

Telangana State Council Higher Education

Notations :

- 1.Options shown in green color and with ✓ icon are correct.
- 2.Options shown in red color and with ✗ icon are incorrect.

Question Paper Name :	BSc MATHEMATICS 06th May 2024 Shift1
Subject Name :	BSc Mathematics
Creation Date :	2024-05-06 19:15:06
Duration :	180
Total Marks :	200
Display Marks:	No
Share Answer Key With Delivery Engine :	Yes
Actual Answer Key :	Yes
Calculator :	None
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console?	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No

Show Reports : No
Show Progress Bar : No

BSc MATHEMATICS

Group Number : 1
Group Id : 7614464
Group Maximum Duration : 0
Group Minimum Duration : 180
Show Attended Group? : No
Edit Attended Group? : No
Break time : 0
Group Marks : 200
Is this Group for Examiner? : No
Examiner permission : Cant View
Show Progress Bar? : No

Mathematics

Section Id : 76144612
Section Number : 1
Section type : Online
Mandatory or Optional : Mandatory
Number of Questions : 100
Number of Questions to be attempted : 100
Section Marks : 100
Enable Mark as Answered Mark for Review and Clear Response : Yes
Maximum Instruction Time : 0
Sub-Section Number : 1

Sub-Section Id : 76144619

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 1 Question Id : 761446606 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\text{If } u = \log(\tan x + \tan y + \tan z), \text{ then } \sin 2x \frac{\partial u}{\partial x} + \sin 2y \frac{\partial u}{\partial y} + \sin 2z \frac{\partial u}{\partial z} =$$

Options :

7614462401. ✖ 1

7614462402. ✔ 2

7614462403. ✖ 3

7614462404. ✖ 4

Question Number : 2 Question Id : 761446607 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\lim_{(x,y) \rightarrow (0,0)} \frac{xy}{\sqrt{x^2 + y^2}} =$$

Options :

7614462405. ✘ 1

7614462406. ✘ -1

7614462407. ✔ 0

7614462408. ✘ 2

**Question Number : 3 Question Id : 761446608 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0**

If $f(x, y) = \log(x^2 + y^2) + \tan^{-1}\left(\frac{y}{x}\right)$, then $f_y(1, 2) =$

Options :

7614462409. ✘ 4

7614462410. ✘ 3

7614462411. ✘ 2

7614462412. ✔ 1

Question Number : 4 Question Id : 761446609 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $f(x, y) = \frac{x^{\frac{8}{3}} + y^{\frac{8}{3}}}{x^{\frac{5}{4}} + y^{\frac{5}{4}}}$ is a homogeneous function of degree

Options :

7614462413. ✓ $\frac{17}{12}$

7614462414. ✗ $\frac{13}{12}$

7614462415. ✗ $\frac{11}{12}$

7614462416. ✗ $\frac{19}{12}$

Question Number : 5 Question Id : 761446610 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $u(x, y) = \sqrt{x^2 + y^2} \sin^{-1}\left(\frac{x}{y}\right)$ then $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} =$

Options :

7614462417. ✘ 4u

7614462418. ✘ 2u

7614462419. ✔ u

7614462420. ✘ 6u

**Question Number : 6 Question Id : 761446611 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

If $u = x^2 + y^2 + z^2$, $x = e^t$, $y = e^t \sin t$ and $z = e^t \cos t$ then $\frac{du}{dt}$ at $t = 2$ is

Options :

7614462421. ✘ $6e^4$

7614462422. ✔ $4e^4$

7614462423. ✘ $8e^4$

7614462424. ✘ e^4

Question Number : 7 Question Id : 761446612 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $u = (x-y)^6 + (y-z)^6 + (z-x)^6$ then $\frac{\partial u}{\partial x} + \frac{\partial u}{\partial y} + \frac{\partial u}{\partial z} =$

Options :

7614462425. ✓ 0

7614462426. ✗ 1

7614462427. ✗ 2

7614462428. ✗ 3

Question Number : 8 Question Id : 761446613 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The extreme value of $x^2 + y^2$ when $x^4 + y^4 = 1$ is

Options :

7614462429. ✓ $\sqrt{2}$

7614462430. ✗ $\sqrt{3}$

7614462431. ✖ $\sqrt{5}$

7614462432. ✖ $\sqrt{6}$

**Question Number : 9 Question Id : 761446614 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0**

The minimum value of $f(x, y) = x^2 + xy + y^2$ is

Options :

7614462433. ✖ 4

7614462434. ✖ 3

7614462435. ✖ 2

7614462436. ✔ 0

**Question Number : 10 Question Id : 761446615 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0**

If $u(x, y, z) = x^2y + y^2z + z^2x$, then at $P(1, 1, 1)$ the value of

$$\frac{\partial u}{\partial x} + \frac{\partial u}{\partial y} + \frac{\partial u}{\partial z} =$$

Options :

7614462437. ✖ 1

7614462438. ✖ 2

7614462439. ✖ 3

7614462440. ✔ 9

Question Number : 11 Question Id : 761446616 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $ax^2 + 2hxy + by^2 = c$, then $\frac{dy}{dx} =$

Options :

7614462441. ✖ $\frac{ax + hy}{hx + by}$

7614462442. ✖ $\frac{hx + by}{ax + hy}$

7614462443.

✓
$$\frac{(ax + by)}{hx + by}$$

7614462444. ✘
$$\frac{(hx + by)^2}{ax + by}$$

Question Number : 12 Question Id : 761446617 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The coefficient of $(y-2)$ in the Taylor's series expansion of $f(x, y) = x^2 + xy + y^2$ in powers of $(x-1)$ and $(y-2)$ is

Options :

7614462445. ✓ 5

7614462446. ✘ 3

7614462447. ✘ 2

7614462448. ✘ 1

Question Number : 13 Question Id : 761446618 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The curvature of the straight line $y = 2x + 3$ at $(1, 5)$ is

Options :

7614462449. ✘ 2

7614462450. ✔ 0

7614462451. ✘ $\frac{1}{2}$

7614462452. ✘ 3

Question Number : 14 Question Id : 761446619 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The radius of the curvature of the curve $xy = 1$ at $(1, 1)$ is

Options :

7614462453. ✘ $\frac{1}{\sqrt{2}}$

7614462454. ✘ 2

7614462455. ✘ $\frac{1}{2}$

7614462456. ✓ $\sqrt{2}$

Question Number : 15 Question Id : 761446620 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The radius of the curvature at the origin for the curve $x^3 + y^3 - x^2 + 6y = 0$ is

Options :

7614462457. ✓ 3

7614462458. ✗ 6

7614462459. ✗ 2

7614462460. ✗ 4

Question Number : 16 Question Id : 761446621 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The locus of centre of curvature is known as

Options :

7614462461. ✗ Envelope

7614462462. ✘ Involute

7614462463. ✔ Evolute

7614462464. ✘ Centre of curvature

Question Number : 17 Question Id : 761446622 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The centre of circle of curvature for the curve $y = e^x$ at $(0,1)$ is

Options :

7614462465. ✘ $(2,3)$

7614462466. ✔ $(-2,3)$

7614462467. ✘ $(2,-3)$

7614462468. ✘ $(-2,-3)$

Question Number : 18 Question Id : 761446623 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The envelope of the family of curves $x \cos \alpha + y \sin \alpha = 4$, where α is a parameter is

Options :

7614462469. ✘ $x^2 - y^2 = 16$

7614462470. ✘ $x^2 = y^2$

7614462471. ✘ $x^2 + y^2 = 4$

7614462472. ✔ $x^2 + y^2 = 16$

Question Number : 19 Question Id : 761446624 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The arc length of the curve $x = f(t)$, $y = g(t)$, $a \leq t \leq b$, is given by

Options :

7614462473. ✔
$$\int_a^b \sqrt{\left(\frac{dx}{dt}\right)^2 + \left(\frac{dy}{dt}\right)^2} dt$$

7614462474. ✘
$$\int_a^b \sqrt{x^2 + y^2} dt$$

7614462475. ✖

$$\int_a^b \sqrt{x^2 + \left(\frac{dy}{dt}\right)^2} dt$$

7614462476. ✖

$$\int_a^b \sqrt{\left(\frac{dx}{dt}\right)^2 + y^2} dt$$

Question Number : 20 Question Id : 761446625 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The length of the arc of the curve $r = 6 \sin \theta$, $0 \leq \theta \leq \frac{\pi}{2}$ is

Options :

7614462477. ✖ 2π

7614462478. ✖ π

7614462479. ✔ 3π

7614462480. ✖ $\frac{3\pi}{2}$

Question Number : 21 Question Id : 761446626 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of the differential equation

$$y dx - x dy + 3x^2 y^2 e^{x^3} dx = 0 \text{ is}$$

Options :

$$x + e^{x^3} = c$$

7614462481. ✖

$$x + e^{-x^3} = c$$

7614462482. ✖

$$xy + e^{xy} = c$$

7614462483. ✖

$$\frac{x}{y} + e^{-x^3} = c$$

7614462484. ✔

Question Number : 22 Question Id : 761446627 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of the differential equation

$$x dy - y dx = \sqrt{x^2 + y^2} dx \text{ is}$$

Options :

7614462485. ✘ $y + \sqrt{x^2 + y} = cx$

7614462486. ✔ $y + \sqrt{x^2 + y^2} = cx^2$

7614462487. ✘ $y + \sqrt{y^2 + x} = cy$

7614462488. ✘ $y + \sqrt{x + y} = cy^2$

Question Number : 23 Question Id : 761446628 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of the differential equation

$$(1+x^3)\frac{dy}{dx} + 3x^2y = \sin^2 x \text{ is}$$

Options :

7614462489. ✔ $2y(1+x^3) = x - \sin x \cos x + c$

7614462490. ✘ $2yx + x^3 = \sin^2 x + c$

7614462491. ✘ $2y(1+x^3) = \sin x \cos x + c$

7614462492.

✘ $2x(1+y^3) = \sin x \cos x + c$

Question Number : 24 Question Id : 761446629 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of the differential equation $\frac{dy}{dx} + \frac{1}{x} = \frac{e^y}{x^2}$ is

Options :

7614462493. ✘ $e^{-x} y^2 = x^2 + cy$

7614462494. ✔ $2xe^{-y} = 2cx^2 + 1$

7614462495. ✘ $2ye^{-x} = 2cy^2 + 1$

7614462496. ✘ $ye^{-x} = cx^2 + y^2$

Question Number : 25 Question Id : 761446630 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

An integrating factor of the differential equation
 $(5x^3 + 12x^2 + 6y^2) dx + 6xy dy = 0$ is

Options :

7614462497. ✘ x^3

7614462498. ✘ x^2

7614462499. ✘ x^4

7614462500. ✔ x

Question Number : 26 Question Id : 761446631 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The solution of the differential equation $(2xy + e^y) dx + (x^2 + xe^y) dy = 0$
 $y(1) = 1$ is

Options :

7614462501. ✘ $x^2 + y^2 = (e+1)x$

7614462502. ✘ $x + y^2 = (e+1)y$

7614462503. ✔ $x^2y + xe^y = (e+1)$

7614462504. ✘ $x^2 + xe^y = (e+2)$

Question Number : 27 Question Id : 761446632 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of the differential equation

$$3x^2y \, dx - (x^3 + 2y^4) \, dy = 0 \text{ is}$$

Options :

7614462505. ✓

$$\frac{x^3}{y} - \frac{2y^3}{3} = c$$

7614462506. ✗

$$\frac{x^3}{y} + \frac{y^3}{x} = c$$

7614462507. ✗

$$\frac{x^2}{y} + \frac{y^2}{x} = c$$

7614462508. ✗

$$\frac{x}{y} + \frac{y}{x} = c$$

Question Number : 28 Question Id : 761446633 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of the differential equation $\frac{dy}{dx} = e^{x-y}(e^x - e^y)$ is

Options :

$$e^y e^{e^x} = e^x e^{e^x} + c$$

7614462509. ✖

$$e^y e^{2x} = e^x e^{x^y} + c$$

7614462510. ✖

$$e^y e^{e^x} = (e^x - 1)e^{e^x} + c$$

7614462511. ✔

$$e^y e^{e^x} = e^{2x} e^{e^y} + c$$

7614462512. ✖

Question Number : 29 Question Id : 761446634 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of the differential equation $y = 2px + yp^2$ where

$p = \frac{dy}{dx}$ is

Options :

$$y^2 = 2cx + c^2$$

7614462513. ✔

7614462514. ✘ $x^2 = 2cy + c^2$

7614462515. ✘ $x = 2cy + c^2$

7614462516. ✘ $x^2 = 2cy^2 + c^2$

Question Number : 30 Question Id : 761446635 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The singular solution of the differential equation $y = px + p^2$ where

$p = \frac{dy}{dx}$ is

Options :

7614462517. ✘ $x + 4y^2 = 0$

7614462518. ✘ $x - 4y^2 = 0$

7614462519. ✔ $x^2 + 4y = 0$

7614462520. ✘ $x^2 - 4y = 0$

Question Number : 31 Question Id : 761446636 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The equation of the third order homogeneous linear differential equation whose three linearly independent solutions are $1, \sin 2x, \cos 2x$ is

Options :

7614462521. ✘ $y''' + 4y = 0$

7614462522. ✘ $y''' - 4y = 0$

7614462523. ✔ $y''' + 4y' = 0$

7614462524. ✘ $y''' - 4y' = 0$

Question Number : 32 Question Id : 761446637 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If the solution of $y'' + y' - 2y = 0, y(0)=0, y'(0)=3$ is of the form $ae^{-2x} + be^x$, then $a+b =$

Options :

7614462525. ✘ 1

7614462526. ✘ -2

7614462527. ✖ 2

7614462528. ✔ 0

Question Number : 33 Question Id : 761446638 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of $(D^2 - 2D + 1)^2 y = 0$, $D = \frac{dy}{dx}$, is

Options :

7614462529. ✔ $(c_1 + c_2x + c_3x^2 + c_4x^3)e^x$

7614462530. ✖ $(c_1 + c_2x + c_3x^2 + c_4x^3)e^{-x}$

7614462531. ✖ $c_1e^x + c_2e^{-x} + c_3e^{2x} + c_4e^{-2x}$

7614462532. ✖ $(c_1 + c_2x + c_3x^2)e^{-x}$

Question Number : 34 Question Id : 761446639 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The number of solutions of $\frac{d^3y}{dx^3} + 8y = 0$ which tend to zero as $x \rightarrow \infty$ is

Options :

7614462533. ✘ 0

7614462534. ✔ 1

7614462535. ✘ 2

7614462536. ✘ 3

Question Number : 35 Question Id : 761446640 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The particular integral of $\frac{d^3y}{dx^3} = \cos 2x$ is

Options :

7614462537. ✘ $\frac{\sin 2x}{4}$

7614462538. ✘ $\frac{\cos 2x}{4}$

7614462539. ✔ $-\frac{\sin 2x}{8}$

7614462540. ✖

$$\frac{\cos 2x}{8}$$

Question Number : 36 Question Id : 761446641 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of $y'' - y = (e^x + e^{-x})^2$ is

Options :

7614462541. ✔

$$c_1 e^{-x} + c_2 e^x + \frac{e^{2x} + e^{-2x} - 6}{3}$$

7614462542. ✖

$$c_1 e^{-x} + c_2 e^x + x e^x + x e^{-x} - 2$$

7614462543. ✖

$$c_1 e^{-x} + c_2 e^x + e^{2x} - e^{-2x}$$

7614462544. ✖

$$c_1 e^{-x} + c_2 e^x + x e^x + e^{-x} - 6$$

Question Number : 37 Question Id : 761446642 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of $(x^2D^2 + 4xD + 2)y = x$, $D = \frac{dy}{dx}$ is

Options :

$$c_1e^{-x} + c_2e^{-2x} + \frac{x}{6}$$

7614462545. ✖

$$c_1e^{-x} + c_2e^{-2x} + \frac{e^x}{6}$$

7614462546. ✖

$$\frac{c_1}{x} + \frac{c_2}{x^2} + \frac{x}{6}$$

7614462547. ✔

$$\frac{c_1}{x} + \frac{c_2}{x^2} + \frac{e^x}{6}$$

7614462548. ✖

Question Number : 38 Question Id : 761446643 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The complementary function of $(x+3)^2y'' - 4(x+3)y' + 6y = x(x+3)e^{-x}$ is

Options :

$$c_1e^{2(x+3)} + c_2e^{3(x+3)}$$

7614462549. ✖

$$c_1(x+3)^2 + c_2(x+3)^3$$

7614462550. ✔

7614462551. ✖

$$c_1 e^{2x} + c_2 e^{3x}$$

7614462552. ✖

$$c_1(x+3) + c_2(x+3)^2$$

Question Number : 39 Question Id : 761446644 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The partial differential equation which is obtained by eliminating the arbitrary function f from $z = e^y f(x+y)$ is

Options :

7614462553. ✖

$$\frac{\partial z}{\partial x} = \frac{\partial z}{\partial y}$$

7614462554. ✖

$$\frac{\partial z}{\partial x} + \frac{\partial z}{\partial y} = z$$

7614462555. ✖

$$\frac{\partial z}{\partial x} - \frac{\partial z}{\partial y} = 5z$$

7614462556. ✔

$$\frac{\partial z}{\partial x} = \frac{\partial z}{\partial y} - z$$

Question Number : 40 Question Id : 761446645 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The solution of the partial differential equation
 $x(y-z)p + y(z-x)q = z(x-y)$ is

Options :

7614462557. ✓ $\phi(xyz, x + y + z) = 0$

7614462558. ✗ $\phi\left(\frac{x}{yz}, x+y+z\right) = 0$

7614462559. ✗ $\phi(xyz, x - y - z) = 0$

7614462560. ✗ $\phi\left(\frac{x}{y+z}, xyz\right) = 0$

Question Number : 41 Question Id : 761446646 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$\text{Sup}\{r \in \mathbb{Q} : 0 \leq r \leq \sqrt{2}\} =$

Options :

7614462561. ✗ 1

7614462562. ✓ $\sqrt{2}$

7614462563. ✗ 2

7614462564. ✗ 4

Question Number : 42 Question Id : 761446647 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\text{If } x_n = \cos\left(\frac{n\pi}{3}\right) \text{ then } \liminf_{n \rightarrow \infty} x_n =$$

Options :

7614462565. ✓ -1

7614462566. ✗ 1

7614462567. ✗ $\frac{1}{2}$

7614462568. ✗ $-\frac{1}{2}$

Question Number : 43 Question Id : 761446648 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Which of the following sequence is not convergent?

Options :

$$a_n = \frac{1}{2^n}$$

7614462569. ✖

$$a_n = \frac{n+1}{n+3}$$

7614462570. ✖

$$a_n = n!$$

7614462571. ✔

$$a_n = \left(1 + \frac{1}{n}\right)^n$$

7614462572. ✖

Question Number : 44 Question Id : 761446649 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Let $a > 0$. Then $\lim_{n \rightarrow \infty} a^{\frac{1}{n}} =$

Options :

a

7614462573. ✖

7614462574. ✘ 2a

7614462575. ✘ 3a

7614462576. ✔ 1

Question Number : 45 Question Id : 761446650 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following series is convergent?

Options :

7614462577. ✔
$$\sum_{n=1}^{\infty} \frac{3n+2}{5n^3+4}$$

7614462578. ✘
$$\sum_{n=1}^{\infty} \left(\frac{102}{100}\right)^n$$

7614462579. ✘
$$\sum_{n=1}^{\infty} \frac{6n^3+7}{n+2}$$

7614462580. ✘

$$\sum_{n=1}^{\infty} \left(\frac{3}{2}\right)^n$$

Question Number : 46 Question Id : 761446651 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $s_1 = 1, s_{n+1} = \sqrt{s_n + 1}$ for any $n \geq 1$. Then $\lim_{n \rightarrow \infty} s_n =$

Options :

7614462581. ✘ $\frac{1+\sqrt{3}}{2}$

7614462582. ✘ $\frac{1+\sqrt{7}}{2}$

7614462583. ✔ $\frac{1+\sqrt{5}}{2}$

7614462584. ✘ $\frac{1+\sqrt{6}}{2}$

Question Number : 47 Question Id : 761446652 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is an increasing sequence?

Options :

$$a_n = \frac{1-n}{n}$$

7614462585. ✘

$$a_n = \frac{1}{(n+1)^2}$$

7614462586. ✘

$$a_n = \frac{1}{2^n}$$

7614462587. ✘

$$a_n = \frac{-1}{n+3}$$

7614462588. ✔

Question Number : 48 Question Id : 761446653 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\sum_{n=2}^{\infty} \left(\frac{1}{4}\right)^n =$$

Options :

7614462589. ✘

$$\frac{1}{17}$$

7614462590. ✓ $\frac{1}{12}$

7614462591. ✗ $\frac{1}{7}$

7614462592. ✗ $\frac{1}{9}$

Question Number : 49 Question Id : 761446654 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The function $f: \mathbb{R} \rightarrow \mathbb{R}$ defined by $f(x) = \begin{cases} x, & \text{if } x \in \mathbb{Q} \\ 0, & \text{if } x \in \mathbb{R} - \mathbb{Q} \end{cases}$ is continuous only at

Options :

7614462593. ✗ $x = 1$

7614462594. ✓ $x = 0$

7614462595. ✗

$$x = -1$$

7614462596. ✘ $x = 2$

Question Number : 50 Question Id : 761446655 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $\lim_{x \rightarrow a} f(x) = 3$ and $\lim_{x \rightarrow a} g(x) = 2$, then $\lim_{x \rightarrow a} [3f(x) - (g(x))^2] =$

Options :

7614462597. ✘ 1

7614462598. ✘ 13

7614462599. ✔ 5

7614462600. ✘ 9

Question Number : 51 Question Id : 761446656 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The function defined by $f(x) = \begin{cases} \frac{\sin 2x}{x}, & \text{when } x \neq 0 \\ k, & \text{when } x = 0 \end{cases}$ is continuous at $x = 0$ if $k =$

Options :

7614462601. ✖ 1

7614462602. ✖ 0

7614462603. ✖ -1

7614462604. ✔ 2

Question Number : 52 Question Id : 761446657 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following functions is not uniformly continuous on the specified set?

Options :

$$f(x) = x \text{ on } \mathbb{R}$$

7614462605. ✖

$$f(x) = \frac{1}{x} \text{ on } \left[\frac{1}{2}, \infty \right)$$

7614462606. ✖

7614462607. ✓

$$f(x) = \frac{1}{x-3} \text{ on } (3,4)$$

7614462608. ✗

$$f(x) = \tan x \text{ on } \left[0, \frac{\pi}{4}\right]$$

Question Number : 53 Question Id : 761446658 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The value of k such that $\lim_{x \rightarrow 0} \frac{\sin 2x + k \sin x}{x^3} = -1$ is

Options :

7614462609. ✗ 2

7614462610. ✓ -2

7614462611. ✗ 1

7614462612. ✗ -1

Question Number : 54 Question Id : 761446659 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The set of all points at which the function $f(x) = |\sin x|$ is not differentiable is

Options :

7614462613. ✓ $\{n\pi : n \in \mathbb{Z}\}$

7614462614. ✗ $\left\{\frac{n\pi}{2} : n \in \mathbb{Z}\right\}$

7614462615. ✗ $\{2n\pi : n \in \mathbb{Z}\}$

7614462616. ✗ $\left\{\frac{(2n+1)\pi}{2} : n \in \mathbb{Z}\right\}$

Question Number : 55 Question Id : 761446660 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $f(x) = x^2 \sin\left(\frac{1}{x}\right)$ for $x \neq 0$ and $f(0) = 0$, then $f'(0) =$

Options :

7614462617. ✗ 2

7614462618. ✗ -1

7614462619. ✖ 1

7614462620. ✔ 0

Question Number : 56 Question Id : 761446661 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following functions is strictly decreasing on the specified set?

Options :

7614462621. ✖ e^x on \mathbb{R}

7614462622. ✔ $\cos x$ on $[0, \pi]$

7614462623. ✖ \sqrt{x} on $[0, \infty)$

7614462624. ✖ x^2 on $[0, \infty)$

Question Number : 57 Question Id : 761446662 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The number of values of c of the Rolle's theorem for the function

$f(x) = x^3 - 4x$ on $[-2, 2]$ is

Options :

7614462625. ✖ 0

7614462626. ✖ 1

7614462627. ✔ 2

7614462628. ✖ 3

Question Number : 58 Question Id : 761446663 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The Taylor's series expansion of the function $f(x) = \log x$ for $0 < x \leq 2$
about $x = 1$ is

Options :

7614462629. ✔ $(x-1) - \frac{(x-1)^2}{2} + \frac{(x-1)^3}{3} - \dots$

7614462630. ✖ $x - \frac{x^2}{2} + \frac{x^3}{3} - \dots$

7614462631. ✖

$$(x-1) - \frac{(x-1)^2}{2!} + \frac{(x-1)^3}{3!} - \dots$$

$$x - \frac{x^2}{2!} + \frac{x^3}{3!} - \dots$$

7614462632. ✖

Question Number : 59 Question Id : 761446664 Question Type : MCQ Option Shuffling : Yes
 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
 : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\text{If } f(x) = \begin{cases} 1 & \text{when } x \in \mathbb{Q} \\ -1 & \text{when } x \in \mathbb{R} - \mathbb{Q} \end{cases}, \text{ then } L(f) = \int_a^b f(x) dx =$$

Options :

7614462633. ✖ $b-a$

7614462634. ✖ 2

7614462635. ✔ $a-b$

7614462636. ✖ 0

Question Number : 60 Question Id : 761446665 Question Type : MCQ Option Shuffling : Yes
 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is not true?

Options :

7614462637. ✘ If f is bounded on $[a, b]$, then $U(f) \geq L(f)$.

7614462638. ✘ If a bounded function f on $[a, b]$ is Riemann integrable, then it is integrable .

7614462639. ✘ Every continuous function f on $[a, b]$ is integrable .

7614462640. ✔ If f is Riemann integrable on $[a, b]$, then f^2 need not be integrable on $[a, b]$.

Question Number : 61 Question Id : 761446666 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let \mathbb{Z} denote the set of integers and k be a natural number. Also

Let $k\mathbb{Z} = \{kx : x \in \mathbb{Z}\}$. Now $6\mathbb{Z} \cap 10\mathbb{Z} =$

Options :

7614462641. ✘ $15\mathbb{Z}$

7614462642. ✔ $30\mathbb{Z}$

7614462643. ✖ $20\mathbb{Z}$

7614462644. ✖ $60\mathbb{Z}$

Question Number : 62 Question Id : 761446667 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let $\mathbb{Q}^* = \mathbb{Q} - \{0\}$, the set of non-zero rational numbers. Define binary
operation $*$ on \mathbb{Q}^* by $a*b = \frac{ab}{5}$. Now in the group $(\mathbb{Q}^*, *)$, the
inverse of 3 is

Options :

7614462645. ✖ $\frac{17}{3}$

7614462646. ✖ $\frac{19}{3}$

7614462647. ✔ $\frac{25}{3}$

7614462648. ✖ $\frac{29}{3}$

Question Number : 63 Question Id : 761446668 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Let S_3 be the symmetric group on 3 symbols and e is the identity of S_3 . Then the number of elements in S_3 which satisfy the equation $x^2 = e$ is

Options :

7614462649. ✓ 4

7614462650. ✗ 3

7614462651. ✗ 2

7614462652. ✗ 6

Question Number : 64 Question Id : 761446669 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The number of generators of a cyclic group of order 240 is

Options :

7614462653. ✗ 80

7614462654. ✗ 36

7614462655. ✖ 48

7614462656. ✔ 64

Question Number : 65 Question Id : 761446670 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following statements is false?

Options :

7614462657. ✖ Every non abelian group is not cyclic.

7614462658. ✖ Every subgroup of a cyclic group is cyclic.

7614462659. ✖ In a group G , if $a^2 = e$ for all $a \in G$, then G is abelian.

7614462660. ✔ Every abelian group is cyclic.

Question Number : 66 Question Id : 761446671 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let G be a cyclic group and $G = \langle a \rangle$. If $o(a) = 120$, then $o(a^8) =$

Options :

7614462661. ✖ 20

7614462662. ✔ 15

7614462663. ✖ 30

7614462664. ✖ 40

**Question Number : 67 Question Id : 761446672 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Let G be a finite group and H, K are any two subgroups of a group G such that $o(H) = 31, o(K) = 47$, then $o(H \cap K) =$

Options :

7614462665. ✖ 16

7614462666. ✖ 78

7614462667. ✔ 1

7614462668. ✖ 44

Question Number : 68 Question Id : 761446673 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let S_7 be the symmetric group on 7 symbols. If $\alpha^4 = (1357246)$
then $\alpha =$

Options :

7614462669. ✓ (1526374)

7614462670. ✗ (1526347)

7614462671. ✗ (1523647)

7614462672. ✗ (1562473)

Question Number : 69 Question Id : 761446674 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following statements is false?

Options :

7614462673. ✗ Every subgroup of an abelian group is always a normal subgroup of G.

7614462674. ✗ If H is a subgroup of G such that index of H in G is 2, then H is a normal sub group of G.

7614462675. ✘ Intersection of any two normal subgroups of a group G is always a normal subgroup of G .

7614462676. ✔ A group in which every sub group is normal is necessarily abelian.

Question Number : 70 Question Id : 761446675 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Consider the following statements.

(i) Any infinite cyclic group is isomorphic to \mathbb{Z} .

(ii) The group $(\mathbb{Z}, +)$ is not isomorphic to $(\mathbb{Q}, +)$.

Now choose the correct option.

Options :

7614462677. ✘ Only statement (i) is true.

7614462678. ✘ Only statement (ii) is true.

7614462679. ✔ Both statements (i) and (ii) are true.

7614462680. ✘ Both statements (i) and (ii) are false.

Question Number : 71 Question Id : 761446676 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The order of the element $5 + \langle 4 \rangle$ in the factor group $\frac{\mathbb{Z}_{12}}{\langle 4 \rangle}$ is

Options :

7614462681. ✓ 4

7614462682. ✗ 3

7614462683. ✗ 2

7614462684. ✗ 1

Question Number : 72 Question Id : 761446677 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following statements is false?

Options :

7614462685. ✗ Every cycle is a permutation.

7614462686. ✓

Every permutation is a cycle.

Order of A_6 is 360.

7614462687. ✖

A_3 is an abelian group.

7614462688. ✖

Question Number : 73 Question Id : 761446678 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Consider the ring $R = \{0, 2, 4, 6, 8\}$ under addition and multiplication modulo 10. What is the unity in R ?

Options :

7614462689. ✖ 2

7614462690. ✖ 4

7614462691. ✖ 8

7614462692. ✔ 6

Question Number : 74 Question Id : 761446679 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is not a subring of \mathbb{Z} ?

Options :

7614462693. ✓ $2\mathbb{Z} \cup 3\mathbb{Z}$

7614462694. ✗ $3\mathbb{Z} \cap 5\mathbb{Z}$

7614462695. ✗ $7\mathbb{Z}$

7614462696. ✗ $11\mathbb{Z}$

Question Number : 75 Question Id : 761446680 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The characteristic of the ring \mathbb{Z}_{18} under the addition and multiplication
18 is

Options :

7614462697. ✗ 0

7614462698. ✓ 18

7614462699. ✗ 12

7614462700. ✗ 16

Question Number : 76 Question Id : 761446681 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Consider equation $x^2 - 5x + 6 = 0$. How many solutions does this equation have in \mathbb{Z}_{12} ?

Options :

7614462701. ✓ 4

7614462702. ✗ 2

7614462703. ✗ 1

7614462704. ✗ 0

Question Number : 77 Question Id : 761446682 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Consider the homomorphism $f : \mathbb{Z}(\sqrt{2}) \rightarrow \mathbb{Z}(\sqrt{2})$ defined by
 $f(a + b\sqrt{2}) = a - b\sqrt{2}$, where $\mathbb{Z}(\sqrt{2}) = \{a + b\sqrt{2} : a, b \in \mathbb{Z}\}$ is a ring under
addition and multiplication. Then $\text{Ker}(f) =$

Options :

7614462705. ✗

$$\{0, \sqrt{2}\}$$

7614462706. ✘ $\{\sqrt{2}\}$

7614462707. ✘ $\{1\}$

7614462708. ✔ $\{0\}$

Question Number : 78 Question Id : 761446683 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Maximal ideals in \mathbb{Z}_{10} are

Options :

7614462709. ✘ $\langle 2 \rangle, \langle 4 \rangle$

7614462710. ✘ $\langle 1 \rangle, \langle 2 \rangle$

7614462711. ✔ $\langle 2 \rangle, \langle 5 \rangle$

7614462712. ✘ $\langle 3 \rangle, \langle 7 \rangle$

Question Number : 79 Question Id : 761446684 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is not an integral domain?

Options :

7614462713. ✘ The ring $\mathbb{Z}(i) = \{a + bi : a, b \in \mathbb{Z}\}$ of Gaussian integers.

7614462714. ✘ The ring $\mathbb{Z}[x]$ of polynomials with integer coefficients.

7614462715. ✔ The ring $M_2(\mathbb{Z})$ of 2×2 matrices over integers.

7614462716. ✘ The ring \mathbb{Z}_p of integers modulo a prime p .

Question Number : 80 Question Id : 761446685 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let R be a commutative ring with unity such that $a^2 = a$ for all a in R
and I be a prime ideal in R . Then $|R/I| =$

Options :

7614462717. ✘ 1

7614462718. ✘ 4

7614462719. ✖ 5

7614462720. ✔ 2

Question Number : 81 Question Id : 761446686 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The rank of the matrix $A = \begin{pmatrix} 1 & 2 & 3 & 4 \\ 2 & 3 & 4 & 5 \\ 7 & 11 & 15 & 19 \\ 9 & 15 & 21 & 27 \end{pmatrix}$ is

Options :

7614462721. ✖ 4

7614462722. ✖ 3

7614462723. ✔ 2

7614462724. ✖ 1

Question Number : 82 Question Id : 761446687 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The dimension of the subspace $W = \{(a, b, c, d) : b - c + d = 0, a + c = 0\}$ of the vector space $\mathbb{R}^4(\mathbb{R})$ is

Options :

7614462725. ✘ 1

7614462726. ✔ 2

7614462727. ✘ 3

7614462728. ✘ 4

Question Number : 83 Question Id : 761446688 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let $T : \mathbb{R}^2 \rightarrow \mathbb{R}^2$ be a linear transformation. If $T \begin{pmatrix} 1 \\ 2 \end{pmatrix} = \begin{pmatrix} 3 \\ 4 \end{pmatrix}, T \begin{pmatrix} 3 \\ 8 \end{pmatrix} = \begin{pmatrix} 5 \\ 6 \end{pmatrix}$

, then $T \begin{pmatrix} 7 \\ 18 \end{pmatrix} =$

Options :

7614462729. ✘ $\begin{pmatrix} 16 \\ 13 \end{pmatrix}$

7614462730. ✘ $\begin{pmatrix} 8 \\ 10 \end{pmatrix}$

7614462731. ✘ $\begin{pmatrix} 10 \\ 8 \end{pmatrix}$

7614462732. ✔ $\begin{pmatrix} 13 \\ 16 \end{pmatrix}$

Question Number : 84 Question Id : 761446689 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The dimension of the vector space V of all 3×3 matrices with real entries is

Options :

7614462733. ✘ 3

7614462734. ✘ 6

7614462735. ✔ 9

7614462736. ✘ 12

Question Number : 85 Question Id : 761446690 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The dimension of null space of the matrix $A = \begin{pmatrix} 1 & -3 & 2 & 0 \\ 0 & 0 & 3 & 0 \end{pmatrix}$ is

Options :

7614462737. ✓ 2

7614462738. ✗ 3

7614462739. ✗ 1

7614462740. ✗ 4

Question Number : 86 Question Id : 761446691 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

If A is a 7 x 9 matrix with a two-dimensional null space, then the rank of A is

Options :

7614462741. ✗ 5

7614462742. ✗ 6

7614462743. ✖ 9

7614462744. ✔ 7

Question Number : 87 Question Id : 761446692 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

If the vectors $\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}, \begin{pmatrix} 0 \\ 4 \\ 5 \end{pmatrix}, \begin{pmatrix} 0 \\ 8 \\ k \end{pmatrix}$ are linearly dependent, then $k =$

Options :

7614462745. ✖ 8

7614462746. ✖ 3

7614462747. ✔ 10

7614462748. ✖ 2

Question Number : 88 Question Id : 761446693 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

$$\text{If } \begin{pmatrix} 46 \\ 47 \end{pmatrix} = a \begin{pmatrix} 1 \\ 3 \end{pmatrix} + b \begin{pmatrix} 6 \\ 5 \end{pmatrix}, \text{ then } a^2 + b^2 =$$

Options :

7614462749. ✓ 65

7614462750. ✗ 34

7614462751. ✗ 25

7614462752. ✗ 74

Question Number : 89 Question Id : 761446694 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If a linear transformation $T: \mathbb{R}^2 \rightarrow \mathbb{R}^2$ is defined as $T \begin{pmatrix} a \\ b \end{pmatrix} = \begin{pmatrix} a+b \\ a-2b \end{pmatrix}$

, then the matrix of T in the basis $B = \left\{ \begin{pmatrix} 1 \\ 0 \end{pmatrix}, \begin{pmatrix} 0 \\ 1 \end{pmatrix} \right\}$ of $\mathbb{R}^2(\mathbb{R})$ is

Options :

7614462753. ✗ $\begin{pmatrix} 1 & -1 \\ 1 & -2 \end{pmatrix}$

7614462754. ✗ $\begin{pmatrix} 1 & -2 \\ 1 & 1 \end{pmatrix}$

7614462755. ✘ $\begin{pmatrix} 1 & 1 \\ -2 & 1 \end{pmatrix}$

7614462756. ✔ $\begin{pmatrix} 1 & 1 \\ 1 & -2 \end{pmatrix}$

Question Number : 90 Question Id : 761446695 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The dimension of the kernel of the linear transformation

$$T: \mathbb{R}^3 \rightarrow \mathbb{R}^2 \text{ defined by } T \begin{pmatrix} x \\ y \\ z \end{pmatrix} = \begin{pmatrix} 2x - y \\ 3x + z \end{pmatrix} \text{ is}$$

Options :

7614462757. ✘ 3

7614462758. ✘ 2

7614462759. ✔ 1

7614462760. ✘ 0

Question Number : 91 Question Id : 761446696 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is an eigen vector of $A = \begin{pmatrix} 1 & 6 \\ 5 & 2 \end{pmatrix}$?

Options :

7614462761. ✓ $\begin{pmatrix} 6 \\ -5 \end{pmatrix}$

7614462762. ✗ $\begin{pmatrix} 2 \\ 3 \end{pmatrix}$

7614462763. ✗ $\begin{pmatrix} 4 \\ -1 \end{pmatrix}$

7614462764. ✗ $\begin{pmatrix} 1 \\ 2 \end{pmatrix}$

Question Number : 92 Question Id : 761446697 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $A = \begin{pmatrix} 1 & 0 & 0 \\ 2 & 3 & 0 \\ 1 & 3 & 4 \end{pmatrix}$, then the eigen values of A^T are

Options :

7614462765. ✘ 2, 3, 4

7614462766. ✔ 1, 3, 4

7614462767. ✘ 3, 4, 5

7614462768. ✘ 6, 1, 4

Question Number : 93 Question Id : 761446698 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If the characteristic equation of $A = \begin{pmatrix} 1 & -4 \\ 4 & 2 \end{pmatrix}$ is $\lambda^2 + a\lambda + b = 0$, then

$a + b =$

Options :

7614462769. ✘ 12

7614462770. ✘ 13

7614462771. ✔ 15

7614462772. ✘ 16

Question Number : 94 Question Id : 761446699 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following matrices is not diagonalizable?

Options :

7614462773. ✘ $\begin{pmatrix} 1 & 0 \\ 2 & 3 \end{pmatrix}$

7614462774. ✔ $\begin{pmatrix} 3 & 2 \\ 0 & 3 \end{pmatrix}$

7614462775. ✘ $\begin{pmatrix} 2 & 3 \\ 0 & -1 \end{pmatrix}$

7614462776. ✘ $\begin{pmatrix} 1 & 3 \\ 4 & 2 \end{pmatrix}$

Question Number : 95 Question Id : 761446700 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let $D = \{d_1, d_2\}$ and $B = \{b_1, b_2\}$ be bases for vector spaces V and W respectively. If $T : V \rightarrow W$ is a linear transformation with the property $T(d_1) = 3b_1 - 3b_2$, $T(d_2) = -2b_1 + 5b_2$, then the matrix for T relative to D and B is

Options :

7614462777. ✖ $\begin{pmatrix} 3 & -3 \\ -2 & 5 \end{pmatrix}$

7614462778. ✖ $\begin{pmatrix} -1 & 2 \\ 3 & 5 \end{pmatrix}$

7614462779. ✔ $\begin{pmatrix} 3 & -2 \\ -3 & 5 \end{pmatrix}$

7614462780. ✖ $\begin{pmatrix} -1 & 3 \\ 2 & 5 \end{pmatrix}$

Question Number : 96 Question Id : 761446701 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $u = \begin{pmatrix} -6 \\ 4 \\ 3 \end{pmatrix}$, then $\|u\| =$

Options :

7614462781. ✓ $\sqrt{61}$

7614462782. ✗ $\sqrt{75}$

7614462783. ✗ $\sqrt{59}$

7614462784. ✗ $\sqrt{49}$

Question Number : 97 Question Id : 761446702 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

If the vectors $u = \begin{pmatrix} 12 \\ 3 \\ -5 \end{pmatrix}$ and $v = \begin{pmatrix} 2 \\ -3 \\ k \end{pmatrix}$ are orthogonal, then $k =$

Options :

7614462785. ✗ -4

7614462786. ✗ 2

7614462787. ✗ -3

7614462788. ✓ 3

Question Number : 98 Question Id : 761446703 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The orthogonal projection of $\begin{pmatrix} 7 \\ 6 \end{pmatrix}$ onto $\begin{pmatrix} 4 \\ 2 \end{pmatrix}$ is

Options :

7614462789. ✘ $\begin{pmatrix} 6 \\ 3 \end{pmatrix}$

7614462790. ✔ $\begin{pmatrix} 8 \\ 4 \end{pmatrix}$

7614462791. ✘ $\begin{pmatrix} 12 \\ 16 \end{pmatrix}$

7614462792. ✘ $\begin{pmatrix} 16 \\ 8 \end{pmatrix}$

Question Number : 99 Question Id : 761446704 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $\left\{ \begin{pmatrix} 3 \\ 0 \\ -1 \end{pmatrix}, \begin{pmatrix} 8 \\ 5 \\ -6 \end{pmatrix} \right\}$ is a basis for a subspace W and $\{v_1, v_2\}$ is the orthonormal basis for W , then $v_1 =$

Options :

7614462793. ✓ $\begin{pmatrix} 3 \\ 0 \\ -1 \end{pmatrix}$

7614462794. ✗ $\begin{pmatrix} 1 \\ 1 \\ 2 \end{pmatrix}$

7614462795. ✗ $\begin{pmatrix} -2 \\ 0 \\ 1 \end{pmatrix}$

7614462796. ✗ $\begin{pmatrix} -1 \\ 0 \\ 3 \end{pmatrix}$

Question Number : 100 Question Id : 761446705 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

In an inner product space, two vectors u and v are orthogonal iff

$$\|u + v\|^2 =$$

Options :

7614462797. ✘ $\|u\|^2 - \|v\|^2$

7614462798. ✘ $\|u\| + \|v\|$

7614462799. ✔ $\|u\|^2 + \|v\|^2$

7614462800. ✘ $\|u\| - \|v\|$

Analytical Ability

Section Id :	76144613
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	33
Number of Questions to be attempted :	33
Section Marks :	50
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	76144620

Question Shuffling Allowed :

No

Is Section Default? :

null

Question Id : 761446706 Question Type : COMPREHENSION Sub Question Shuffling Allowed :

No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator :

None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (101 to 110)

Data Sufficiency: A question is given followed by data in the form of two statements labeled as I and II. If the data given in I alone is sufficient to answer the question then choice (1) is the correct answer. If the data given in II alone is sufficient to answer the question, then choice (2) is the correct answer. If both I and II put together are sufficient to answer the question but neither of the statements alone is sufficient, then Choice (3) is the correct answer. If both I and II put together are not sufficient to answer the question and additional data is needed, then choice (4) is the correct answer.

Sub questions

Question Number : 101 Question Id : 761446707 Question Type : MCQ Option Shuffling : No

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let A, B, C be any three non-empty sets . What is $n(A \cap B \cap C)$?

(I) $n(A \cap B) = 10$.

(II) $n(C \cap B) = 20$.

Options :

7614462801. ✖ 1

7614462802. ✖ 2

7614462803. ✖ 3

7614462804. ✔ 4

Question Number : 102 Question Id : 761446708 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let $0 \leq \theta \leq 90^\circ$. What is the value of $\tan 2\theta$?

(I) θ is an angle in a triangle.

(II) $\cos \theta = \frac{\sqrt{3}}{2}$.

Options :

7614462805. ✖ 1

7614462806. ✔ 2

7614462807. ✖ 3

7614462808. ✖ 4

Question Number : 103 Question Id : 761446709 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is perimeter of the rectangle?

(I) The sides of the rectangle are in the ratio 1:3.

(II) The area of the rectangle is 300 square meters.

Options :

7614462809. ✘ 1

7614462810. ✘ 2

7614462811. ✔ 3

7614462812. ✘ 4

Question Number : 104 Question Id : 761446710 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the total cost of 1 table and 2 chairs?

(I) 2 tables and 2 chairs cost is Rs 15,000.

(II) Cost of 3 chairs is Rs 15,000.

Options :

7614462813. ✘ 1

7614462814. ✖ 2

7614462815. ✔ 3

7614462816. ✖ 4

Question Number : 105 Question Id : 761446711 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the three digit number $xy2$?

(I) $x + 2y = 5$.

(II) $x + y = 4$.

Options :

7614462817. ✖ 1

7614462818. ✖ 2

7614462819. ✔ 3

7614462820. ✖ 4

Question Number : 106 Question Id : 761446712 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Let A be the set of consecutive even integers .Is 0 in set A?

- (I) -16 is in A.
- (II) -4 is in A.

Options :

7614462821. ✖ 1

7614462822. ✖ 2

7614462823. ✖ 3

7614462824. ✔ 4

Question Number : 107 Question Id : 761446713 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

What is the value of x?

(I) $x^2 - 5x + 6 = 0$.

(II) $x^2 - 4x + 4 = 0$.

Options :

7614462825. ✖ 1

7614462826. ✔ 2

7614462827. ✖ 3

7614462828. ✖ 4

Question Number : 108 Question Id : 761446714 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

In how many points do the two circles intersect?

(I) The radii of the circles are 3cm and 4cm.

(II) The distance between their centres is 1cm.

Options :

7614462829. ✖ 1

7614462830. ✖ 2

7614462831. ✔ 3

7614462832. ✖ 4

Question Number : 109 Question Id : 761446715 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the slope of the line L?

(I)The line L is perpendicular to the line $4x - 3y + 12 = 0$.

(II)Line L passes through the origin.

Options :

7614462833. ✓ 1

7614462834. ✗ 2

7614462835. ✗ 3

7614462836. ✗ 4

Question Number : 110 Question Id : 761446716 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the GCD of the positive integers x and y ?

(I) x, y are consecutive positive integers.

(II) $x < y$.

Options :

7614462837. ✓ 1

7614462838. ✗ 2

7614462839. ✗ 3

7614462840. ✗ 4

Sub-Section Number : 2
Sub-Section Id : 76144621
Question Shuffling Allowed : Yes
Is Section Default? : null

Question Number : 111 Question Id : 761446717 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A:Z :: C:___

Options :

7614462841. ✓ X

7614462842. ✖ Y

7614462843. ✖ V

7614462844. ✖ W

**Question Number : 112 Question Id : 761446718 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Court:Justice :: School: _____

Options :

7614462845. ✖ Student

7614462846. ✖ Teacher

7614462847. ✔ Education

7614462848. ✖ Ignorance

**Question Number : 113 Question Id : 761446719 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

1 D 5:5 H 9 :: 15 P 19: _____

Options :

7614462849. ✘ 19 S 23

7614462850. ✘ 18 T 23

7614462851. ✘ 18 T 22

7614462852. ✔ 19 T 23

Question Number : 114 Question Id : 761446720 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

5:24 :: 7: _____

Options :

7614462853. ✘ 49

7614462854. ✘ 42

7614462855. ✔ 48

7614462856. ✘ 36

Question Number : 115 Question Id : 761446721 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The missing number of the series 51,54,59,____,77 is

Options :

7614462857. ✘ 64

7614462858. ✔ 66

7614462859. ✘ 69

7614462860. ✘ 70

Question Number : 116 Question Id : 761446722 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The next term of the series 6,12,20,30 is

Options :

7614462861. ✔ 42

7614462862. ✘ 32

7614462863. ✖ 40

7614462864. ✖ 36

Question Number : 117 Question Id : 761446723 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The next term of the sequence 11,27,51,123 is

Options :

7614462865. ✖ 162

7614462866. ✖ 143

7614462867. ✔ 171

7614462868. ✖ 207

Question Number : 118 Question Id : 761446724 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The next term of the sequence AD,FC,EH,JG is

Options :

7614462869. ✘ JK

7614462870. ✔ IL

7614462871. ✘ KI

7614462872. ✘ KL

**Question Number : 119 Question Id : 761446725 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

The odd thing among 68, 102, 136, 153, 182 is

Options :

7614462873. ✔ 182

7614462874. ✘ 153

7614462875. ✘ 136

7614462876. ✘ 102

**Question Number : 120 Question Id : 761446726 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time**

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The odd thing among 1C2,2E3,3G4,4I5,5L6 is

Options :

7614462877. ✘ 3G4

7614462878. ✘ 1C2

7614462879. ✔ 5L6

7614462880. ✘ 4I5

Sub-Section Number : 3
Sub-Section Id : 76144622
Question Shuffling Allowed : No
Is Section Default? : null

Question Id : 761446727 Question Type : COMPREHENSION Sub Question Shuffling Allowed :
No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (121 to 125)

A group of 123 students went to a canteen for cold drinks, ice-cream and tea. 42 students took ice cream, 36 tea and 30 cold drinks,15 students purchased ice-cream and tea,10 ice -cream and cold drinks and 4 cold drinks and tea but not ice-cream,11 took ice-cream and tea but not cold drinks.

Sub questions

Question Number : 121 Question Id : 761446728 Question Type : MCQ Option Shuffling : No

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Now the number of students purchased all the three drinks is

Options :

7614462881. ✓ 4

7614462882. ✗ 3

7614462883. ✗ 2

7614462884. ✗ 6

Question Number : 122 Question Id : 761446729 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Number of students who purchased cold drinks and tea is

Options :

7614462885. ✗ 11

7614462886. ✗ 6

7614462887. ✓ 8

7614462888. ✖ 16

Question Number : 123 Question Id : 761446730 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Number of students who purchased nothing is

Options :

7614462889. ✖ 79

7614462890. ✔ 44

7614462891. ✖ 34

7614462892. ✖ 54

Question Number : 124 Question Id : 761446731 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Number of students who purchased exactly two drinks is

Options :

7614462893. ✖ 10

7614462894. ✘ 15

7614462895. ✘ 17

7614462896. ✔ 21

**Question Number : 125 Question Id : 761446732 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Number of students who purchased only cold drinks is

Options :

7614462897. ✘ 17

7614462898. ✘ 21

7614462899. ✔ 16

7614462900. ✘ 8

Sub-Section Number :	4
Sub-Section Id :	76144623
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 761446733 Question Type : COMPREHENSION Sub Question Shuffling Allowed :

No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator :

None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (126 to 130)

The following table shows the percentages of expenditure of five persons A, B, C, D, E monthly income on different heads food, rent, travel, entertainment and savings.

	Food	Rent	Travel	Entertainment	Savings
A	25	15	28	12	20
B	30	18	12	10	30
C	24	12	14	10	40
D	28	17	15	25	15
E	15	20	18	12	35

Sub questions

Question Number : 126 Question Id : 761446734 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If the amount spent by A on the head travel in a month is Rs 11,760, then the amount spent by A on the head entertainment in that month is (in Rupees)

Options :

7614462901. ✘ 11,000

7614462902. ✘ 6300

7614462903. ✘ 8400

7614462904. ✔ 5040

**Question Number : 127 Question Id : 761446735 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0**

In a month, if B's total income is Rs 1,80,000, then the rent paid by B(in rupees) is

Options :

7614462905. ✔ 32,400

7614462906. ✘ 54,000

7614462907. ✘ 21,600

7614462908. ✘ 18,000

Question Number : 128 Question Id : 761446736 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If in a month D saved Rs 18,000, then the total expenditure of D on travel and entertainment is (in rupees)

Options :

7614462909. ✘ 30,000

7614462910. ✘ 18,000

7614462911. ✘ 20,400

7614462912. ✔ 48,000

Question Number : 129 Question Id : 761446737 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If C's monthly income is Rs 70,000, then the amount saved by C in that month is (in rupees)

Options :

7614462913. ✘ 9,800

7614462914. ✓ 28,000

7614462915. ✘ 42,000

7614462916. ✘ 8,400

Question Number : 130 Question Id : 761446738 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If E spends Rs 30,000 on travel and entertainment in a month, then the rent paid by E in the same month is (in rupees)

Options :

7614462917. ✘ 35,000

7614462918. ✘ 12,000

7614462919. ✓ 20,000

7614462920. ✘ 15,000

Sub-Section Number :	5
Sub-Section Id :	76144624
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 131 Question Id : 761446739 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In a certain code language,if CAMPUS is written as BBLQTT
then code for PENCIL is

Options :

7614462921. ✓ OFMDHM

7614462922. ✗ ODMEJN

7614462923. ✗ OFODJM

7614462924. ✗ QFMBJK

Question Number : 132 Question Id : 761446740 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In a certain code language,if GROUPS is written as ROTNQF then
then code for TSECET is

Options :

7614462925. ✗ TFDFTU

7614462926. ✘ SFDETS

7614462927. ✔ SDBDRS

7614462928. ✘ TDBFRT

**Question Number : 133 Question Id : 761446741 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

In a certain code language,if VICTORY is coded as IVOTCYR
then code for SUCCESS is

Options :

7614462929. ✘ SUECCSS

7614462930. ✘ USUCCESS

7614462931. ✘ SUCECSS

7614462932. ✔ USECCSS

**Question Number : 134 Question Id : 761446742 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

In a certain code language,if SILVER=34,COPPER=32,then
BRONZE=

Options :

7614462933. ✘ 39

7614462934. ✘ 38

7614462935. ✘ 36

7614462936. ✔ 29

**Question Number : 135 Question Id : 761446743 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

In a certain code language,if BANANA is coded as AOBOBB,then
which word is coded as EHOBBSO?

Options :

7614462937. ✘ PAPAYA

7614462938. ✘ CITRON

7614462939. ✔ ORANGE

7614462940. ✘ CHERRY

**Question Number : 136 Question Id : 761446744 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0**

If READ is coded as 5623 and BOOK is coded as 4778,then
BROKER is coded as

Options :

7614462941. ✘ 547865

7614462942. ✔ 457865

7614462943. ✘ 467856

7614462944. ✘ 468278

**Question Number : 137 Question Id : 761446745 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0**

In a certain code language,if DIRECTOR is coded as EKUIHZVZ,
then PRODUCER is coded as

Options :

7614462945. ✘ QTPEZDFZ

7614462946. ✘ QTRZHZIL

7614462947. ✔ QTRHZILZ

7614462948. ✘ QTZIRMKL

Question Number : 138 Question Id : 761446746 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If MAN=28 and WOMAN=66, then PERSON=

Options :

7614462949. ✘ 95

7614462950. ✘ 85

7614462951. ✘ 99

7614462952. ✔ 87

Question Number : 139 Question Id : 761446747 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In a certain code language,if BASKET is coded as #%@!&\$ and TRIED is coded as \$*2&4, then decode for @%\$2*& is

Options :

7614462953. ✘ ATTIRE

7614462954. ✔ SATIRE

7614462955. ✘ RAIETT

7614462956. ✘ ASRITE

Question Number : 140 Question Id : 761446748 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In a certain code language,if SUPPLY is coded as 16, then how will DEMAND be coded ?

Options :

7614462957. ✔ 7

7614462958. ✘ 12

7614462959.

✘ 14

7614462960. ✘ 16

Sub-Section Number : 6
Sub-Section Id : 76144625
Question Shuffling Allowed : Yes
Is Section Default? : null

Question Number : 141 Question Id : 761446749 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The day of the week 23rd May 2019 is

Options :

7614462961. ✔ Thursday

7614462962. ✘ Friday

7614462963. ✘ Saturday

7614462964. ✘ Monday

Question Number : 142 Question Id : 761446750 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

At what time between 5 and 6, are the hands of a clock coincide?

Options :

$21\frac{3}{11}$ minutes past 5

7614462965. ✖

$19\frac{3}{11}$ minutes past 5

7614462966. ✖

$26\frac{3}{11}$ minutes past 5

7614462967. ✖

$27\frac{3}{11}$ minutes past 5

7614462968. ✔

Question Number : 143 Question Id : 761446751 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The number of times that the hands of a clock coincide in a day is

Options :

7614462969. ✖ 25

7614462970.

✘ 21

7614462971. ✘ 24

7614462972. ✔ 22

Question Number : 144 Question Id : 761446752 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Sita starts from a point and moves 5 km south and then turns east and goes 3 km. Then she turns south and walks 3 km and further moves 9 km west. How far is she from the starting point? (in Kms)

Options :

7614462973. ✘ 9

7614462974. ✔ 10

7614462975. ✘ 8

7614462976. ✘ 6

Question Number : 145 Question Id : 761446753 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Kavita is Kumar's sister. Sarita is Kumar's mother. Sanjay is Sarita's father. Vijay is Sanjay's brother. How is Kavita related to Vijay?

Options :

7614462977. ✘ Daughter

7614462978. ✔ Grand-daughter

7614462979. ✘ Daughter-in-law

7614462980. ✘ Sister

Question Number : 146 Question Id : 761446754 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In the following list of numbers, how many 2's are followed by 5 but not preceded by 6?

6 2 5 2 4 1 2 5 0 3 6 2 5 0 3 9 8 2 5 8 7 3 6 2 5

Options :

7614462981. ✔ 2

7614462982. ✘ 1

7614462983. ✖ 3

7614462984. ✖ 4

Question Number : 147 Question Id : 761446755 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The number of ways of sitting 6 people around a circular table is

Options :

7614462985. ✖ 36

7614462986. ✖ 720

7614462987. ✔ 120

7614462988. ✖ 216

Question Number : 148 Question Id : 761446756 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The number of ten digit numbers that can be formed by using the digits 4 and 5 is

Options :

7614462989. ✘ 20

7614462990. ✘ 2^{18}

7614462991. ✘ 2^9

7614462992. ✔ 2^{10}

Question Number : 149 Question Id : 761446757 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let a, b be any two rational numbers. If $a * b = a^2 + b$, $a \oplus b = a + b^2$, then

$$(1 * 2) \oplus (3 * 4) =$$

Options :

7614462993. ✔ 172

7614462994. ✘ 180

7614462995. ✘ 130

7614462996. ✘ 184

Question Number : 150 Question Id : 761446758 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $169 \times 196 = 27$, $225 \times 256 = 31$, $676 \times 64 = 34$, then $841 \times 144 =$

Options :

7614462997. ✓ 41

7614462998. ✗ 43

7614462999. ✗ 45

7614463000. ✗ 47

Communicative English

Section Id :	76144614
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	42
Number of Questions to be attempted :	42
Section Marks :	50
Enable Mark as Answered Mark for Review and Clear Response :	Yes

Maximum Instruction Time : 0
Sub-Section Number : 1
Sub-Section Id : 76144626
Question Shuffling Allowed : Yes
Is Section Default? : null

Question Number : 151 Question Id : 761446759 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Choose the synonym of the underlined word in the sentence from the alternatives given below:

"The revolt against the demolition spread far and wide."

Options :

7614463001. ✓ Uprising

7614463002. ✗ Suspicion

7614463003. ✗ Volume

7614463004. ✗ Extension

Question Number : 152 Question Id : 761446760 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Choose the synonym of the underlined word in the sentence from the alternatives given below:

"The parched land awaited the monsoon."

Options :

7614463005. ✘ Angry

7614463006. ✘ Vast

7614463007. ✔ Dry

7614463008. ✘ Wet

Question Number : 153 Question Id : 761446761 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Choose the antonym of the underlined word in the sentence from the alternatives given below:

"Everyone knows that life is ephemeral."

Options :

7614463009. ✔ Eternal

7614463010. ✘ Fleeting

7614463011. ✘ Uncertain

7614463012. ✘ Impossible

**Question Number : 154 Question Id : 761446762 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Choose the antonym of the underlined word in the sentence from the alternatives given below:

“You should be a sycophant if you wish to succeed in leadership roles.”

Options :

7614463013. ✘ Comedian

7614463014. ✘ Follower

7614463015. ✔ Critic

7614463016. ✘ Flatterer

**Question Number : 155 Question Id : 761446763 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Choose the correct spelling from the alternatives given below:

Options :

7614463017. ✘ Articulate

7614463018. ✘ Artecuate

7614463019. ✔ Articulate

7614463020. ✘ Arrticate

**Question Number : 156 Question Id : 761446764 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Choose the correct spelling from the alternatives given below:

Options :

7614463021. ✘ Abandent

7614463022. ✔ Abundant

7614463023. ✘ Abudent

7614463024. ✘ Abondent

Question Number : 157 Question Id : 761446765 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Choose the correct option that can be substituted for the words/phrase given below:

“willing to take risks”

Options :

7614463025. ✘ Substantial

7614463026. ✘ Inhuman

7614463027. ✘ Desperate

7614463028. ✔ Adventurous

Question Number : 158 Question Id : 761446766 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Choose the correct option that can be substituted for the words/phrase given below:

“causing harm or evil to others”

Options :

7614463029. ✔ Malicious

7614463030. ✘ Chaotic

7614463031. ✘ Insipid

7614463032. ✘ Benevolent

Question Number : 159 Question Id : 761446767 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Choose the correct option that can be substituted for the words/phrase given below:

“one who studies political trends and voting statistics”

Options :

7614463033. ✘ Sociologist

7614463034. ✔ Psephologist

7614463035. ✘ Demographer

7614463036. ✘ Statistician

Question Number : 160 Question Id : 761446768 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with an appropriate word from the options given below:

“Her elegant dress received many from her friends at the party.”

Options :

7614463037. ✘ complaints

7614463038. ✘ complements

7614463039. ✔ compliments

7614463040. ✘ condiments

Question Number : 161 Question Id : 761446769 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with an appropriate word from the options given below:

“Before you leave the hall, that you have answered all the questions.”

Options :

7614463041. ✘ assure

7614463042. ✔ ensure

7614463043. ✘ insure

7614463044. ✘ unsure

**Question Number : 162 Question Id : 761446770 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with an appropriate word from the options given below:

“It is a good idea to take two deep before you start writing the exam.”

Options :

7614463045. ✔ breaths

7614463046. ✘ breathes

7614463047. ✘ broths

7614463048. ✘ breaks

**Question Number : 163 Question Id : 761446771 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the appropriate idiom from the options given below:

“The debate between the two celebrities offered a lot of

Options :

7614463049. ✘ food to be chewed and digested

7614463050. ✘ time to enjoy

7614463051. ✔ food for thought

7614463052. ✘ wine to drink

**Question Number : 164 Question Id : 761446772 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the appropriate idiom from the options given below:

“Political debates, movies and cricket are

Options :

7614463053. ✘ not my mind diversions

7614463054. ✘ not my hottest cakes

7614463055. ✔ not my cup of tea

7614463056. ✘ not my game changers

**Question Number : 165 Question Id : 761446773 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0**

Fill in the blank with the appropriate idiom from the options given below:

“I think I have clearly understood the of making a movie.”

Options :

7614463057. ✘ hammer and tongs

7614463058. ✔ nuts and bolts

7614463059. ✘ needles and thread

7614463060. ✘ heroes and heroines

**Question Number : 166 Question Id : 761446774 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0**

Fill in the blank with the appropriate phrasal verb from the options given below:

“She has always been respectful to her parents. She loves her father for advice.”

Options :

7614463061. ✓ looking up to

7614463062. ✗ looking down to

7614463063. ✗ turning up inwards

7614463064. ✗ giving in

Question Number : 167 Question Id : 761446775 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the appropriate phrasal verb from the options given below:

Because of bad weather, the play is”

Options :

7614463065. ✗ turned off

7614463066. ✗ taken off

7614463067. ✘ given off

7614463068. ✔ called off

**Question Number : 168 Question Id : 761446776 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the appropriate phrasal verb from the options given below:

“Surprisingly, the minister is honest and his mistakes.”

Options :

7614463069. ✔ owns up to

7614463070. ✘ carries out

7614463071. ✘ comes across

7614463072. ✘ pushes through

**Question Number : 169 Question Id : 761446777 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Fill in the blanks with the appropriate article from the options given below:

“She is principal of college.”

Options :

7614463073. ✘ a, the

7614463074. ✔ the, the

7614463075. ✘ an, a

7614463076. ✘ the, an

Question Number : 170 Question Id : 761446778 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Fill in the blanks with the appropriate article from the options given below:

“He suddenly saw lion rushing at him. lion was ferocious.”

Options :

7614463077. ✘ the, an

7614463078. ✘ the, a

7614463079. ✘ a, a

7614463080. ✓ a, the

**Question Number : 171 Question Id : 761446779 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0**

Fill in the blank with the appropriate article from the options given below:

“I consider it honour to have met President of India.”

Options :

7614463081. ✓ an, the

7614463082. ✗ a, the

7614463083. ✗ the, the

7614463084. ✗ an, a

**Question Number : 172 Question Id : 761446780 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0**

Fill in the blank with the appropriate preposition from the options given below:

“Other than you, who else is responsible your failure?”

Options :

7614463085. ✘ with

7614463086. ✘ of

7614463087. ✔ for

7614463088. ✘ without

Question Number : 173 Question Id : 761446781 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the appropriate preposition from the options given below:

“Many college students are addicted playing video games.”

Options :

7614463089. ✘ with

7614463090. ✔ to

7614463091. ✘ about

7614463092. ✘ without

**Question Number : 174 Question Id : 761446782 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the appropriate prepositions from the options given below:

“She has often told her teachers her interest politics.”

Options :

7614463093. ✘ with, about

7614463094. ✘ about, with

7614463095. ✔ about, in

7614463096. ✘ about, about

**Question Number : 175 Question Id : 761446783 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Choose the appropriate question tag for the following statements:

“We’ve met before, ?”

Options :

7614463097. ✘ have we?

7614463098. ✔ haven’t we?

7614463099. ✘ hadn’t we?

7614463100. ✘ haven’t us?

**Question Number : 176 Question Id : 761446784 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Choose the appropriate question tag for the following statements:

“You don’t know the correct answer, ?”

Options :

7614463101. ✘ don’t you?

7614463102. ✘ aren’t you?

7614463103. ✘ have you?

7614463104. ✔ do you?

Question Number : 177 Question Id : 761446785 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is the correct passive voice form of the given sentence?

“Gardening interests me.”

Options :

7614463105. ✔ I am interested in gardening.

7614463106. ✘ I am interested with gardening.

7614463107. ✘ I am interesting in gardening.

7614463108. ✘ Gardening is my interest.

Question Number : 178 Question Id : 761446786 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is the correct active voice form of the given sentence?

“When was the book returned?”

Options :

7614463109. ✘ When the book was returned?

7614463110. ✔ When did you return the book?

7614463111. ✘ Was the book returned?

7614463112. ✘ What time have you returned the book?

Question Number : 179 Question Id : 761446787 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is the correct active voice form of the given sentence?

“Let the ribbon be cut.”

Options :

7614463113. ✘ Who will cut the ribbon?

7614463114. ✘ He Is letting the ribbon cut.

7614463115. ✓ Cut the ribbon.

7614463116. ✘ Shall we cut the ribbon?

Question Number : 180 Question Id : 761446788 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Fill the blank with the correct verb form from the alternatives given below:

“In the last week’s final year examination, many a student with a high score.”

Options :

7614463117. ✘ have passed

7614463118. ✓ has passed

7614463119. ✘ will pass

7614463120. ✘ will have passed

Question Number : 181 Question Id : 761446789 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Fill the blank with the correct verb form from the alternatives given below:

“A passionate teacher will always help usbetter.”

Options :

7614463121. ✘ to learn

7614463122. ✘ learning

7614463123. ✔ learn

7614463124. ✘ to learning

Question Number : 182 Question Id : 761446790 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Fill the blank with the correct verb form from the alternatives given below:

“After every examination, she thoroughly upset.”

Options :

7614463125. ✘ is appearing

7614463126. ✘ was appearing

7614463127. ✘ has appeared

7614463128. ✔ appears

Question Number : 183 Question Id : 761446791 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following sentences is a grammatically acceptable example of subject-verb concord?

Options :

7614463129. ✔ The high level committee appointed by the government makes quick decisions.

7614463130. ✘ The high level committee appointed by the government make quick decisions.

7614463131. ✘ The high level committee appointed by the government are making quick decisions.

7614463132. ✘ The high level committee appointed by the government is made quick decisions.

Question Number : 184 Question Id : 761446792 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following sentences is a grammatically acceptable example
of subject-verb concord?

Options :

7614463133. ✓ Neither the teacher nor the students dislike a holiday.

7614463134. ✗ Neither the teacher nor the students dislikes a holiday.

7614463135. ✗ Neither the students nor the teacher dislike a holiday.

7614463136. ✗ Neither the teachers nor the students dislikes a holiday.

Question Number : 185 Question Id : 761446793 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Fill the blank with the correct verb form to agree with the subject of the
sentence:

“These scissors that we bought at the industrial exhibition
dangerously sharp.”

Options :

7614463137. ✘ is

7614463138. ✔ are

7614463139. ✘ am

7614463140. ✘ be

Question Number : 186 Question Id : 761446794 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the grammatically correct sentence from the options given below:

Options :

7614463141. ✘ I am smelling something burning in the kitchen.

7614463142. ✘ I am smell something burning in the kitchen.

7614463143. ✘ I am smelled something burning in the kitchen.

7614463144. ✔ I smell something burning in the kitchen.

Question Number : 187 Question Id : 761446795 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the grammatically correct sentence from the options given below:

Options :

7614463145. ✘ According to me, the outcome is obvious.

7614463146. ✘ As per me, the ourcome is obvious.

7614463147. ✘ In my opinion, I think the outcome is obvious.

7614463148. ✔ In my opinion, the outcome is obvious.

Question Number : 188 Question Id : 761446796 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the grammatically correct sentence from the options given below:

Options :

7614463149. ✘ I don't think so you need to bring your Aadhar with you.

7614463150. ✔ I don't think you need to bring your Aadhar with you.

7614463151. ✘ I don't think that whether you need to bring your Aadhar with you.

7614463152. ✘ I don't think if you need to bring your Aadhar with you.

Question Number : 189 Question Id : 761446797 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the grammatically correct sentence from the options given below:

Options :

7614463153. ✘ Most students need guidance and support to cope up with success.

7614463154. ✔ Most students need guidance and support to cope with success.

7614463155. ✘ Most students need guidance and support to cope up success.

7614463156. ✘ Most students need guidance and support to cope up for success.

Question Number : 190 Question Id : 761446798 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the grammatically correct sentence from the options given below:

Options :

7614463157. ✘ Although the rain, the examination continued.

7614463158. ✘ In spite the rain, the examination continued.

7614463159. ✘ Despite of the rain, the examination continued.

7614463160. ✔ In spite of the rain, the examination continued.

Sub-Section Number :	2
Sub-Section Id :	76144627
Question Shuffling Allowed :	No
Is Section Default? :	null

**Question Id : 761446799 Question Type : COMPREHENSION Sub Question Shuffling Allowed :
No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Question Numbers : (191 to 195)**

Read the following passage carefully and answer the questions from 191 to 195 that follow:

Indian security agencies recently intercepted a Pakistan-bound ship from China at Mumbai's Nhava Sheva port. The ship was suspected to be carrying a "dual-use consignment" related to Pakistan's nuclear and ballistic missile program. Among the items was a Computer Numerical Control (CNC) machine manufactured by an Italian company. The consignment raised concerns due to its potential military applications.

A team from the Defense Research and Development Organization (DRDO) inspected the cargo. The interception highlights India's vigilance in monitoring shipments that could have both civilian and military uses. Such dual-use items can pose security risks, and authorities are keen on preventing their unauthorized transfer.

Sub questions

Question Number : 191 Question Id : 761446800 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What does "dual use" in the context of this article mean?

Options :

7614463161. ✘ Used by two different countries

7614463162. ✘ Used for many purposes

7614463163. ✔ Used for two different purposes

7614463164. ✘ Used both on land and in water

Question Number : 192 Question Id : 761446801 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Why is monitoring dual-use items important for our national security?

Options :

7614463165. ✘ It will give us a military edge

7614463166. ✘ It will benefit our economy

7614463167. ✔ It will avoid future security risks

7614463168. ✘ It will help us prepare for war

Question Number : 193 Question Id : 761446802 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Towards which country was the ship sailing?

Options :

7614463169. ✔ Pakistan

7614463170. ✘ China

7614463171. ✘ Italy

7614463172. ✘ India

**Question Number : 194 Question Id : 761446803 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Who was asked to investigate the contents of the consignment?

Options :

7614463173. ✘ Computer Numerical Control Machine

7614463174. ✘ Indian Defense Research

7614463175. ✘ Mumbai's Nhava Sheva

7614463176. ✔ Defense Research and Development Organization

**Question Number : 195 Question Id : 761446804 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Does the CNC machine have any military applications?

Options :

7614463177.

✘ Absolutely, yes

7614463178. ✔ Potentially, yes

7614463179. ✘ Certainly, no

7614463180. ✘ Impossible to investigate

Sub-Section Number : 3
Sub-Section Id : 76144628
Question Shuffling Allowed : No
Is Section Default? : null

**Question Id : 761446805 Question Type : COMPREHENSION Sub Question Shuffling Allowed :
No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Question Numbers : (196 to 200)

Read the following passage carefully and answer the questions from 196 to 200 that follow:

India's economy is projected to grow at a rate of 6.0% to 6.8% in the fiscal year 2023-24, with various agencies providing similar forecasts. The optimism stems from robust private consumption, increased capital expenditure, and a strong manufacturing sector. However, there are concerns about the accuracy of these estimates due to discrepancies between Gross Value Added (GVA) and Gross Domestic Product (GDP) figures. The GVA growth of 6.5% in the October-December quarter suggests a more modest economic expansion than the 8.4% GDP growth indicates. This divergence, attributed to a decrease in subsidies like Urea, raises questions about the true state of the economy. With global trade growth forecasts lowered and domestic challenges like inflation, the Indian economy faces a complex path ahead.

Sub questions

Question Number : 196 Question Id : 761446806 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the projected growth rate of Indian economy for 2023-2024?

Options :

7614463181. ✘ greater than 0.8%

7614463182. ✔ about 6.8%

7614463183. ✘ almost 6.5%

7614463184. ✘ close to 8.4%

Question Number : 197 Question Id : 761446807 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Why are there doubts about the accuracy of the growth estimates?

Options :

7614463185. ✘ Because the GDP is higher than the GVA

7614463186. ✘ Because the GVA is higher than the GDP

7614463187. ✖ Because GDP and GVA are not reliable measures

7614463188. ✔ Because there is a difference between GVA and GDP figures

**Question Number : 198 Question Id : 761446808 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Why is there a difference between GDP and GVA figures?

Options :

7614463189. ✖ Global trade forecasts are affecting the figures

7614463190. ✔ Decrease in subsidies like urea

7614463191. ✖ Strong manufacturing sector

7614463192. ✖ Healthy private consumption

**Question Number : 199 Question Id : 761446809 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

One of the major challenges India is likely to face in the future is

Options :

7614463193. ✓ Inflation

7614463194. ✘ Private consumption

7614463195. ✘ Economic expansion

7614463196. ✘ Global forecasts

Question Number : 200 Question Id : 761446810 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The word 'divergence' in this context means

Options :

7614463197. ✘ The difference between 6.0% and 6.8%

7614463198. ✓ The difference between GDP and GVA figures

7614463199. ✘ The difference between Indian forecasts and global forecasts

7614463200. ✘ The difference between subsidies and capital expenditure