

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

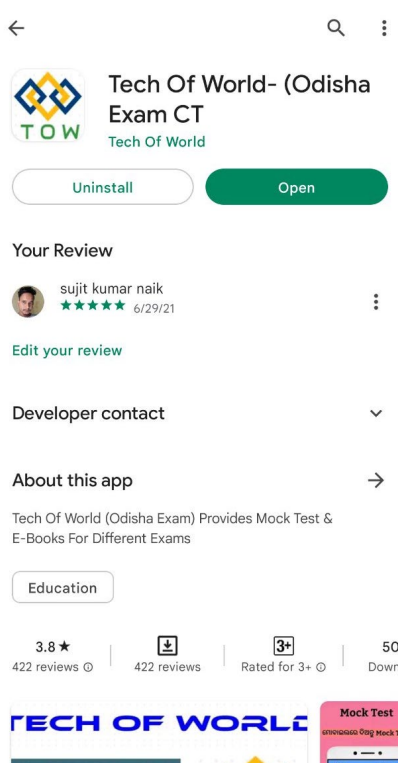


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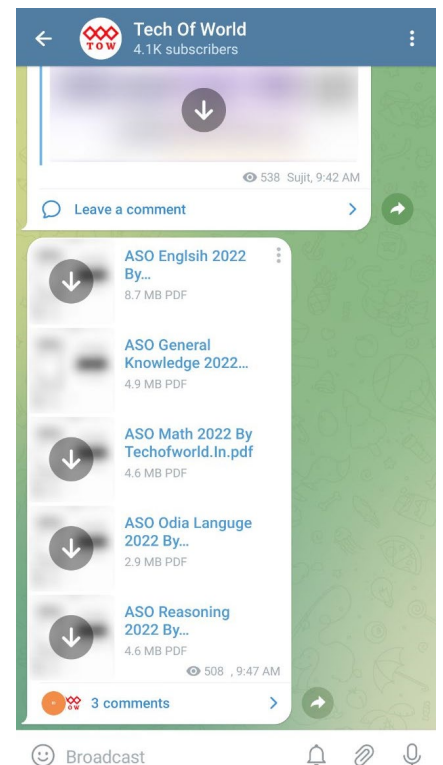
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* Correct Answer is in Bold and slightly bigger
* Candidate selected option is Underlined

English Language

Q2792700 Fill in the blank with the correct spelling from among the given options.

We request your gracious presence on the auspicious _____ of our daughter's wedding.

Score Obtained : -0.25

- A) occassion
- B) occassion
- C) occasion
- D) ocaasion

Q2793315 Fill in the blanks with the most appropriate words.

The _____ van, next to the school, was converted into a _____ store.

Score Obtained : 0.0

- A) stationery, stationary
- B) stationary, stationery**
- C) stationary, stationary
- D) stationery, stationery

Q2792650 Identify the meaning of the highlighted idiom in the given sentence.

The fake Godman is helping poor people because he has his own **axe to grind** and not because he cares about their welfare.

Score Obtained : 0.0

- A) troubles to deal with
- B) have an ulterior motive**
- C) to think deeply
- D) to act selflessly

Q2792685 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.

CLANDESTINE : COVERT

Score Obtained : 0.0

- A) wicked : nefarious**
- B) rough : bastion
- C) humble : truculent
- D) peaceful : belligerent

Q2790462 Read the following passage and answer the questions based on the information provided in the passage.

Driving etiquette is a civilized driving behaviour comprising observance of rules and propriety. Certain statutory obligations have to be observed. While driving a vehicle, it is absolutely essential that all documents connected with ownership of the vehicles, driving license, pollution-free certificate in original, etc. are kept in the car. They have to be produced on demand by the competent authority. When the person driving a vehicle is still a learner, the board L should be prominently displayed.

Parking vehicles on the side of the road is a common feature because of paucity of space. Technically, this is illegal as per the Indian Motor Vehicle Act, but the rule is not enforced strictly. To caution a pedestrian or a slow-moving vehicle in front of us, sounding the horn is essential. We are bound to do it legally as well, but we should not honk unnecessarily, creating sound pollution.

Basic human dignity is more important than strict observance of rules. At crossroads, those who come from our right path always have precedence. We should give hand signals for those who follow us, particularly when we slow down, take sudden turn or overtake a vehicle. Never take a vehicle from wrong side even if there is space. When another driver makes a mistake try to correct him if time permits, instead of abusing him or threatening him with dire consequences.

Q2790467 When we make a mistake, we should

Score Obtained : 1.0

- A) Drive on and ignore it
- B) Abuse the driver
- C) Admit it and apologize for it**
- D) Threaten the driver

Q2790463 While driving a vehicle a learner has to display which of the following signs?

Score Obtained : 1.0

- A) M
- B) V
- C) L**
- D) O

Q2790464 "Paucity" means

Score Obtained : 0.0

- A) Scarcity**
- B) Abundance
- C) Profusion
- D) Copiousness

Q2790465 In order to caution a pedestrian, we should

Score Obtained : 1.0

- A) Honk continuously
- B) Slow down
- C) Sound horn**
- D) Drive fast

Q2790466 The one coming from the right, at crossroads always has to

Score Obtained : 1.0

- A) Come before others**
- B) Stay behind
- C) Honk unnecessarily
- D) Remain where they are

Q2792708 What does "ami" mean in words such as amiable, amity and amigo?

Score Obtained : 1.0

- A) sister
- B) anger
- C) love**
- D) thrill

Q2791098 Addition of salt facilitates melting of ice during winter. Identify the CORRECT reason for this.

Score Obtained :

- A) Salt increases the freezing point of water on the surface of ice
- B) Salt decreases the freezing point of water on the surface of ice**
- C) Salt decreases the freezing point of water present deep inside ice
- D) Salt increases the kinetic energy of the water molecules which generates heat

Q2791159

"In one point I fully agree with the gentlemen to whose general views I am opposed. I feel with them that it is impossible for us, with our limited means, to attempt to educate the body of the people.....". The statement given here is part of which of the following options?

Score Obtained :

- A) Macaulay's Minute -1835**
- B) Wood Despatch - 1854
- C) Sargent commission-1944
- D) Hunter Commission – 1882

Q2791083 In India, Governor of a State is appointed by the

Score Obtained :

- A) President of India**
- B) Members of Rajya sabha
- C) Prime Minister of India
- D) Members of Lok sabha

Q2791149 Rashtriya Madhyamik Shiksha Abhiyan scheme was launched by the Government to enhance

Score Obtained :

- A) Access to Secondary Education**
- B) Improve quality of PH. D Education
- C) Encourage non-gender and socio- economic barriers
- D) To have a closed Financial management system

Q2791169 Identify the tool for comprehensive self-review and analysis for CBSE affiliated schools and parents which enables them to analyze students' performance in order to take remedial measures.

Score Obtained :

- A) Saransh**
- B) Aakanksha
- C) Pragathi
- D) Subhiksha

Q2791367 Choose the conclusion/conclusions that follow the given statements by selecting a right option.

Statements:

All mambas are pythons.

No python is cobra.

Conclusions:

- I) No mamba is cobra
- II) All pythons are mambas.

- A) Only II follows
B) None follow
C) Both I and II follows
D) Only I follows

Q2792740 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 is the code for 'He' in the code language?

Statements:

- I. 'fa la' means 'He come' in the code language
II. 'pa la' means 'He do' in the code language

Score Obtained :

- 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

Q2792724 A man, who was facing North direction turns 45 degrees in clockwise direction. After that he turns 90 degrees in anti-clockwise direction. Which direction is he facing now?

Score Obtained :

- A) South-West
B) North-East
C) North-West
D) South-East

Q2791334 Seven-tenth of Megha's age is equal to three-fourth of Gouri's age. The ratio of the age of Megha to age of Gouri is

Score Obtained :

- A) 12:13
B) 15:14
C) 15:13
D) 13:14

Q2791350 In a certain code language, [RA SA HA] is written as [@@ ^^ **], [MA LA RA] is written as [^^ %% ##], [SA MA RA] is written as [%% ^^ **], [MA HA LA] is written as [%% @@ ##]. What will be the code for "RA"?

Score Obtained :

- A) ^^
B) &&
C) \$\$
D) ##

Q2791234 In which year was the National Council of Educational Research and Training set up as an autonomous organisation by the Government of India ?

Score Obtained :

- A) 1951
B) 1959
C) 1971
D) 1961



Q2792752 Which of the following ensures equal participation opportunity amongst students in a class of 30 students?

Score Obtained :

- A) Group clusters with individual tasks
 B) Seminar and presentation style
 C) Lecture style
 D) One-on-one style
-

Q2792798 In ancient India, an educated person was considered to be

Score Obtained :

- A) one who had risen above all types of bondages of desires
 B) one who looked for ordinary facts and patterns
 C) one who feared to face injustice
 D) one who had community interest to achieve one's end
-

Q2792763 Designing a classroom so that enough practice can take place in order to master a skill or become clear of procedure helps in the thickening of

Score Obtained : -C

- A) Dendrite
 B) Axon
 C) Myelin sheath
 D) Synapse
-

Q2791185 According to Motivation hygiene theory by Frederick Herzberg which of the following would act as motivator for teachers?

Score Obtained : -C

- A) Job enrichment
 B) Good salary
 C) Job security
 D) Working conditions
-

Q2791224 Which of the following is the informal agency of education?

Score Obtained :

- A) School
 B) Teacher
 C) Community
 D) Institute
-

Q2792801 India has aspired to be secular state. What, therefore, follows is that an educated citizen is expected to

Score Obtained : -C

- A) Be scientific and rational in solving social and personal problems
 B) Be actively promoting ancient ways in technology and science
 C) Stand for the religious practices as a way of life
 D) Take pride in the dependence of traditional rituals to solve problems
-

Q2792931 When thirsty very young children may turn to drink any water available, indiscriminately without considering hygiene and potability. An adult guides the child to distinguish water that can quench thirst from other uses of water. This is an example for

Score Obtained : -C

- A) Social interaction and development

- B) Identification and utility of objects
C) Learning strategies and discovery
D) Peer learning and guidance

Q2791229 Read the following statements and choose the CORRECT option.

- (i) Informal Education is a lifelong process in a natural way for an individual.
(ii) Tutoring at home or private tuitions is covered under the informal mode of education.

Score Obtained : 1.0

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

Q2792934 An example of a good Instructional Objective is

Score Obtained : -0.25

- A) Students will submit their assignments within time and with accuracy
B) Students will solve problems of 3-digit addition at 1 problem/minute with 90% accuracy
C) Students will be able to solve problems and apply it in real life situations
D) Students will enjoy the topic of addition and will be motivated to do on their own

Q2791689 Three forces of equal magnitude (10N) are applied on a body of mass 15kg. If forces are applied symmetrically with equal angles to each other, then what will be the acceleration of body?

Score Obtained : 0.0

- A) 2 m/s^2
B) 1 m/s^2
C) 0 m/s^2
D) 3 m/s^2

Q2791736 A d.c voltage with appreciable ripple expressed as $(V = V_1 + V_2 \cos wt)$ is applied to a resistor. The amount of heat generated per second is given by

Score Obtained : 0.0

- A) $(2V_1^2 + V_2^2)/(2R)$**
B) $(V_1^2 + V_2^2)/(2R)$
C) $(V_1 - V_2)/R$
D) $(V_1 + V_2)/R$

Q2791769 The temperature at which the velocity of sound in air becomes 1.2 times its value at room temperature (27 °C) is

Score Obtained : 0.0

- A) (-) 23 °C
B) 27 °C
C) 87 °C
D) 159 °C

Q2791730 If a current I is flowing in a circular wire of radius r, then what will be the magnetic field at the center of circle? (Other symbols have their usual meanings)

Score Obtained : 0.0

- A) $\mu_0 I / 4\pi r$

B) $\mu_0 I / 2r$

C) $\mu_0 I / 2\pi r$

D) $\mu_0 I / 4r$

Q2791774 What should be the specific heat of the body if a body with mass 2 kg absorbs heat of 100 calories when its temperature raises from 30°C to 80°C?

Score Obtained : 0.0

A) 10^{-3} cal/gr °C

B) 10^{-2} cal/gr °C

C) 10^{-8} cal/gr °C

D) 10^{-6} cal/gr °C

Q2791683 Two masses m_1 and m_2 are connected by a massless string over a fixed pulley. If $m_1 > m_2$, m_1 will move downward and m_2 will move upward. What is the acceleration with which the combination of two masses will move? (g = acceleration due to gravity)

Score Obtained : 0.0

A) 0

B) g

C) $[(m_1 - m_2) / (m_1 + m_2)] \times g$

D) $[2m_1 m_2 / (m_1 + m_2)] \times g$

Q2792621 Which of the following occurs when potassium permanganate reacts with hydrochloric acid?

Score Obtained : -0.25

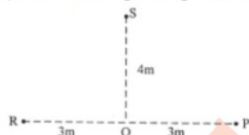
A) Chlorine is liberated

B) Manganese (IV) oxide is formed

C) Potassium manganate is formed

D) Manganese is deposited

Q2791775 In the given figure, what is the ratio of sound intensity at points S, R and Q if point P is the source of sound?



Score Obtained : 0.0

A) 25:36:144

B) 36:25:100

C) 169:100:144

D) 144:36:100

Q2791738 Stationary charge produces

Score Obtained : -0.25

A) Neither electric nor magnetic field

B) Both magnetic and electric field

C) Electric field

D) Magnetic field

Q2791662 The CORRECT combination about discovery-scientist pair among the following is



Score Obtained : 1.0

- A) electron-Goldstein; Proton-Goldstein; Neutron-J.J.Thomson
B) electron-J.J.Thomson; Proton-Goldstein; Neutron-Chadwick
C) electron-J.J.Thomson; Proton-Chadwick; Neutron-Goldstein
D) electron-Chadwick; Positron-Goldstein; Neutron-J.J.Thomson

Q2791767 Water of volume 2 L in a container is heated with a coil of 1 kW at 27 °C. The lid of the container is open and the energy dissipates at the rate of 160 J/s. In how much time temperature will rise from 27 °C to 77 °C? (specific heat of water is 4.2 kJ/kg)

Score Obtained : 0.0

- A) 7 min
B) 6 min 2 s
C) 8 min 20s
D) 14 min

Q2791743 What is the net resistance between the two vertices of the face diagonal of a cube which has 12 equal resistors of resistance R?

Score Obtained : 0.0

- A) 5/6 R
B) 1/6 R
C) 3/4 R
D) 7/12 R

Q2791712 If a rocket of mass 100 kg with 900 kg of fuel is fired from rest such that the exhaust gases are ejected at a uniform speed of 45 km/s, then the maximum speed acquired by the rocket will

Score Obtained : 0.0

- A) be less than 20 km/s
B) lie between 50 to 90 km/s
C) lie between 30 to 45 km/s
D) be more than 100 km/s

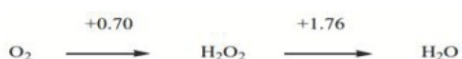
Q2792634 Which of the following represents the feasibility of reactions?

- (A) $2(\text{H}_2\text{O}) \rightarrow (\text{H}_2\text{O}_2) + 2\text{H}^+ + 2\text{e}^-$, $E^0 = -1.76\text{V}$
(B) $\text{H}_2\text{O}_2 \rightarrow \text{O}_2 + 2(\text{H}^+) + 2\text{e}^-$, $E^0 = -0.70\text{V}$

Score Obtained : 0.0

- A) (A)- Not Feasible, (B)- Feasible
B) (A)- Not Feasible, (B)- Not Feasible
C) (A)- Feasible, (B)- Feasible
D) (A)- Feasible, (B)- Not Feasible

Q2792623 Calculate the potential for the conversion of O_2 to H_2O ?



Score Obtained : -0.25

- A) 1.85 V
B) 1.23 V
C) 1.02 V
D) 2.46 V



Q2791669 Which of the following combination is CORRECTLY explaining spectral series?

Score Obtained : 0.0

- A) Balmer, $n_1=1$ to $n_2=3,4,\dots$; Pascher, $n_1=1$ to $n_2=2,3,4,5,\dots$; Bracket, $n_1=1$ to $n_2=4,5,6,\dots$
B) Balmer, $n_1=1$ to $n_2=3,4,\dots$; Pascher, $n_1=1$ to $n_2=4,5,\dots$; Bracket, $n_1=1$ to $n_2=4,5,6,\dots$
C) Balmer, $n_1=1$ to $n_2=3,4,\dots$; Pascher, $n_1=1$ to $n_2=4,5,\dots$; Bracket, $n_1=1$ to $n_2=5,6,\dots$
D) Balmer, $n_1=1$ to $n_2=2,3,4,\dots$; Pascher, $n_1=1$ to $n_2=3,4,5,\dots$; Bracket, $n_1=1$ to $n_2=4,5,6,\dots$

Q2791666 Which one of the following combinations is CORRECT about quantum theory?

Score Obtained : 1.0

- A) n-major energy level; l-minor energy level; m-shape of subshell; s-direction of spin of electron
B) n-major energy level; l-shape and energy levels of subshell; m-possible number of orientation of subshells; s-direction of spin of electron
C) n-major energy level; l-shape and energy levels of subshell; m-minor energy level; s-direction of spin of electron
D) n-shape of shell; l-possible number of orientation of subshells; m-minor energy level; s-direction of spin of electron

Q2791702 Height of a tower is 10m. A lifting machine use to put bricks of mass 3kg at tower from earth surface. If lifting machine can put 100 bricks in 10s, then what will be the power of lifting machine?

Score Obtained : 0.0

- A) 30000W
B) 100W
C) 300W
D) 3000W

Q2791672 Cathode rays

Score Obtained : 0.0

- A) travel in straight line; fluoresce when they strike glass surface; produce gamma-ray when they strike metal surface, not deflected by electric and magnetic field
B) travel in straight line; fluoresce when they strike glass surface; produce x-ray when they strike metal surface, deflected by electric and magnetic field
C) travel in straight line; fluoresce when they strike glass surface; produce x-ray when they strike metal surface, not deflected by electric and magnetic field
D) travel in straight line; phosphoresce when they strike glass surface; produce gamma-ray when they strike metal surface, deflected by electric and magnetic field

Q2792625 Which of the following represents the feasibility of reactions?

- (A) $\text{Fe}^{3+} + \text{e}^- \rightarrow \text{Fe}^{2+}$, $E^0 = +0.77\text{V}$
(B) $\text{Fe}^{2+} + 2\text{e}^- \rightarrow \text{Fe}$, $E^0 = -0.47\text{V}$

Score Obtained : 0.0

- A) (A)- Feasible, (B)- Feasible
B) (A)- Feasible, (B)- Not Feasible
C) (A)- Not Feasible, (B)- Feasible
D) (A)- Not Feasible, (B)- Not Feasible

Q2793310 Which of the following salient features is common in the classes of Aves and Mammals under kingdom Animalia?

Score Obtained : 1.0

- A) Cold-blooded
B) Homiothermous
C) Two-chambered Heart
D) Poikilothermous

Q2792296 Which of the following country boasts the world's largest capacity for wind energy, totalling just over 288 GW at the end of 2020?

Score Obtained : 0.0

- A) China
 - B) India
 - C) Spain
 - D) Germany
-

Q2791785 Which of the following is NOT a function of lysosomes?

Score Obtained : 1.0

- A) Modification of proteins**
 - B) Autophagy
 - C) Programmed destruction
 - D) Intracellular digestion
-

Q2792361 In a open circulatory system the blood is not enclosed in the blood vessels but it is pumped into a cavity called

Score Obtained : -0.25

- A) veins
 - B) arteries
 - C) ostia
 - D) hemocoel**
-

Q2791797 Which of the following cell organelle is also known as the "director of the cell"?

Score Obtained : 1.0

- A) Lysosomes
 - B) Mitochondria
 - C) Nucleus**
 - D) Plastids
-

Q2793313 Triploblastic invertebrates have been categorized under various phylums. Select the CORRECT match of the phylum and the body pattern of the organisms belonging to this phylum.

Score Obtained : 1.0

- A) Annelids-segmented**
 - B) Annelids-unsegmented
 - C) Cnidarians-segmented
 - D) Cnidarians-motile
-

Q2792356 What is animal physiology?

Score Obtained : 0.0

- A) The study of how animals change the environmental conditions
 - B) The study of the outer appearance of the animal and its influence on the atmosphere to maintain its rapid growing population
 - C) The study of how animal form or structure and function sustain life and shape responses to environmental conditions**
 - D) The study of the genetic variations in animals due to environmental conditions
-

Q2791787 Which of the following cell organelles is surrounded by a double membrane?

Score Obtained : -0.25

- A) Lysosome
- B) Nucleus**

- C) Vacuole
 - D) Peroxisome
-

Q2792320 The topmost part of a marine ecosystem and there is sufficient light for regular photosynthetic activity is the

- A) dysphotic zone
 - B) euphotic zone**
 - C) bathypelagic zone
 - D) aphotic zone
-

Q2792366 The epidermal cells surrounding the guard cells of the stomata are known as

- A) lenticels**
 - B) accessory cells
 - C) pneumatophores
 - D) aerenchyma
-

Q2791811 Which of the following bio-molecules is metabolized in glyoxysomes?

- A) Both Carbohydrates and Proteins**
 - B) Proteins
 - C) Carbohydrates
 - D) Lipids
-

Q2792315 The process by which water vapor in the air is changed into liquid water is

- A) Deposition
 - B) Condensation**
 - C) Evaporation
 - D) Transpiration
-

Q2793311 Which of the following type of plants are regarded as cryptogams and possess vascular system as well as sporophylls?

- A) Angiosperms
 - B) Gymnosperms**
 - C) Bryophyta
 - D) Pteridophytes
-

Q2792298 Where is the Bhabha Atomic Research Center situated?

- A) Mumbai**
 - B) Thane
 - C) Pune
 - D) Nashik
-

Q2792314 GPP of an ecosystem is the rate at which energy is captured during photosynthesis. What does GPP stands for?

- A) Gross Populated Protocol
B) Gross Primary Productivity
C) Gross Pyramid Procedure
D) Growth Period Productivity
-

Q2792300 When 1kg U235 is collapsed the released energy is equivalent to the heat of combustion of coal of

Score Obtained : 0.0

- A) 3 tonnes
B) 30 tonnes
C) 300 tonnes
D) 3000 tonnes
-

Q2792301 Over irrigation is responsible for

Score Obtained : 0.0

- A) land degradation**
B) decrease salinity in the soil
C) water pollution
D) decrease alkalinity in the soil
-

Q2792314 Select the type of the phylum of the soft bodied animals and the rasping organ for feeding in their body respectively.

Score Obtained : 1.0

- A) Annelida, Radula
B) Mollusca, Radula
C) Arthropods, Tube feet
D) Mollusca, Malpighian tubules
-

Q2792324 Biomagnification

Score Obtained : 1.0

- A) refers to an increase in the concentration of toxins at successive trophic levels of the food chain**
B) refers to use microorganisms to degrade organic contaminants in soil, groundwater, sludge, and solids
C) refers to process by which organic substances are decomposed by micro-organisms
D) refers to an increase in the concentration of beneficial substances at successive trophic levels of the food chain
-

Q2792358 Every particle of soil holds some imbibed water in it, this water is hold up in the soil particle with such a great imbibition force that it cannot be separated form it for the use of the plant. This is called

Score Obtained : -0.25

- A) free water
B) capillary water
C) gravitational water
D) hygroscopic water
-

Q2791966 The number of students in three batches are in the ratio 2:5:7. If 30 students joined each batch, the ratio changes to 4:7:9. The total number of students in the three batches before the increase were

Score Obtained : -0.25

- A) 168
B) 210

- C) 280
D) 140

Q2792005 If $x^4 - ax^3 + bx^2 - cx + 7 = 0$ is divided by $x - 1$, it leaves a remainder of 5 and when the same expression is divided by $x + 1$, it leaves a remainder of 4. The value of b is

Score Obtained : 0.0

- A) -3.5**
B) 4.5
C) -4
D) 3

Q2791886 The value of $\sin^2 60^\circ + \cos^2 30^\circ + \cot^2 45^\circ + \sec^2 60^\circ - \operatorname{cosec}^2 30^\circ$ is

Score Obtained : 1.0

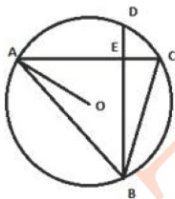
- A) $\frac{3}{4}$
B) $\frac{3}{2}$
C) $\frac{5}{2}$
D) $\frac{1}{2}$

Q2791933 If $2^{(x-y)} = 32$ and $2^{(x+y)} = 128$, then the value of x is

Score Obtained : 1.0

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

Q2791917 In the given figure, chords AC and BD of a circle with centre O, intersect at right angles at E. If $\angle OAB = 35^\circ$, then the measure of $\angle EBC$ is



Score Obtained : 0.0

- A) 15°
B) 35°
C) 25°
D) 40°

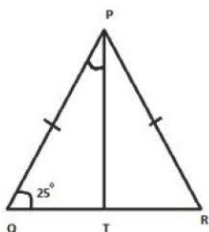
Q2791976 If $[.]$ denotes the greatest integer function, then the domain of the function $f(x) = \frac{1}{\sqrt{[|x|-1]-5}}$ is

Score Obtained : 0.0

- A) $(-6, 6)$
B) $(-7, 7)$
C) $(-\infty, -7] \cup [7, \infty)$

D) $(-\infty, -5] \cup [5, \infty)$

Q2791911 If PQR is an isosceles triangle such that $PQ = PR$, $\angle PQT = 25^\circ$ and PT is the median to base QR, then the measure of $\angle QPT$ is



A) 45°

B) 65°

C) 75°

D) 55°

Q2792006 What is the value of $8x^3 + 27x^2y + 48xy^2 + 27y^3$ when $x = 10$, $y = -6$?

A) 4236

B) 3856

C) 3248

D) 4664

Q2791996 Which of the following is a polynomial?

A) $x^3 - 2x^2 + 4x - 3\sqrt{x} + 5$

B) $x^3 + x\sqrt{x} - 5$

C) $\frac{x^3 + 2x - 1}{3x + 4}$

D) $x^3 + \sqrt{5x} + 3$

Q2791982 Let $f : \mathbb{R} \rightarrow \mathbb{R}$ defined by $f(x) = 3x + |x|$. The value of $f(3x) + f(-x) - f(x)$ is

A) $3x + 3|x|$

B) $3x$

C) $9|x|$

D) $9x + 9|x|$

Q2791894 $(1 + \cot\theta - \operatorname{cosec}\theta)(1 + \tan\theta + \sec\theta) =$

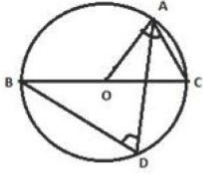
A) 1

B) 3

C) 0

D) 2

Q2791905 In the given figure, O is the centre of the circle, BC is the diameter. If $\angle OAC = 55^\circ$, then the measure of $\angle ADB$ is



Score Obta

- A)** 55°
 B) 45°
 C) 110°
 D) 65°

Q2791938 If $2^{(2+4+6+\dots+2n)} = (0.25)^{-21}$ and $n > 0$, then the value of n is

Score Obta

- A)** 6
 B) 8
 C) 5
 D) 4

Q2791964 The fractional form of the recurring decimal $23.\overline{43}$ is

Score Obta

- A)** $\frac{2320}{99}$
 B) $\frac{14}{55}$
 C) $\frac{252}{99}$
 D) $\frac{47}{9}$

Q2791878 If $12\tan\theta=5$, then $\frac{12 \sin\theta - \cos\theta}{12 \sin\theta + \cos\theta} =$

Score Obta

- A)** $\frac{2}{3}$
 B) 0
 C) $\frac{1}{6}$
 D) $\frac{5}{6}$

Q2791953 ₹ 465 is divided among 3 persons X, Y and Z such that 2 times X's share, 5 times Y's share and 3 times Z's share are all equal. The shares of X, Y and Z respectively are

Score Obta

- A) ₹ 235, ₹ 85, ₹ 145
B) ₹ 225, ₹ 90, ₹ 150
 C) ₹ 250, ₹ 80, ₹ 135
 D) ₹ 246, ₹ 80, ₹ 139

Q2791940 The value of $\log_5(125) + \frac{\log 48 - \log 6}{\log 64}$ is

- A) $\frac{7}{2}$
 B) $\frac{5}{8}$
 C) $\frac{5}{2}$
 D) $\frac{5}{7}$

Q2791893 The angle of elevation of an aeroplane from a point on the ground is 45° . After flying for 15 seconds, the elevation changes to 30° . If the aeroplane is flying at a height of 2500 m, then the speed of the aeroplane is

Score Obtained : 0.0

- A) 524.2 km/h
 B) 486.4 km/h
 C) 439.2 km/h
 D) 535.6 km/h

Q2791945 The value of $\left(\frac{4^{-1} - 64^{-1}}{15}\right)^{\frac{1}{3}}$ is

Score Obtained : 1.0

- A) $\frac{-1}{3}$
 B) $\frac{-1}{4}$
 C) $\frac{1}{3}$
 D) $\frac{1}{4}$

Q2791985 If $U = \{x : x \in \mathbb{N}, x \leq 15\}$; $A = \{x : x \text{ is an even number}, 0 < x < 15\}$; $B = \{2, 3, 5, 7, 9, 11, 13, 15\}$, then the set $(A \cup B)'$ is

Score Obtained : 1.0

- A) $\{1\}$
 B) $\{3, 5, 7, 9, 11, 13, 15\}$
 C) $\{1, 15\}$
 D) $\{\}$

