351104852. 2

864351104853. 3

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864351104854. 4

Question Number : 72 Question Id : 86435130101 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

What would be the decimal form of the following hexadecimal $1AF_{16}$?

1. 256
2. 450
3. 431
4. 16

Options :

864351104855. 1

864351104856. 2

864351104857. 3

864351104858. 4

Question Number : 73 Question Id : 86435130102 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Who is the father of modern digital computer?

1. Von Neuman
2. Charles Babbage
3. Blaise Pascal
4. Herman Hollerith

Options :

864351104859. 1

864351104860. 2

864351104861. 3

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864351104862. 4

Question Number : 74 Question Id : 86435130103 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The arranging of data in a logical sequence is called

1. Sorting
2. Classifying
3. Reproducing
4. Summarizing

Options :

864351104863. 1

864351104864. 2

864351104865. 3

864351104866. 4

Question Number : 75 Question Id : 86435130104 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Type of Architecture used in high-end servers is

1. Complex Instruction set computer
2. Explicitly parallel Instruction computing
3. Reduced Instruction set computer
4. Single Core Processor

Options :

864351104867. 1

864351104868. 2

864351104869. 3

864351104870. 4

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Question Number : 76 Question Id : 86435130105 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which protocol provides e-mail facility among different hosts?

1. FTP
2. SMTP
3. TELNET
4. SNMP

Options :

864351104871. 1

864351104872. 2

864351104873. 3

864351104874. 4

Question Number : 77 Question Id : 86435130106 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The ascending order or a data Hierarchy is

1. bit–bytes–record–field–file–database
2. bytes–bit–field–record–file–database
3. bytes–bit–record–field–file–database
4. bit–bytes–fields–record–file–database

Options :

864351104875. 1

864351104876. 2

864351104877. 3

864351104878. 4

Question Number : 78 Question Id : 86435130107 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

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Correct Marks : 4 Wrong Marks : 1

In banking, railways etc. which computers are used?

1. Mini Computers
2. Micro Computers
3. Main Frames
4. Super Computers

Options :

864351104879. 1

864351104880. 2

864351104881. 3

864351104882. 4

Question Number : 79 Question Id : 86435130108 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

MPG is a file extension of which type of files?

1. Audio
2. Image
3. Video
4. Flash

Options :

864351104883. 1

864351104884. 2

864351104885. 3

864351104886. 4

Question Number : 80 Question Id : 86435130109 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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Full form of URL is

1. Uniform Resource Locator
2. Uniform Resource Link
3. Uniform Registered Link
4. Unified Resource Link

Options :

864351104887. 1

864351104888. 2

864351104889. 3

864351104890. 4

Question Number : 81 Question Id : 86435130110 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

A digital image is defined as a matrix of

1. Whole numbers
2. Zeros
3. Integer numbers
4. Digital numbers

Options :

864351104891. 1

864351104892. 2

864351104893. 3

864351104894. 4

Question Number : 82 Question Id : 86435130111 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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A computerized database system for capture, storage, retrieval, analysis, and display of spatial data is

1. DBMS
2. GIS
3. GPRS
4. GPS

Options :

864351104895. 1

864351104896. 2

864351104897. 3

864351104898. 4

Question Number : 83 Question Id : 86435130112 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which one of the following is not an example of vector data?

1. River network
2. Watershed boundary
3. Well location
4. Satellite image

Options :

864351104899. 1

864351104900. 2

864351104901. 3

864351104902. 4

Question Number : 84 Question Id : 86435130113 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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RAID stands for

1. Redundant array of independent disks
2. Redundant array of individual disks
3. Reusable Array of independent disks
4. Reusable array of individual disks

Options :

864351104903. 1

864351104904. 2

864351104905. 3

864351104906. 4

Question Number : 85 Question Id : 86435130114 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The binary equivalent of the decimal number 10 is

1. 0010
2. 10
3. 1010
4. 010

Options :

864351104907. 1

864351104908. 2

864351104909. 3

864351104910. 4

Question Number : 86 Question Id : 86435130115 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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Trenches are not formed along

1. Oceanic-Oceanic Convergent plate boundary
2. Continental-Continental convergent plate boundary
3. Continental-Oceanic convergent plate boundary
4. All type of convergent plate boundary

Options :

864351104911. 1

864351104912. 2

864351104913. 3

864351104914. 4

Question Number : 87 Question Id : 86435130116 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The boundary between two trade wind belts along the equator is known as

1. Horse latitude
2. Doldrums
3. Prevailing westerlies
4. Sub-tropical zone

Options :

864351104915. 1

864351104916. 2

864351104917. 3

864351104918. 4

Question Number : 88 Question Id : 86435130117 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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Tides on Earth are generated due to

1. Gravitational force by Sun and Moon
2. Imbalance between required centripetal and gravitational force
3. Imbalance between Rotation of Earth and centripetal force
4. Centrifugal force generated due to earth's rotation

Options :

864351104919. 1

864351104920. 2

864351104921. 3

864351104922. 4

Question Number : 89 Question Id : 86435130118 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The highly variable gaseous constituent of the Earth's Atmosphere is

1. Carbon-dioxide
2. Argon
3. Water vapour
4. Ozone

Options :

864351104923. 1

864351104924. 2

864351104925. 3

864351104926. 4

Question Number : 90 Question Id : 86435130119 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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Which day is celebrated as International Ozone Day?

1. 16th September
2. 22nd April
3. 22nd March
4. 5th June

Options :

864351104927. 1

864351104928. 2

864351104929. 3

864351104930. 4

Question Number : 91 Question Id : 86435130120 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Outermost layer of Earth is

1. mantle
2. crust
3. core
4. ridge

Options :

864351104931. 1

864351104932. 2

864351104933. 3

864351104934. 4

Question Number : 92 Question Id : 86435130121 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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The main constituent of CNG is _____.

1. methane
2. butane
3. ethane
4. propane

Options :

864351104935. 1

864351104936. 2

864351104937. 3

864351104938. 4

Question Number : 93 Question Id : 86435130122 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

World Water Day is celebrated annually on

1. 22nd March
2. 22nd April
3. 22nd May
4. 20th August

Options :

864351104939. 1

864351104940. 2

864351104941. 3

864351104942. 4

Question Number : 94 Question Id : 86435130123 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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An anemometer is used for measuring

1. rainfall
2. solar radiation
3. wind speed
4. humidity

Options :

864351104943. 1

864351104944. 2

864351104945. 3

864351104946. 4

Question Number : 95 Question Id : 86435130124 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The El-Nino Phenomenon occurs in

1. Atlantic Ocean
2. Pacific Ocean
3. Indian Ocean
4. Arctic Ocean

Options :

864351104947. 1

864351104948. 2

864351104949. 3

864351104950. 4

Question Number : 96 Question Id : 86435130125 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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The secretariat of the United Nations Framework convention on climate change is located in

1. Germany
2. Japan
3. USA
4. Sweden

Options :

864351104951. 1

864351104952. 2

864351104953. 3

864351104954. 4

Question Number : 97 Question Id : 86435130126 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

NDVI stands for

1. Normalized Different Vegetation Index
2. Normalized Duration Vegetation Index
3. Normalized Difference Variation Index
4. Normalized Difference Vegetation Index

Options :

864351104955. 1

864351104956. 2

864351104957. 3

864351104958. 4

Question Number : 98 Question Id : 86435130127 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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Seismograph is used to measure the

1. Cyclone
2. Earthquake
3. Landslide
4. Flood

Options :

864351104959. 1

864351104960. 2

864351104961. 3

864351104962. 4

Question Number : 99 Question Id : 86435130128 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Theme of World Ozone Day 2019 was

1. ozone for life
2. 32 years and healing
3. caring for all life under the sun
4. keep cool and carry on

Options :

864351104963. 1

864351104964. 2

864351104965. 3

864351104966. 4

Question Number : 100 Question Id : 86435130129 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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The Government of India launched National Action Plan on Climate Change (NAPCC) on

1. 30th June, 2009
2. 30th June 2010
3. 30th June 2006
4. 30th June 2008

Options :

864351104967. 1

864351104968. 2

864351104969. 3

864351104970. 4

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