

B.ED ARTS 2023

E-BOOK- PDF

6,000 MCQ

FULL TEST- 4

EXPLANATION

2,250 ଟି ପୂର୍ବ ବର୍ଷର ପ୍ରଶ୍ନ



B.ED SCI. 2023

E-BOOK- PDF

6,000 MCQ

EXPLANATION

2,300 ଟି ପୂର୍ବ ବର୍ଷର ପ୍ରଶ୍ନ

100% ସଫଳତା

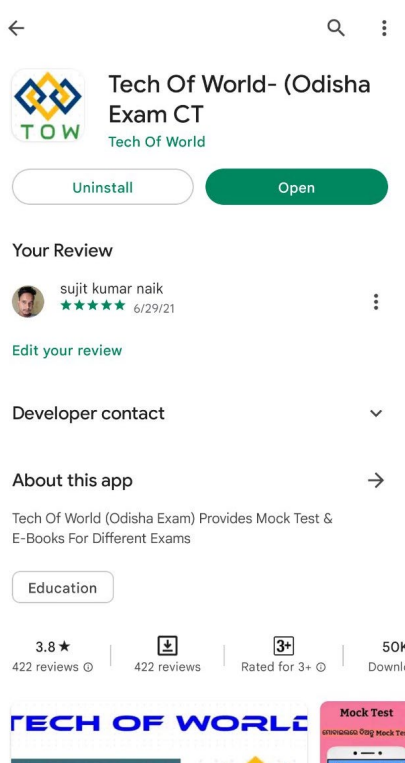


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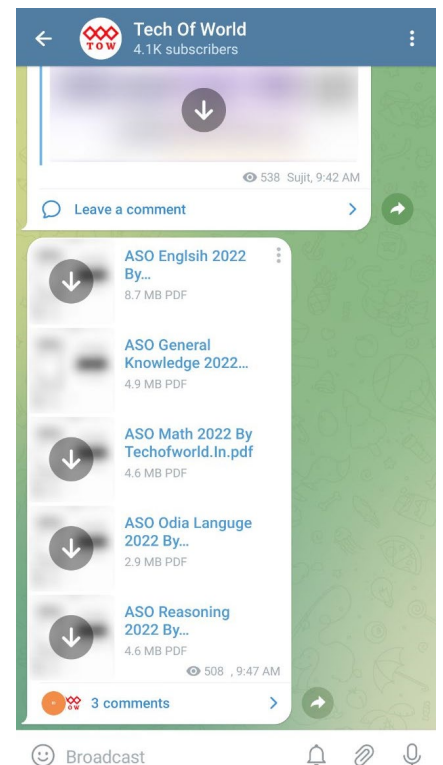
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* Correct Answer is in Bold and slightly bigger
* Candidate selected option is Underlined

English Language

Q2792644 Identify the meaning of the highlighted idiom- **To feather one's own nest**

Score Obtained : -0.25

- A) To live together
B) To make money unfairly
C) To be free from all obligations
D) To protect one's own kith and kin

Q2792706 The prefix 'Bene' in the word 'Benefactor' means

Score Obtained : -0.25

- A) reform
B) before
C) well
D) scared

Q2792661 Fill in the blanks with the most appropriate words.

Tea is a must-have _____ for fried snacks in monsoon and Susan received a _____ for serving such a delicious combination to her guests.

Score Obtained : 1.0

- A) complement, complement
B) compliment, compliment
C) compliment, complement
D) complement, compliment

Q2792682 The pair of words given in capitalized letters is related in some way. From the options, choose the pair that exhibits the most similar relationship to the given pair.

MENDICANT : BEGGAR

Score Obtained : 0.0

- A) vagabond : wanderer**
B) destitute : affluent
C) household : settled
D) waif : affluent

Q2790432 *Direction: Read the following passage and answer the questions based on the information provided in the passage.*

Both the parachutists had been flown behind enemy lines in the early hours of the morning, with the instruction to gain as much information as possible on a new experimental factory. The building itself was believed to be in a sheltered valley in the neighbourhood as to be invisible from the air. Both men knew that their chances of being caught were slight, for though the approaches to the factory were well guarded, there were comparatively few troops stationed in the area.

The men had destroyed their parachutes and had dressed as labourers to avoid being spotted easily. A path across some fields led them to a road beyond which they believe the factory was located. At the road side they noticed some tools, a broken-down lorry, and a deep pit in which rain water had collected. The men were cautiously making their way towards the lorry when the sound of a truck in the distance made them dash for cover. The countryside was so bare that they had no alternative other than to jump into the pit. There was a great splash, and then all was still. The water was quite shallow, and the men pressed themselves against the sides of the pit wondering if they had attracted the attention of the driver of the lorry.

They listened anxiously as the truck came nearer, hoping it would pass. Instead, it seemed to stop almost directly above them. The parachutists heard voices and the door of the truck slammed loudly overhead. From the discussion that followed, they understood that some men in the truck had come to collect the tools near the broken-down vehicle. Suddenly the men were startled by a piece of wood which was thrown into the pit and which struck the water just behind them; this was followed by an empty cigarette packet.

They held their breath and wondered what would happen next. Then the sound of engine starting up again set them at ease, for they knew they had narrowly escaped being captured. But their joy quickly turned to sorrow, for on looking up, they found the pit much deeper than they had thought. Its sides were slippery and there was no sign of a single, secure foothold.

Q2790434 The parachutists weren't sure of the exact location of the factory because it was _____.

Score Obtained : 0.0

- A) well- known
- B) invisible
- C) in a sheltered valley**
- D) well- guarded

Q2790436 What does secure foothold mean?

Score Obtained : -0.25

- A) Good foundation
- B) Safe place to climb**
- C) Ladder
- D) Safe position

Q2790433 Why were the men obliged to jump into the pit?

Score Obtained : -0.25

- A) They were dressed as labourers
- B) There were few places where they could hide**
- C) The enemy soldiers were looking for them
- D) They were dressed as parachutists

Q2790435 They found the pit _____ deeper than they thought.

Score Obtained : -0.25

- A) many
- B) far**
- C) more
- D) very

Q2790437 How did the parachutists feel when they heard the sound of engine starting up again?

Score Obtained : -0.25

- A) Anxious
- B) Adventurous
- C) Frightened
- D) Relaxed**

Q2792695 Fill in the blank with the correct spelling from among the given options.

Tom was accused of _____ when it was found that he had copied the story from his contemporary's book.

Score Obtained : -0.25

- A) plegiarism
B) Plagiarism
C) plegerism
D) plagarism
-

Q2791156 Which Commission in India was established in 1979 by the Janata Party Government under Prime Minister Morarji Desai with a mandate to "identify the socially or educationally backward." ?

Score Obtained : .

- A) Kothari Commission
B) Secondary Education Commission
C) Mandal Commission
D) Subrahmanyam Committee
-

Q2791095 What is the main cause of sparkling effect of diamonds?

Score Obtained

- A) High refractive index**
B) Low refractive index
C) Large critical angle
D) Critical angle is zero
-

Q2791146 Which of the following organizations was established by the All India Council for Technical Education (AICTE) in 1994 and operated as an autonomous body since 2010?

Score Obtained : .

- A) Universal Grants Commission**
B) National Assessment and Accreditation Council
C) National Board of Accreditation
D) Jawahar Navodaya Vidyalaya
-

Q2791163 The National Institute of Educational Planning and Administration (NIEPA), established by the Ministry of Human Resource Development, is a premier organization dealing with capacity building and research in planning and management of education in India and

Score Obtained

- A) BRIC nations
B) Scandinavian countries
C) South Asian countries
D) Commonwealth countries
-

Q2791079 Who among the following can create one or more All-India Services by law on the basis of a resolution passed by Council of States?

Score Obtained : .

- A) Governor of State**
B) Vice President of India
C) Parliament of India
D) Chief Minister of State
-

Q2792721 Gunal walks in West direction for 30 Kms. After that he turns to East direction and walks for another 6 Kms and finally he turns to North direction and walks for 1 Kms. How far is he from the starting point and which direction is he with respect to the starting point?

Score Obtained : .

- A) 13 Kms, North-West**
B) 43 Kms, North-East



- C) 31 Kms, North-East
D) 25 Kms, North-West

Q2791346 If HOCKEY is coded as WCIAMF, how will BADMINTON be coded in the same code?

Score Obtained : 0.0

- A) DCFOKPVQP
B) LMRLGKBYZ
C) ZYBKGLRML
D) AZCLHMSNM

Q2792735 Given below a question followed by 2 statements numbered (I) and (II). Choose the statement/statements required to answer the question by selecting a relevant option.

Question: What does 'ma' mean in a code language?

Statements:

- I. 'la ma na' means 'You are good' in the code language
II. 'ma fa ta' means 'They are bad' in the code language

Score Obtained : -0.25

- A) Statement (II) ALONE is sufficient, but statement (I) alone is NOT sufficient
B) BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient
C) Statements (I) and (II) TOGETHER are NOT sufficient
D) Statement (I) ALONE is sufficient, but statement (II) alone is NOT sufficient

Q2791330 Three bells ring simultaneously at 7 AM on Monday. They ring at regular intervals of 35 minutes, 40 minutes, 55 minutes respectively. The time when all the three bells ring together next is

Score Obtained : -0.25

- A) 10:20 PM Wednesday
B) 10:20 AM Wednesday
C) 7 PM Tuesday
D) 7 AM Tuesday

Q2791364 Choose the conclusion/conclusions that follow the given statements by selecting a right option.

Statements:

Some pancakes are buns.

Some buns are salads.

No salad is custard.

Conclusions:

- I) No custard is bun.
II) No salad is pancake.
III) Some buns are pancakes.

Score Obtained : 1.0

- A) Only III follows
B) Only I follows
C) Only II and III follows
D) Only I and II follows

Q2792748 Which among the following is an objective of affective domain?

Score Obtained : -0.25

- A) Organising
 - B) Conceptual knowledge
 - C) Procedural knowledge
 - D) Perceptual abilities
-

Q2791218 The objective of NCTE is to work for improvement and development of

- A) Teacher Education
 - B) Technical Teachers' Education
 - C) Theoretical Education
 - D) Technical Education
-

Q2792932 A question like, 'Why is Romeo and Juliet considered a tragedy?' Is an example for

- A) Creative thinking
 - B) Practical thinking
 - C) Applicational thinking
 - D) Analytical thinking**
-

Q2791217 By following which of the given activities, a student can be educated in social behaviour?

- A) Curriculum
 - B) Social and cultural activities in the school
 - C) Strict imposition of the discipline
 - D) Syllabus
-

Q2792790 The influence of European liberal thought on education is seen in the

- A) Belief that children should grow in knowledge
 - B) Emphasis on academic growth and intellectual refinement
 - C) Focus on emotional and social development**
 - D) Assertion that all human activities are to be addressed in school
-

Q2792793 Choose what best describes holistic development

- A) Individual development is the physical, intellectual, emotional, social and moral developments
 - B) Homework, school lectures, projects and independent study
 - C) Practising from texts, application in the real world and tests
 - D) Local knowledge, national awareness and global knowledge
-

Q2791220 Which of the following are the basic functions of management?

- A) planning, organizing, discussing, commanding, and controlling
- B) planning, organizing, coordinating, discussing, and controlling
- C) planning, discussing, coordinating, commanding, and controlling
- D) planning, organizing, coordinating, commanding, and controlling**

Q2791182 How many abilities did Guilford initially give in his theory Structure of Intellect?

Score Obtained : 0.0

- A) 100
- B) 130
- C) 120**
- D) 110

Q2792824 In order to develop a concept thoroughly in a topic, it's critical for teachers to provide challenging situations and variables that the children's schemes no longer can explain and justify. This is appropriate as per the

Score Obtained : -0.25

- A) The drive for advanced thinking**
- B) The drive for adaptation
- C) The drive for equilibrium
- D) The drive to have pleasure

Q2792745 Which of the following concepts explains that 'A student is able to perform simple addition when working with a teacher or parent, but is frustrated when performing the task alone.'?

Score Obtained : -0.25

- A) Zone of Proximal Development**
- B) Conditional Response
- C) Sociocultural Adoption
- D) Adapting to Instructions

Q2792624 Which of the following plot represents Pourbix diagram?

Score Obtained : 1.0

- A) NE(0) Vs N
- B) NE(0) Vs pH
- C) E(0) Vs N
- D) E(0) Vs pH**

Q2791676 A lift moves vertically up with an acceleration "a". Force exerted by a person of mass M on the floor of the lift is

Score Obtained : 1.0

- A) Ma
- B) Mg
- C) M(g + a)**
- D) M(g - a)

Q2791717 A uniform wire of resistance 50 Ω is cut into 5 equal parts and then each of the parts are connected in parallel. Which of the following is the equivalent resistance of the combination?

Score Obtained : -0.25

- A) 2 Ω**
- B) 5 Ω
- C) 10 Ω
- D) 1 Ω

Q2792612 Which of the following inferences can be drawn from the Frost diagram of Mn?

Score Obtained : 0.0

- A) Both oxidising agent and reducing agent are on the right side of Frost diagram
B) The oxidising agent is on the right side of the Frost diagram, whereas the reducing agent is on the left
C) The oxidising agent is on the left side of the Frost diagram, whereas the reducing agent is located on the right
D) Both oxidising agent and reducing agent are on the left side of Frost diagram

Q2791682 If a block of mass 'm' placed on a plane inclined at an angle θ , is on the verge of sliding, then the coefficient of friction between the block and the plane is given by

Score Obtained : -0.25

- A) $\cos \theta$
B) $\sin 2\theta / 2$
C) $\sin \theta$
D) $\tan \theta$

Q2791660 The smallest quantity of energy that can be emitted or absorbed in the form of electromagnetic radiation is known as

Score Obtained : -0.25

- A) Spectrum
B) Quantum
C) Photon
D) Photoelectron

Q2791764 A ray of light is incident on a plane mirror along a vector $i + j - k$. The normal on incidence point is along $i + j$. The unit vector along the reflected ray is

Score Obtained : -0.25

- A) $(i + j - k)/\sqrt{3}$
B) $(-i - j + k)/\sqrt{3}$
C) $(-i - j - k)/\sqrt{3}$
D) $(i - j - k)/\sqrt{3}$

Q2792616 By self-oxidation and reduction of nitrous acid, which of the following compounds is produced?

Score Obtained : -0.25

- A) HNO_3 and N_2
B) HNO_3 and N_2O
C) HNO_3 and NO
D) HNO_3 and N_2O_3

Q2792615 Which of the following compounds is produced when hypochlorous acid is auto-oxidized?

Score Obtained : 0.0

- A) HClO_2 and HClO_3
B) HClO_2 and HCl
C) HClO_3 and HCl
D) HClO_4 and HCl

Q2791763 Two identical conducting rods are first connected independently to two vessels, one containing water at 100°C and the other containing ice at 0°C . In the second case, the rods are joined end to end and connected to the same vessels. Let q_1 and q_2 gram per second be the rate of the melting of ice in the two cases respectively. The ratio q_1/q_2 is

Score Obtained : 0.0



- A) 4
B) 2
C) $\frac{1}{2}$
D) $\frac{1}{4}$

Q2791647 Which of the following is an example of Law of multiple proportion?

Score Obtained : -0.25

- A) $\text{H}_2\text{O}, \text{H}_2\text{O}_2$
B) CH_4, CO_2
C) $\text{H}_2\text{O}, \text{CO}_2$
D) SO_2, CS_2

Q2791718 If the amount of charge passed in time t through a cross-section of a wire is $q(t) = t^3 + 3t^2 + 2t + 20$, then what will be current at $t = 6\text{s}$?

Score Obtained : 0.0

- A) 136A
B) 150A
C) 120A
D) 146A

Q2791758 A Steel wire of length L at 40°C is suspended from the ceiling and then a mass m is hung from its free end. The wire is cooled down from 40°C to 30°C to regain its original length L . The coefficient of linear thermal expansion of the steel is $10^{-5}/^\circ\text{C}$, Young's modulus of steel is 10^{11} N/m^2 and radius of wire is 1 mm. Assume that $L \gg$ diameter of the wire. Then the value of m in kg is nearly

Score Obtained : 0.0

- A) 4
B) 6
C) 3
D) 5

Q2791757 Two rods, one of the aluminium and the other made of steel, having initial length L_1 and L_2 are connected together to form a single rod of length $L_1 + L_2$. The coefficients of linear expansion for aluminium and steel are α_a and α_s respectively. If the length of each rod increases by the same amount when their temperature are raised by 1°C , then find the ratio $L_1/(L_1 + L_2)$

Score Obtained : 0.0

- A) $\alpha_s/(\alpha_a + \alpha_s)$
B) $\alpha_a/(\alpha_a + \alpha_s)$
C) α_s/α_a
D) $\alpha_s \times \alpha_a$

Q2791732 If two long, straight wires, each carrying an electric current of 3.0 A, are kept parallel to each other at a separation of 2.0 cm, then what will be magnetic force experienced by 1 m of the wire?

Score Obtained : 0.0

- A) $1 \times 10^{-5}\text{ N}$
B) $9 \times 10^{-5}\text{ N}$
C) $6 \times 10^{-5}\text{ N}$
D) $3 \times 10^{-5}\text{ N}$

Q2791639 Which of the following statements is INCORRECT regarding atomic orbitals?

Score Obtained : -0.25

- A) 5f orbital has 2 radial nodes



- B) s-orbital has no angular dependence
C) angular wave function determines the shape of electron cloud
D) 4s orbital has 3 radial nodes

Q2791727 Meissner effect is seen in

Score Obtained : 1.0

- A) Insulators
B) Paramagnetic substances
C) Ferromagnetic substances
D) Non magnetic substances

Q2791680 Law that proves that different masses accelerate to the earth at the same rate, but with different forces is

Score Obtained : -0.25

- A) Newton's first law
B) Combinations of Newton's first and third law
C) Newton's third law
D) Newton's second law

Q2791641 Which electronic configuration amongst the following correctly represents "Sulphur" atom

Score Obtained : 0.0

- A) $1s^2 2s^2 2p^6 3s^2 3p^4$**
B) $1s^2 2s^2 2p^6 3s^2 3p^2 3d^2$
C) $1s^2 2s^2 2p^6 3s^2 3p^2 4s^2$
D) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 4p^3$

Q2791688 A light rope is fixed at one end of the ceiling. A monkey start climbing up the rope with $2m/s^2$ acceleration from the lower end. If mass of the monkey is 40kg, then what will be the tension in the rope? (Here $g=10m/s^2$)

Score Obtained : 0.0

- A) 480N**
B) 80N
C) 320N
D) 400N

Q2792266 Which of the following transformation involves the application of reagents and reaction conditions to transform target species?

Score Obtained : -0.25

- A) Chemical transformation**
B) Coordinate transformation
C) Conflict transformation
D) Physical transformation

Q2791801 The common name of the phylum Pterophyta is

Score Obtained : -0.25

- A) Mosses
B) Cycads
C) Quillworts
D) Ferns



Q2792270 Read the following statements regarding greenhouse gas and choose the CORRECT option:

- (i) Greenhouse gases are gases that can trap heat
- (ii) They let sunlight pass through the atmosphere
- (iii) They prevent the heat that the sunlight brings from leaving the atmosphere

- A) (i), (ii) and (iii) are TRUE**
- B) (i), (ii) and (iii) are FALSE
- C) (i), (ii) are TRUE and (iii) is FALSE
- D) (i), (ii) are FALSE and (iii) is TRUE

Q2791780 Which of the following cell organelles found in some plant cells are known as dictyosomes?

- A) Golgi apparatus**
- B) Mitochondria
- C) Centrosome
- D) Plastids

Q2791802 In which of the following phyla excretion takes place through malpighian tubules?

- A) Annelida
- B) Platyhelminthes
- C) Aschelminthes
- D) Arthropoda**

Q2792341 Which channels facilitate the movement of water across the lipid bilayer on the cell membrane of plants?

- A) Xylem
- B) Cuticle
- C) Aquaporins**
- D) Palisade parenchyma

Q2792348 Which element is commonly seen in nitrogen fixing microorganisms?

- A) Calcium
- B) Manganese
- C) Cobalt**
- D) Fluoride

Q2792346 What do you call plants that prepare their own nutrition?

- A) Atrophic
- B) Heterotrophic
- C) Autotrophic**
- D) Zootrophic

Q2792265 Choose one of the method as a solution when a natural resource is depleting?

- A) Deforestation
B) Overpopulation
C) Reforestation
D) Pollution
-

Q2793301 Match the following cell organelles in List I with their components in List II.

List I	List II
a. Centriole	(i) Cristae
b. Mitochondria	(ii) Spokes
c. Inclusion bodies	(iii) Axoneme
d. Cilia	(iv) Phosphate granules

- A) (a)-(ii), (b)-(i), (c)-(iv), (d)-(iii)**
B) (a)-(iii), (b)-(iv), (c)-(ii), (d)-(i)
C) (a)-(iii), (b)-(i), (c)-(iv), (d)-(ii)
D) (a)-(ii), (b)-(i), (c)-(iii), (d)-(iv)
-

Q2792271 The isotope of the element carbon that is unstable and weakly radioactive is

- A) carbon-14**
B) carbon-13
C) nitrogen-14
D) carbon-12
-

Q2792284 Name the method by which ores are extracted from the interiors of the Earth?

- A) Ploughing
B) Distillation
C) Mining
D) Filtration
-

Q2792267 When adopting a microbial process for degradation of a waste matter what would be one of the major hindrances in the process?

- A) Rate limiting factors**
B) Microbial growth factors
C) Biological catalyst
D) Rate enhancing factors
-

Q2792286 Soil contains bits of decayed living organisms which is called

- A) rock
B) gas
C) water
D) humus
-

Q2792290 Read the following statements regarding forest and choose the CORRECT option:

- (i) Forest protects land and soil from erosion caused by rain, wind, and radiation
- (ii) Forest belts can even absorb the negative impacts of sound and wind

- A) (i) and (ii) are FALSE
 - B) (i) is FALSE and (ii) is TRUE
 - C) (i) and (ii) are TRUE**
 - D) (i) is TRUE and (ii) is FALSE
-

Q2792339 What is the movement of water through a semi permeable membrane called as?

- A) Diffusion
 - B) Osmosis**
 - C) Surface tension
 - D) Capillarity
-

Q2793299 Read the following statements and choose the CORRECT option.

- (i) Mitochondria is a semi-autonomous cell organelle.
- (ii) Mitochondria has its own DNA and ribosomes.

- A) (i) is FALSE and (ii) is FALSE
 - B) (i) is TRUE and (ii) is TRUE**
 - C) (i) is TRUE and (ii) is FALSE
 - D) (i) is FALSE and (ii) is TRUE
-

Q2791804 Under binomial system of nomenclature, a plant/animal name is written in two words which designate

- A) Genus and Species**
 - B) Family and Kingdom
 - C) Genus and Class
 - D) Order and Kingdom
-

Q2793296 Which of the following organisms lack mitochondria?

- A) Green algae**
 - B) Yeast
 - C) Blue-green algae
 - D) Paramecium
-

Q2791792 Which of the following denotes the characteristics of Bryophyta division?

- A) They possess well developed vascular tissues
 - B) The plants develop a number of hair-like structures known as rhizoids**
 - C) The xylem and phloem tissue helps in conduction of water and other substances from one part of plant body to another
 - D) The body of plant is in the form of an undivided thallus
-

Q2791990 A natural number, when decreased by 7, becomes 60 times its reciprocal. The number is

Score Obtained : 0.0

- A) 12
- B) 5
- C) 8
- D) 10

Q2791927 If $\log 7 = 0.8451$, then $\text{antilog}(-1.1549) =$

Score Obtained : 0.0

- A) 0.07
- B) 0.05
- C) 0.02
- D) 0.04

Q2791946 In a library, the ratio of number of story books to that of non-story books was 4:5 and total number of story books was 488. When some more story books were bought, the ratio became 6:5. What is the number of story books bought?

Score Obtained : 0.0

- A) 262
- B) 312
- C) 244
- D) 308

Q2791969 If $f : \mathbb{R} \rightarrow \mathbb{R}$ such that $f(x) = 7x + 3$, then $f^{-1}(x) =$

Score Obtained : -0.25

- A) $(x-3)/7$
- B) $(x - 7)/3$
- C) $7x - 3$
- D) $1/(7x + 3)$

Q2791951 A container contains a mixture of 49 litres of wine and water in the proportion of 5:2. How much of water must be added to it so as to make the ratio of wine to water 7:4?

Score Obtained : 0.0

- A) 6 litres
- B) 4 litres
- C) 7 litres
- D) 5 litres

Q2791901 Which of the following statements is incorrect?

Score Obtained : -0.25

- A) In a parallelogram, the diagonals bisect each other.
- B) In a parallelogram, the diagonals are equal.
- C) If all the sides of a quadrilateral are equal, then it is a parallelogram.
- D) If all the angles of a quadrilateral are equal, then it is a parallelogram.

Q2791879 If $\tan 4\theta = \cot(\theta - 5^\circ)$, where 4θ and $(\theta - 5^\circ)$ are acute angles then the value of θ in degrees is

Score Obtained : 0.0

- A) 19°
 B) 18°
 C) 20°
 D) 16°

Q2791906 In a $\triangle ABC$, P, Q and R are the mid-points of AB, BC and CA respectively. If The length of the sides AB, BC and CA are 9 cm, 10 cm and 11 cm respectively, then the perimeter of the $\triangle PQR$ is

Score Obtained : -0.25

- A) 25 cm
 B) 30 cm
 C) 15 cm
 D) 10 cm

Q2791948 Which of the following is an irrational number?

Score Obtained : -0.25

- A) 0.0100100001....
 B) 0.01
 C) 0.3333333..
 D) 0.12121212

Q2791876 The value of $\sin 15^\circ + \cos 15^\circ$ is

Score Obtained : -0.25

- A) $\frac{1}{\sqrt{2}}$
 B) 1
 C) $\frac{\sqrt{3}}{2}$
 D) $\sqrt{\frac{3}{2}}$

Q2791989 If one root of the equation $x^2 + px + 40 = 0$ is 5, while the equation $x^2 + px + q = 0$ has equal roots, then the value of q is

Score Obtained : 1.0

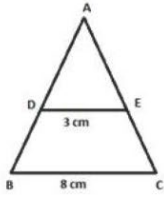
- A) $\frac{169}{4}$
 B) 169
 C) 4
 D) $\frac{169}{4}$

Q2791977 The domain of the function $f(x) = \frac{3x^{\frac{5}{4}} + 3x^2 - 5}{x^2 - 16}$ is

Score Obtained : 0.0

- A) $[0,4) \cup (4, \infty)$
 B) $(-4, 4)$
 C) $\mathbb{R} - \{4\}$
 D) $(-\infty, \infty)$

Q2791913 In the given figure, ABC is a triangle in which DE \parallel BC. If BC = 8 cm, DE = 3 cm and area of $\triangle ADE = 27 \text{ cm}^2$, what is the area of $\triangle ABC$?



- A) 64 cm²
 B) 125 cm²
C) 192 cm²
 D) 512 cm²

Q2792000 If $\frac{x^{1602} + 6x^{1601}}{4x^{1600}} = 2398.75$, then the positive value of x is

- A) 98
B) 95
 C) 101
 D) 103

Q2791920 The value of the expression $\log(75/16) - 3\log(5/3) + \log(160/81)$ is

- A) log2**
 B) log3
 C) log5
 D) 1

Q2791871 If $x = a\sin\theta + b\cos\theta$ and $y = a\cos\theta - b\sin\theta$, then which of the following is correct?

- A) $x^2 + y^2 = a^2 + b^2$**
 B) $x^2 - y^2 = a^2 + b^2$
 C) $x^2 - y^2 = a^2 - b^2$
 D) $x^2 + y^2 = a^2 - b^2$

Q2791932 If $10^{0.33} = x$, $10^{0.60} = y$ and $x^z = y^3$, then the value of z is approximately

- A) 2.76
 B) 1.56
C) 5.45
 D) 4.35

Q2791973 If $x, y, z \in \mathbb{R}$ and independent of each other, then the range of $\left(x^2 + \frac{1}{x^2}\right) + (5^y + 5^{-y}) + (\tan^2 z + \cot^2 z)$ is

- A) $[6, \infty)$**
 B) $(-\infty, \infty)$
 C) $(-\infty, 6]$

D) $[2, \infty)$

Q2791919 If $\log_3(25 - x^2) = 2$, then the value of x is

Score Obtained : 0.0

A) ± 4

B) 1

C) ± 3

D) 2

Q2791889 The angle of elevation of the top of a tower PR from a point Q on the ground is 30° . If the observer moves 20 metres towards the foot of the tower to a point S, the angle of elevation of the top increases by 30° . The height of the tower PR is

Score Obtained : 0.0

A) 16 m

B) 17.32 m

C) 15.41 m

D) 18 m

TOW

