

# 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

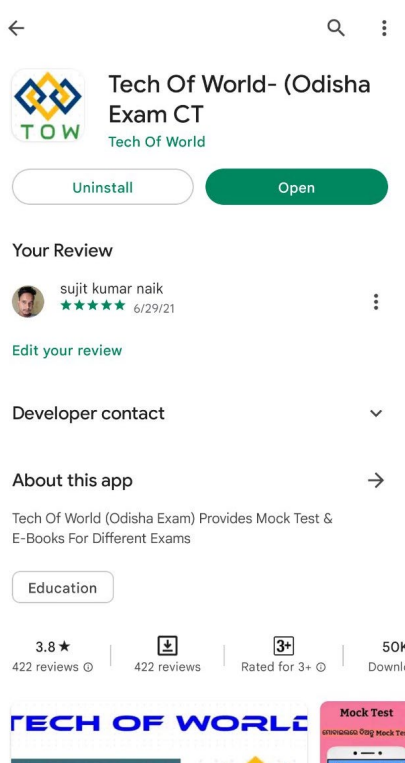


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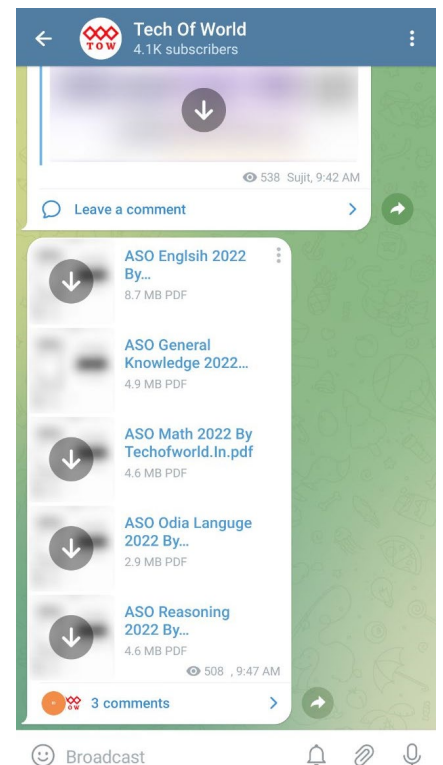
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Section 1 - PaperI-English Language**Passage Questions (1-5)**

Read the passage and answer the questions that follow:

You may ask whether it is possible to keep such an obvious thought from occurring even to a human mind. It is, Wormwood, it is! Handle him properly and it simply won't come into his head. He has not been anything like long enough with the Enemy to have any real humility yet. What he says, even on his knees, about his own sinfulness is all parrot talk. At bottom, he still believes he has run up a very favourable credit-balance in the Enemy's ledger by allowing himself to be converted, and thinks that he is showing great humility and condescension in going to church with these "smug", commonplace neighbours at all. Keep him in that state of mind as long as you can.

1) How should Wormwood not let an obvious thought from coming into 'his head'?

- A) By handling 'him' properly.
- B) By making 'him' feel smug.
- C) By showing 'him' humility.
- D) By believing in 'him'.

2) Whom is the speaker talking to?

- A) The Enemy.
- B) The Client.
- C) Wormwood.
- D) Himself.

3) What is parrot talk of the client according to the speaker?

- A) Running up a favourable credit balance.
- B) Talking about his own sinfulness.
- C) Showing humility.
- D) Being smug about his life.

4) What will be a one-letter word describing the strategy suggested with respect to 'him' by the speaker?

- A) Acceptance.
- B) Bureaucracy
- C) Deception.
- D) Denial.

5) What is the result of being long enough near the Enemy?

- A) Love.
  - B) Pride.
  - C) Humility.
  - D) Peace.
- 

6) Fill in the blank with the correct option:

Donation of a \_\_\_\_\_ is generally not enough to please a beggar so, the rich person \_\_\_\_\_ a basket of fruits.

- A) scent, cent
  - B) sent, cent
  - C) cent, sent
  - D) sent, scent
- 

7) "Till doomsday" means

- A) never
  - B) forever
  - C) at the end
  - D) in the beginning
- 

8) Fill in the blank with correct prefix or suffix:

His name was \_\_\_\_\_ scribed on his trophy.

- A) sub
  - B) ex
  - C) in
  - D) un
- 

9) Which of the following words is correctly spelt?

- A) proverbial
- B) provarbial
- C) proverbial
- D) preverbial

10) Choose the option that best describes the idiom "You can't have your cake and eat it."

- A) You can't win a war or words with your wife.
- B) The baker is not an eater.
- C) You have been enjoying both of two desirable but mutually exclusive alternatives.
- D) You can't enjoy both of two desirable but mutually exclusive alternatives.

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Section 2 - Paper I - Education and General Awareness

11) The gravitational force inside a hollow sphere shell of uniform areal mass density is everywhere equal to

- A) Unity
- B) Infinite
- C) Zero
- D) A negative number

12) Which of the given pairs is/are correct?

- (a) Bharatiya Jana Sangh - Shyama Prasad Mukherjee
- (b) Swatantra Party - Minoo Masani
- (c) Congress Party - Rafi Ahmad Kidwai
- (d) Socialist Party - Ajay Ghosh

- A) a only
- B) a and b only
- C) a, b and c
- D) a, c and d

13) The 'School Choice Campaign' is a program initiated in 2007 by the NGO -

- A) Shikshangan
- B) Pratham
- C) Akshara Foundation
- D) Centre for Civil Society

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14) In 1929, the Hartog Committee was established to review the

- A) education of English language in India
- B) state of girls' education in India
- C) position of education in India
- D) state of education in the rural sector in India

15) The National Teacher Portal that avails teachers high quality resources for literacy and numeracy is named

- A) Dhruv
- B) Dhvani
- C) Dhanam
- D) Diksha

Section 3 - Paper I-Reasoning

16) Choose the conclusion/conclusions that logically follows the given statements, by selecting an appropriate option.

Statements:

- (a) Some pens are parrots
- (b) All the parrots are oranges

Conclusions:

- (I) All the oranges are parrots
  - (II) Some pens are oranges
- A) Only conclusion (I) follows
  - B) Only conclusion (II) follows
  - C) Neither conclusion (I) nor (II) follows
  - D) Both conclusions follow

17) In a certain code language, if the word NATURE is coded as ANUTER, then how will the word RATION be coded in that language?

- A) RNATIO
- B) RATNIO
- C) ARTION
- D) ARITNO

18) In the following questions, mark:

- 1, if statement I alone is sufficient to answer the problem.
- 2, if statement II alone is sufficient to answer the problem.
- 3, if statements I and II both taken together are sufficient to answer the problem.
- 4, if statements I and II taken together are NOT sufficient to answer the problem.

Who is the youngest among A, B, C, D, and E, if each of them are of different age?

- I. B is not the youngest. E is elder than A but younger than B.
- II. D is younger than E. A is elder than C and D.

- A) 1
- B) 2
- C) 3
- D) 4

19) In the following questions, mark:

- 1, if statement I alone is sufficient to answer the problem.
- 2, if statement II alone is sufficient to answer the problem.
- 3, if statements I and II both taken together are sufficient to answer the problem.
- 4, if statements I and II taken together are NOT sufficient to answer the problem.

How many votes did the winner received in an election? (assuming none of the votes were invalid)

- I. There were four candidates. The winner received 5,000 votes more than the one who received the least.
- II. The one who received the least votes received 50% less than the winner.

- A) 1
- B) 2
- C) 3
- D) 4

20) 5 persons A, B, C, D and E are sitting around a circular table facing towards the centre. A is facing south-west and D is facing south-east. B and E are sitting exactly opposite to A and D respectively. C is sitting exactly midway between D and B. In which direction is C facing?

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

Section 4 - Paper I-Teaching Aptitude

- 21) The aims of education which are largely based on values belong to which of the following philosophical field?
- A) Epistemology
  - B) Metaphysics
  - C) Axiology
  - D) Logic
- 
- 22) Who proposed the concept of Zone of Proximal Development?
- A) Albert Bandura
  - B) Van Gogh
  - C) Lev Vygotsky
  - D) Ivan Pavlov
- 
- 23) Navodaya Schools have been established to
- A) increase number of schools in cantonment areas
  - B) provide good education in rural areas
  - C) provide modern and western education
  - D) provide education which is close to nature
- 
- 24) The concept of integral education can be attributed to which of the following thinkers?
- A) Vivekananda
  - B) Gandhiji
  - C) Aurobindo
  - D) Tagore
- 
- 25) Active learning is an approach to instruction that involves actively engaging students with the course material through
- A) Chalkboard instruction
  - B) Exhibits and displays
  - C) Textbook assignments
  - D) Role plays

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26) Which of the following teachers is most likely to support gifted children effectively?

- A) Teacher A prepares her lesson well, she organises group work.
- B) Teacher B organises reciprocal teaching assignments for group work with heterogenous grouping.
- C) Teacher C groups children with higher order abilities into clusters.
- D) Teacher D makes leaders and supports them to lead groups and mentor them while doing their own tasks.

27) A student is trying to solve a problem of Mathematics with great interest and effort. Which of the following is he using?

- A) Involuntary attention
- B) Voluntary action
- C) Voluntary attention
- D) Involuntary action

28) In behaviourism, negative reinforcement means \_\_\_\_\_.

- A) withdrawing the impediment to the correct behaviour
- B) punishing wrong behaviour with dire consequences
- C) rewarding wrong behaviour with extrinsic rewards
- D) intrinsic rewards are withdrawn along with extrinsic rewards

29) What is the only United Nations agency with the mandate in higher education?

- A) WHO
- B) IMO
- C) UNCTAD
- D) UNESCO

30) The type of learning that is intentional and occurs by organising objectives is referred to as \_\_\_\_\_

- A) Informal Learning
- B) Formal Learning
- C) Non formal Learning
- D) Individual Learning

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## Section 5 - PaperII-Physical Science

31) Which among the following will be the energy of a one dimensional box at integral value  $n$  equal to 2 with length  $L$  and mass of the particle is  $m$ ?

- A)  $E = h^2/4mL^2$
- B)  $E = 8mhL$
- C)  $E = 2mhL^2$
- D)  $E = h^2/2mL^2$

32) Which of the following is exothermic process?

- A) Dilution of an acid
- B) Evaporation of water
- C) Dissolution of ammonium chloride in water
- D) Sublimation of camphor

33) The resistance of a copper wire is independent of

- A) Temperature
- B) Length
- C) Material
- D) Shape of cross section

34) The number of images formed by two plane mirrors inclined at  $18^\circ$  is

- A) 20
- B) 18
- C) 19
- D) 21

35) When a net force acts on an object, the object will be accelerated in the direction of the force with an acceleration inversely proportional to

- A) Velocity of the object
- B) Inertia of the object
- C) Force of the object
- D) Mass of the object

36) Which among the following is correct comparison of the energy difference between the given energy levels?

- A)  $E_2 - E_1 > E_5 - E_4$
- B)  $E_2 - E_1 < E_5 - E_4$
- C)  $E_2 - E_1 = E_5 - E_4$
- D)  $E_2 - E_1 < E_4 - E_3$

37) The number of non-bonding molecular orbital electrons in CO is

- A) 2
- B) 6
- C) 4
- D) 8

38) When lime stone is heated it decomposes to give quick lime and carbon dioxide, the chemical equation for this reaction is,

- A)  $\text{CaCO}_3(\text{heat}) \rightarrow \text{CaO}_2 + \text{CO}_2$
- B)  $\text{CaCO}_3(\text{heat}) \rightarrow \text{CaO} + \text{CO}_2$
- C)  $\text{CaCO}_3(\text{heat}) \rightarrow \text{Ca}(\text{CO})_3 + \text{CO}_2$
- D)  $\text{CaCO}_3(\text{heat}) \rightarrow \text{Ca}_2\text{O} + \text{CO}_2$

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39) Why are articles made of iron painted to prevent rust?

- A) Paint makes articles made of iron beautiful
- B) Paint prevents iron articles to come in contact with moisture present in air
- C) Paint makes articles to be dirty
- D) Paint prevents iron articles to getting sticky

40) A proton and an alpha particle enter in a uniform magnetic field with the same velocity. The period of rotation of alpha particle will be

- A) two times that of a proton
- B) four times that of proton
- C) three times that of proton
- D) same as that of a proton



41) A charged particle moves in a gravity free space without change in velocity. Which of the following are possible?

- (i)  $E = 0, B = 0$
- (ii)  $E = 0, B \neq 0$
- (iii)  $E \neq 0, B = 0$
- (iv)  $E \neq 0, B \neq 0$

- A) Only (i) and (iii) are true
- B) Only(ii) and (iv) are true
- C) Only (i), (iii) & (iv) are true
- D) Only (i), (ii) and (iv) are true

42) A submarine is fitted with a SONAR system which operates at an ultrasonic frequency of 42 kHz. An enemy submarine is moving towards the SONAR with a speed of 200 m/s. If the speed of sound in seawater is 1400 m/s, the frequency of sound received back at the SONAR fitted submarine after reflection from the enemy submarine is

- A) 36 kHz
- B) 42 kHz
- C) 48 kHz
- D) 56 kHz

43) A Steel wire of length  $L$  at  $40^\circ\text{C}$  is suspended from the ceiling and then a mass  $m$  is hung from its free end. The wire is cooled down from  $40^\circ\text{C}$  to  $30^\circ\text{C}$  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  $10^{11}\text{ N/m}^2$  and radius of wire is 1 mm. Assume that  $L \gg$  diameter of the wire. Then the value of  $m$  in kg is nearly

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

44) A cricket ball of mass 150 gm is moving with a velocity of 12 m/s and is hit by a bat so that the ball is turned back with a velocity of 20 m/s. The force of blow acts for 0.01 s on the ball. The average force exerted by the bat on the ball is

- A) 480 N
- B) 600 N
- C) 500 N
- D) 400 N

45) A mass of  $m$  kg is subjected to a constant force of  $W$  kg.wt for  $t$  sec whereas initially the body is being at rest. Under the action of force the body moves a distance ' $x$ ' metres (in  $t$  secs) and acquires a velocity of  $V$  m/s. Then  $x$  is

- A)  $V^2/2gWt$
- B)  $gtW/2m$
- C)  $(mV)^2/4gWt$
- D)  $Wg(t^2)/2m$

46) Arrange the observed bond angle in descending order.

- A)  $F_2O > H_2O > Cl_2O$
- B)  $H_2O > F_2O > Cl_2O$
- C)  $Cl_2O > H_2O > F_2O$
- D)  $Cl_2O > F_2O > H_2O$

47) Write the chemical equation for the reaction of barium chloride with aluminium sulphate to give aluminium chloride and precipitate barium sulphate.

- A)  $3BaCl_2 + Al_2(SO_4)_3 \rightarrow 3BaSO_4 + 2AlCl_3$
- B)  $3BaCl_2 + Al(SO_4)_2 \rightarrow 3BaSO_4 + 2AlCl_3$
- C)  $3BaCl + Al_2(SO_4)_3 \rightarrow 3Ba_2SO_4 + 2Al_2Cl_3$
- D)  $3BaCl + Al_2(SO_4)_3 \rightarrow 3Ba_2SO_4 + 2AlCl_3$

48) A metallic sphere of radius  $a$  is surrounded by a concentric thin metallic sheet of radius  $b$ . The space between these two electrodes is filled with a homogeneous poorly conducting material of resistivity  $\rho$ . The resistance between the two electrodes is

- A)  $R = (\rho/4\pi)(1/a + 1/b)$
- B)  $R = (\rho/4\pi)(1/a - 1/b)$
- C)  $R = (\rho/4\pi ab^2)(a + b)$
- D)  $R = (\rho/4\pi)(b/a^2)$

49) Two glass bulbs of equal volume are connected by a narrow tube and are filled with a gas at  $0^\circ C$  and a pressure of 76 cm of mercury. One of the bulbs is then placed in melting ice and the other is placed in a water bath maintained at  $62^\circ C$ . The volume of the connecting tube is negligible. The new value of the pressure inside the bulbs is

- A) 83.75 cm of mercury
- B) 29.75 cm of mercury
- C) 23.75 cm of mercury
- D) 89.75 cm of mercury

50) A cylindrical vessel filled with water upto a height of 2 m stands on a horizontal plane. The side wall of the vessel has a plugged circular hole touching the bottom. The coefficient of friction between the bottom of the vessel and the plane is 0.4 and the total mass of water plus vessel is 100 kg. The minimum diameter of the hole so that the vessel begins to move on the floor if the plug is removed is

- A) 2 cm
- B) 11.3 cm
- C) 5.65 cm
- D) 10 cm

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Section 6 - PaperII-Biological Science

51) Which among the following is the function of leghaemoglobin?

- A) CO<sub>2</sub> Scavenger
- B) O<sub>2</sub> Scavenger
- C) N<sub>2</sub> Scavenger
- D) H<sub>2</sub> Scavenger

52) The respiratory enzymes in bacteria are usually found in

- A) Nucleoid
- B) Plasmid
- C) Mesosomes
- D) Episomes

53) As per Whittaker's System of Classification, prokaryotes are included in which of the following kingdoms?

- A) Protista
- B) Fungi
- C) Monera
- D) Plantae

54) An organism tries to maintain the constancy of its internal environments. This is called

- A) Adaptation
- B) Conformer
- C) Homeostasis
- D) Communities

55) Species which are NOT the natural inhabitants of the local habitat but are introduced into the system, are known as

- A) Native Species
- B) Exotic Species
- C) Local Species
- D) Neither Exotic nor Local Species

56) Nitrosomonas and Nitrobacter come in the category of

- A) Photoautotrophs
- B) Chemoautotroph
- C) Photoheterotroph
- D) Chemoheterotroph

57) Sucrose is converted into glucose and fructose by the help of enzyme

- A) Fructokinase
- B) Mutase
- C) Invertase
- D) Enolase

58) Match the following organelles/components of a cell in List I to their functions in List II.

List I	List II
(a) Mitochondria	(i) Structural support
(b) Cytoskeleton	(ii) ATP production
(c) Endoplasmic reticulum	(iii) Packaging of material and secretion
(d) Golgi bodies	(iv) Drug detoxification

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

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

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

60) A phenomenon known as alternation of generation is observed in life cycle of plants. Which of the following statements CORRECTLY describes this phenomenon?

- A) Haploid phase is sporophyte
- B) Diploid phase is gametophyte
- C) Haploid phase is gametophyte
- D) Haploid and diploid phase both are sporophyte



61) Match the following organisms in List II with their respective kingdoms in List I.

List I	List II
(a) Fungi	(i) Nostoc
(b) Animalia	(ii) Yeast
(c) Protista	(iii) Sponges
(d) Monera	(iv) Dinoflagellates

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

62) The rate of production of organic matter by producer during photosynthesis per unit time and area is called

- A) Gross Primary Productivity  
B) Net Primary Productivity  
C) Secondary Productivity  
D) Net Production Efficiency

63) Which among the following wavelength range belongs to photosynthetic active radiation?

- A) 200-350 nm  
B) 400-700 nm  
C) 750-900 nm  
D) 950-1200 nm

64) Extinction is the process of evolution that leads to the disappearance of a population or species on this Earth. Select the CORRECT reason for the extinction of Dinosaurs millions of years ago.

- A) Asteroid Strike  
B) Climate Change  
C) Loss of habitat  
D) Disease

65) Select two biologically important compounds among the following options that contain both oxygen and nitrogen.

- A) Lipids and Carbohydrates  
B) Proteins and Nucleic acids  
C) Squalene and Carotene  
D) Alum and Baking Soda

66) Mobile electron carrier in electron transport chain in mitochondrial membrane is

- A) Cyt a-a3
- B) Cyt c
- C) Cyt bc1
- D) Complex II

67) Read the following statements with respect to nucleus in a cell.

- (i) DNA replication, transcription as well as translation all these events occur within nucleus.
- (ii) Nucleus is single membranous and controller of all the cellular activities.
- (iii) Nucleus contains nucleolus, chromatin and lamin.
- (iv) During cell division nuclear envelope disappears, at the beginning of mitosis.

Choose the option with all CORRECT statements.

- A) (i) and (iii) are correct
- B) (ii) and (iii) are correct
- C) (i) and (ii) are correct
- D) (iii) and (iv) are correct

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68) Read the following statements:

- a. All the vertebrates are chordates.
- b. All the chordates are not vertebrates.
- c. Non-chordates are characterised by the presence of notochord.
- d. Vertebrates are not metazoans.

Choose the option with all INCORRECT statements:

- A) a and c are incorrect
- B) b and c are incorrect
- C) c and d are incorrect
- D) a and d are incorrect

69) What does the "N" in the N95 mask stand for?

- A) Not Resistant to Dust
  - B) Not Resistant to Fog
  - C) Not resistant to Air
  - D) Not Resistant to Oil
- 

70) Select the CORRECT option among the following.

Assertion (A): Forests on this Earth influence and improve the quality of the natural resources like air, water and soil.

Reason (R): Forests usually holds the soil which helps in the increasing the underground water level.

- A) Both A and R are true and R is the correct explanation of A
- B) Both A and R are true but R is not the correct explanation of A
- C) A is true but R is false
- D) Both A and R are false

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Section 7 - PaperII-Mathematics

71) The length of each edge of a cube is 10 cm. What is the longest distance between any two points on the cube?

- A) 10 cm
- B) 15 cm
- C)  $10\sqrt{2}$  cm
- D)  $10\sqrt{3}$  cm

72) The system of equations  $2x + 3y = 5$ ,  $6x + 9y = a$  has infinitely many solutions if  $a =$

- A) 2
- B) 4
- C) 6
- D) 15

73) For any 2 positive integers  $a$  and  $b$ , L.C.M  $(a,b) = ab$ , if and only if

- A) G.C.D  $(a,b) = 1$
- B) G.C.D  $(a,b) = ab$
- C) G.C.D  $(a,b) = a+b$
- D) G.C.D  $(a,b) = a-b$

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74) If  $N$  is a set of all natural numbers such that:  $f : N \rightarrow N$  and  $f(x) = 2x+1$ , then the function  $f$  is called

- A) one to one
- B) many to one
- C) onto
- D) bijective

75) If  $3^n \times 9^2 = 6561$ , then  $n =$

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



76) What is the angle of elevation of the sun, when the length of shadow of a tree is equal to the height of the tree?

- A)  $30^\circ$
- B)  $45^\circ$
- C)  $60^\circ$
- D)  $90^\circ$

77) What is the area of a regular hexagon of edge length b units?

- A)  $\frac{3\sqrt{3}}{2} b^2$
- B)  $\frac{5\sqrt{3}}{2} b^2$
- C)  $\frac{3\sqrt{2}}{2} b^2$
- D)  $\frac{3\sqrt{3}}{4} b^2$

78) Which of the following is the common root of  $x^3 - 3x^2 + 3x - 1 = 0$  and  $x^4 - 3x^2 + 4x - 2 = 0$ ?

- A) -3
- B) -1
- C) 1
- D) 2

79) If  $a \mid b$  and  $b \mid a$  then

(Note : For any 2 integers X and Y,  $X \mid Y$  implies that X divides Y completely without leaving any remainder.)

- A)  $a=b$
- B)  $a = \pm b$
- C)  $a = b = 0$
- D)  $a = b = 1$

80) In a group of 48 members, 36 like coffee and 24 like tea. If each one of them like atleast one of the two drinks, then what is the number of members who like both the drinks?

- A) 8
- B) 10
- C) 12
- D) 16

81)  $\log 20 + \log 5 + \log 4 + \log 25 =$

- A) 1
- B) 2
- C) 4
- D) 8

82) Simplify the given expression

$$32^{\left(\frac{n}{5}\right)} \times \frac{2^{n+1}}{4^n \times 2}$$

- A) 1
- B) 2
- C) 1/2
- D) 1/4

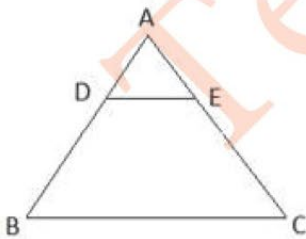
83) If  $\cos A = 1/2$ , then what is the value of  $\tan A$ ?

- A) 0
- B) 1
- C)  $1/\sqrt{3}$
- D)  $\sqrt{3}$

84) If  $\operatorname{cosec} A - \cot A = X$  and  $\operatorname{cosec} A + \cot A = Y$ , then what is the product of X and Y?

- A) -1
- B) 1
- C) 2
- D) 3

85) In the triangle  $\triangle ABC$ , D and E are points on the sides AB and AC such that  $AD : DB = 1 : 2$  and  $AE : EC = 1 : 2$ . What would be the ratio of the area of the triangle  $\triangle ADE$  and quadrilateral DECB?



- A) 1 : 2
- B) 1 : 3
- C) 1 : 8
- D) 1 : 9

86) If the equation  $x^2 + 2(k+1)x + 9k - 5 = 0$  has only negative roots, then

- A)  $k \leq 0$
- B)  $k \geq 0$
- C)  $k \geq 6$
- D)  $k \leq 6$

87) What is the least integer  $n$  such that  $n$  divide  $2^n - 2$  but  $n$  does not divide  $3^n - 2$ ?

- A) 8
- B) 6
- C) 4
- D) 3

88) If  $f(0) = 1$ ,  $f(1) = 1$  and  $f(n) = 2 \times f(n-1) + f(n-2)$  for  $n \geq 2$ , then what is the value of  $f(5) + f(7)$ ?

- A) 420
- B) 357
- C) 280
- D) 84

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89) If  $b = 3a^2$ , then  $2 \log_3 a - \log_3 b =$

- A) -1
- B) 0
- C) 1
- D) 2

90) What is the value of  $\cos 2A / (\sin A + \cos A)$  ?

- A)  $\cos A - \sin A$
- B)  $\cos A + \sin A$
- C)  $\sin A - \cos A$
- D)  $\sin 2A$

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Answer Key:

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1	A	31	D	61	C
2	C	32	A	62	A
3	B	33	D	63	B
4	C	34	C	64	A
5	C	35	D	65	B
6	C	36	A	66	B
7	B	37	C	67	D
8	C	38	B	68	C
9	C	39	B	69	D
10	D	40	A	70	A
11	C	41	D	71	D
12	C	42	D	72	D
13	D	43	A	73	A
14	C	44	A	74	D
15	D	45	D	75	C
16	B	46	C	76	B
17	D	47	A	77	A
18	D	48	B	78	C
19	C	49	A	79	B
20	A	50	B	80	C
21	C	51	B	81	C
22	C	52	C	82	A
23	B	53	C	83	D
24	C	54	C	84	B
25	D	55	B	85	C
26	C	56	B	86	C
27	C	57	C	87	D
28	A	58	D	88	C
29	D	59	C	89	A
30	C	60	C	90	A