

ಕರ್ನಾಟಕ ಶಾಲಾ ಗುಣಮಟ್ಟ ಮೌಲ್ಯಾಂಕನ ಮತ್ತು ಅಂಗೀಕರಣ ಪರಿಷತ್ತು (ರಿ.)

6ನೇ ಅಡ್ಡ ರಸ್ತೆ, ಮಲ್ಲೇಶ್ವರಂ, ಬೆಂಗಳೂರು - 560 003.

ಕಲಿಕಾ ಸಾಧನಾ ಸಮೀಕ್ಷೆ - 2018-19

ಮಾಧ್ಯಮ : ಇಂಗ್ಲೀಷ್

ವಿಷಯ: ವಿಜ್ಞಾನ, ಸಮಾಜ ವಿಜ್ಞಾನ, ಗಣಿತ

ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಸೂಚನೆಗಳು :

ಸಮಯ : 2.30 ಗಂಟೆ

1. ಪ್ರಶ್ನೆಗಳನ್ನು ಮೊದಲು ಓದಿ ಅರ್ಥೈಸಿಕೊಳ್ಳುವುದು.
2. ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯಲ್ಲಿ ಬಲಗಡೆ ನೀಡಿರುವ ಸಂಖ್ಯೆಯನ್ನು ಓ.ಎಂ.ಆರ್. ನಲ್ಲಿ ನಿಗದಿಪಡಿಸಿದ ಸ್ಥಳದಲ್ಲಿ ಕಡ್ಡಾಯವಾಗಿ '✓' ಮಾಡುವುದು.
3. ಪ್ರತಿ ಪ್ರಶ್ನೆಗೆ A. B. C. D. ಎಂಬುದಾಗಿ 4 ಆಯ್ಕೆಯ ಉತ್ತರಗಳನ್ನು ನೀಡಲಾಗಿರುತ್ತದೆ. ಅವುಗಳಲ್ಲಿ ಸರಿಯಾದ ಒಂದು ಉತ್ತರಕ್ಕೆ ಮಾತ್ರ ಓ.ಎಂ.ಆರ್.ನಲ್ಲಿ '✓' ಮಾಡುವುದು.
ಉದಾಹರಣೆ: 2ನೇ ಪ್ರಶ್ನೆಗೆ B. ಸರಿ ಉತ್ತರವಾಗಿದ್ದಲ್ಲಿ ಹೀಗೆ '✓' ಮಾಡುವುದು. 2.

A	B	C	D
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. ಓ.ಎಂ.ಆರ್.ನಲ್ಲಿ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ನಿಗದಿಪಡಿಸಿದ ಸ್ಥಳದಲ್ಲಿ ವಿದ್ಯಾರ್ಥಿಗಳು ಸಹಿ ಮಾಡುವುದು ಹಾಗೂ ಶಿಕ್ಷಕರು ಶಿಕ್ಷಕರಿಗೆ ನಿಗದಿಪಡಿಸಿರುವ ಸ್ಥಳದಲ್ಲಿ ಸಹಿ ಮಾಡುವುದು.

- 1) **The salt responsible for temporary hardness in water is:**
A) Sodium bicarbonate B) Calcium bicarbonate
C) Calcium sulphate D) Calcium chloride
- 2) **The following is correct pair with reference to types of mixtures :**
A) Sugar solution → homogeneous
Salt solution → heterogeneous
B) Sugar solution → heterogeneous
Sand and water → homogeneous
C) Sugar solution → homogeneous
Sand and water → heterogeneous
D) Sugar solution → heterogeneous
Sand and water → heterogeneous
- 3) **A liquid starts changing its state to gas at 203°F at normal pressure. The boiling point of that liquid at normal pressure in Kelvin scale is :**
A) 273 K B) 268 K C) 373 K D) 368 K
- 4) **The satellite having its own atmosphere is :**
A) Moon B) Phobos C) Titan D) Europa
- 5) **The food substance that contains highest quantity of carbohydrate is:**
A) Coconut B) Milk C) Potato D) Groundnut
- 6) **The function of flower's pollen is :**
A) Attracting insects
B) Protecting inner parts of the flower
C) Producing female sex cells since it contains ovary
D) Producing male sex cells called pollen grains
- 7) **The characteristic property of particles of matter is :**
A) The movement of particles increases as the temperature increases
B) The particles of matter move only when temperature is provided
C) The movement of particles increases as the temperature decreases
D) The rate of diffusion decreases as the temperature increases

- 8) **The correct characteristic property of wooden log :**
 A) Definite size, increased diffusion, has definite shape
 B) Definite size, negligible compression, is hard
 C) No definite size, does not diffuse, negligible compression
 D) No definite shape and size, speed of diffusion is high, negligible compression
- 9) **“The doctor suggests to keep a wet cloth on the forehead of the patient suffering from fever”- the scientific justification for this suggestion is :**
 A) To avoid dehydration from the patient’s body having fever
 B) To cool the body by the entry of water from the skin of the forehead
 C) Water in the wet cloth reduces the temperature of the atmosphere
 D) The water in the wet cloth uses the body temperature to evaporate and cools the body

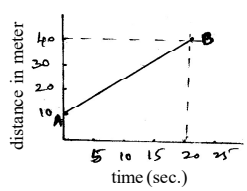
10)



The above ray diagram illustrates the process and type of reaction for change in state of matter, x, y and z can be represented as,

- A) x = Fusion and endothermic
 y = Condensation and exothermic
 z = Sublimation and endothermic
- B) x = Solidification and endothermic
 y = Fusion and exothermic
 z = Condensation and endothermic
- C) x = Fusion and exothermic
 y = Condensation and endothermic
 z = Sublimation and exothermic
- D) x = Fusion and exothermic
 y = Solidification and endothermic
 z = Condensation and exothermic
- 11) **The following is the correct pair with reference to solution and mixture,**
 A) Sugar in water → Solution
 Tincture of Iodine → Suspension
 B) Copper sulphate in water → Solution
 Milk in water → Suspension
 C) Copper sulphate in water → Solution
 Chalk powder in water → Suspension
 D) Sugar in water → Solution
 Copper sulphate in water → Suspension
- 12) **The processes related to physical change are**
 A) Fusion, solidification, condensation, evaporation
 B) Fusion, combustion, condensation, solidification
 C) Fusion, digestion, solidification, evaporation
 D) Fusion, solidification, digestion, condensation
- 13) **A solution of Urea of 120g is obtained by dissolving 16g of Urea in water. The percentage mass of Urea is :**
 A) 1.33% B) 13.33% C) 33.3% D) 133.3%

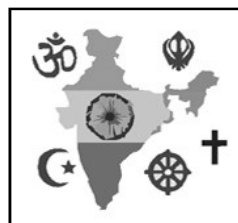
- 14) **Following are the steps involved for separating water and methanol in laboratory**
- Methanol having low boiling point evaporates
 - Taking the mixture in the distillation flask and heating
 - Water remains in the distillation flask
 - Collecting the condensed methanol in the condenser
- The correct sequence is,**
- | | |
|---------------------------|---------------------------|
| A) (iv), (ii), (i), (iii) | B) (ii), (i), (iii), (iv) |
| C) (iii), (i), (iv), (ii) | D) (ii), (i), (iv), (iii) |
- 15) **Following is the true statement related to plant cell**
- | | |
|--|--|
| A) Cell wall is made of cellulose | B) Cell membrane is made of cellulose |
| C) Chloroplast is made up of cellulose | D) A big vacuole is made up of cellulose |
- 16) **The prokaryotic cell among the following is :**
- Human cell containing nucleoid
 - Plant cell containing nucleoid
 - Bacterial cell containing nucleoid
 - Virus cell not containing nucleoid
- 17) **The reason for undergoing “Plasmolysis” of cell is**
- It is kept in hypotonic solution. The cell organelles contracted due to loss of water by osmosis.
 - It is kept in hypertonic solution. The contents of the cells moved away from the cell wall due to loss of water.
 - It is kept in hypertonic solution. The contents of the cells have lost water and have shrunked.
 - It is kept in hypotonic solution. The organelles have lost water and shrunked due to active transport.
- 18) **The correct pair showing the cell organelles and their functions is :**
- Golgi complex - Weakens poisonous substances and toxins of medicines
 - Centromere - Keeps the cell clean by digesting wornout organelles
 - Endoplasmic reticulum - Helps in biological synthesis of cell membrane
 - Lysosome - Helps in synthesis of proteins
- 19) **The characteristic properties of the muscles found in the bronchi of the lungs are :**
- Involuntary, spindle shaped, smooth muscles with a single nucleus
 - Involuntary, cylindrical, striated muscles with many nuclei
 - Involuntary, spindle shaped, smooth muscles with many nuclei
 - Involuntary, spindle shaped, striated muscles with a single nucleus
- 20) **“Phloem is different from Xylem” because,**
- The substances move upwards in phloem
 - Xylem substances flow in both the directions
 - The substances move downwards in phloem
 - The substances move in both the directions in phloem
- 21) **The epithelial tissue enveloping the capillaries are :**
- cylindrical cells helping flow of blood in the capillaries
 - flat cells helping the transportation of substances through the semipermeable membrane
 - flat cells with an arrangement of many layers helping in transportation of blood
 - cuboidal cells helping in transportation of materials

- 22) The properties of the cells in the tissues of the coconut shell is described as :
- Present in shells of seeds, dead, stone cells with thick cell wall due to deposition of lignin
 - Present in seeds and fruits, living, stone cells with thick cell wall due to deposition of pectin
 - Present in shells of seeds, dead, flexible cells with thin cell wall deposition of pectin
 - Present in shells of seeds, dead, flexible cells with cell wall deposition of lignin
- 23) A vehicle 'X' travels from A to B in 10 s. Both speed and velocity are calculated. Which of the following is impossible :
- Speed and velocity are same
 - Speed is greater than velocity
 - Velocity is greater than speed
 - Velocity is lesser than speed
- 24) The velocity of a body from 5th second to 15th second is 2m/s. The acceleration of the body from 10th second to 12th second is :
- 2 m/s²
 - 10 m/s²
 - 20 m/s²
 - 0 m/s²
- 25) In the given graph the distance travelled by a body from A to B is
- 40 meters
 - 30 meters
 - 20 meters
 - 60 meters
- 
- 26) A stone revolved in a circular path takes 10 s to complete one revolution in a circle of radius 7cm. Its velocity in m/s is :
- 44 m/s
 - 4.4 m/s
 - 0.44 m/s
 - 0.044 m/s
- 27) When arranged in the decreasing order of their inertia :
- coin, rubber ball, bicycle, lorry
 - bicycle, lorry, coin, rubber ball
 - rubber ball, coin, lorry, bicycle
 - lorry, bicycle, rubber ball, coin
- 28) Two bodies A and B of masses 15 kg and 20 kg of momentum P_A and P_B are moving with velocities 20 m/s and 15 m/s respectively. The correct conclusion about their momentum is :
- $P_A = P_B$
 - $P_A < P_B$
 - $P_A > P_B$
 - $P_A = P_B = 0$
- 29) The force required to increase the velocity of a body of mass 'm' from 5 m/s to 20 m/s in 't' seconds is :
- $\frac{-15m}{t}$ N
 - $\frac{25m}{t}$ N
 - $\frac{15m}{t}$ N
 - $\frac{-25m}{t}$ N
- 30) A swimmer goes forward during swimming because,
- The swimmer pushes the water side ways by his hands and in return water is circulated.
 - The swimmer pushes the water backwards by his hands and in return water pushes him forward.
 - The swimmer pushes water upwards by his legs and in return water pushes him forward.
 - The swimmer pushes water by his legs and in return upward thrust of water pushes him upwards.

- 31) **This chief feature of Chola's administration is popular even today.**
 A) Self governance of the village B) Federal system of government
 C) Parliamentary form of government D) Self governance of districts
- 32) **One of the functions of local self government**
 A) Providing security to the members of Panchayat
 B) Inviting the people of other states
 C) Conducting conference in the international level
 D) Saving and Protecting the property of Panchayat
- 33) **The special feature of Kailasa temple built by the Rashtrakutas is**
 A) The highest temple of Asia
 B) The first temple built of Marble rock
 C) Monolith Construction
 D) Pink sand stone from Rajasthan is used to build this temple
- 34) **The main reason for the causes of tides**
 A) Latitudes and longitudes B) The gravitational pull of Moon and Sun
 C) Gravitational pull of planets D) Internal movements of the earth
- 35) **The high domestic usage of air conditioning and refrigerator is responsible for**
 A) Depletion of ozone layer B) Destruction of Troposphere
 C) Depletion of Themosphere D) Rarification of Exposphere
- 36) **Nowadays our markets are flooded with foreign made goods because of**
 A) Urbanisation B) Decentralization
 C) Globalization D) Industrialization
- 37) **One of the contributions of Rajputs to the field of architecture is**
 A) Mahabalipuram Pancharatha B) Basadi of Madhukeshwar
 C) Chaityalaya of Karle D) Basadi of Mount Abu
- 38) **If Mohamud Ghazni had not invaded India,**
 A) Rajputs would have remained united
 B) The temple of Somanatha would not have been destroyed
 C) The Kingdom of Delhi would not have been established
 D) The Qutub Minar would not have been constructed
- 39) **Ramanujacharya advocated 'Jeeva' and 'Prakruthi' are under the control of Brahma while Shankaracharya advocated**
 A) Devotion of pure soul is the way to reach God
 B) The divine soul and the human soul have a lord and servant relationship
 C) The world is maya, an illusion; Brahma is the absolute truth
 D) The world is not maya or illusion. It is as true as divine soul
- 40) **The chief feature of the architecture of Vijayanagara is**
 A) The huge auditorium with many pillars
 B) The auditorium with Indo-Sarsenic style
 C) Indo-Greek style of auditorium
 D) A vast dome structure with pillars

41) The given picture advocates this particular fundamental right of the constitution

- A) Cultural and Educational Rights
- B) Right to Religion
- C) Right against exploitation
- D) Right to Equality



42) The meaning of the word 'Secular' in our constitution

- A) The equality of all religions
- B) Discrimination on caste
- C) Out of caste
- D) Sovereign Nation

43) With respect to financial bill, the Lok Sabha is more powerful than Rajya Sabha because

- A) Rajya Sabha does not have power to hold financial bill
- B) Rajya Sabha can hold the bill passed by Lok Sabha only for 14 days
- C) Lok Sabha can hold the bill passed by Rajya Sabha only for 14 days
- D) Lok Sabha has the power of sending the financial bill to the President without sending it to Rajya Sabha

44) The right statement related to the election of the president of India is

- A) Article 54 and 55 states the method of election of the president of India
- B) The president of India is elected by the members of both the houses of Parliament
- C) The only elected members of Delhi and Puducherry elect the president
- D) The Chief Justice of Supreme Court elects the president

45) The power is distributed between the Central and the State Government in India. This indicates

- A) Republic system
- B) Parliamentary form of government
- C) Federal system
- D) Democratic Republic system

46) The child knows it's mother tongue first from

- A) Text book
- B) Friends
- C) Mass Media
- D) Family

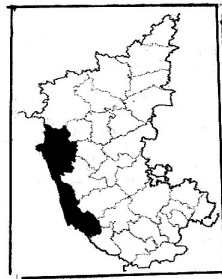
47) The family has been classified on the basis of marriage into

- A) Matriarchal and Patriarchal
- B) Matriarchal and Monogamy
- C) Monogamy and Polygamy
- D) Patriarchal and Polygamy

48) The most important agency of socialization is peer group because

- A) It gives religious base for social life
- B) Children learn many aspects of social behaviour from friends
- C) They contribute more for the economic development of a Nation
- D) They study in same class rooms

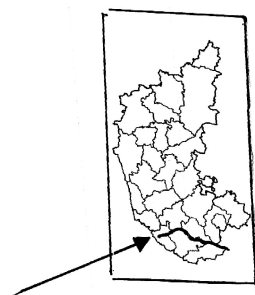
- 49) We should switch off all electric lights when not in use, because
- They are exhaustible energy sources
 - They are non-exhaustible energy sources
 - They can be reused
 - They will increase the atmospheric temperature
- 50) The density of population means
- The average number of people who are living in one kilometer
 - The total number of people living in an area
 - The average number of people who are living in one square kilometer
 - The density of people living in an area
- 51) Every citizen should have good health in a nation, because
- It increases earnings and richness
 - It brings respect from others
 - It leads to property and luxurious life
 - It increases the standard of life and quality of work
- 52) The right statement related to the 'division of work' in the principles of Management is
- It reduces the production
 - It earns less profit
 - It reduces the loss in production
 - It leads to lack of co-operation among the workers
- 53) Staffing is the function concerned with
- the formulation of plans, policies, strategies etc
 - the future course of operation for a given period
 - the recruitment, selection, placement etc
 - the instruction, guidance, supervision etc
- 54) The physical division located in the map of Karnataka is
- The coastal plain
 - Malnad
 - Northern Maidan
 - Southern Maidan



- 55) If Charmadi Ghat connects Mangalore and Chikkamagaluru, Agumbe Ghat connects
- Hassan and Sakaleshpura
 - Shivamogga and Udupi
 - Shivamogga and Kundapura
 - Mangalore and Kundapura

- 56) The trees of evergreen forest grows tall and dense. The reason for this is
- Low rainfall and low temperature
 - High rainfall and low temperature
 - Low temperature and high moisture
 - High rainfall and high temperature
- 57) Black soil is formed by the disintegration by Basalt rock whereas the soil formed by granite and gneiss is
- The Coastal alluvial soil
 - Laterite soil
 - Red soil
 - Mountain soil
- 58) The eastern flowing river located on the map of Karnataka is

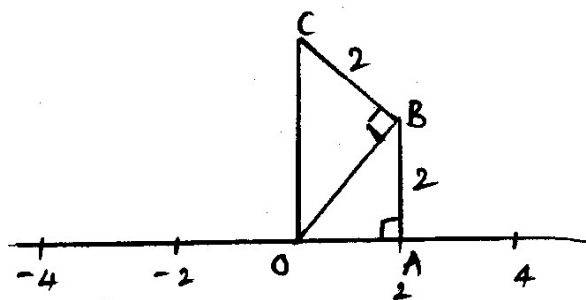
- Krishna
- Pennar
- Palar
- Cauvery



- 59) Karnataka is proud for the successful generation of hydro-electric energy for the first time, because
- We have more coal and petroleum reserves in our state
 - We have more irrigational canals in our state
 - We have more opportunity for the generation of hydel-power in our state
 - We have more hydro electric power generating machinery
- 60) Paddy is the food crop in Karnataka where sugarcane is grown as a
- Beverage crop
 - Commercial crop
 - Plantation crop
 - Fibre crop

- 61) A mathematics book costs Rs. 250, Madhura buys it for Rs.200 after discount, percentage of discount is
 A) 10% B) 25% C) 20% D) 30%
- 62) Value of $(4^{-1})^2$ is
 A) 8 B) -16 C) -8 D) $\frac{1}{16}$
- 63) Which of the following measurements are sufficient to construct a triangle similar to a given triangle?
 A) measure of 3 sides of given triangle B) measure of 2 angles of given triangle
 C) measure of 3 angles of given triangle D) measure of 2 sides of given triangle
- 64) Average weight of 6 people in a house is 25.5 kg, among them sum of the weights of 5 people is 125 kg then the weight of 6th person is
 A) 25.5 kg B) 28 kg C) 30 kg D) 28.5 kg
- 65) In the graph of the equation $y = x - 3$, if $y = -1$, then value of x is
 A) 2 B) -2 C) -1 D) -4
- 66) Sum of 4 interior angles of a quadrilateral is
 A) 2 right angles B) 3 right angles
 C) 4 right angles D) a straight angle
- 67) The irrational part of $(\sqrt{2} + \sqrt{3})^2$ is
 A) $\sqrt{2} + \sqrt{3}$ B) $\sqrt{6}$ C) $\sqrt{2}$ D) $\sqrt{3}$
- 68) Rationalizing factor of the denominator of $\frac{1}{2\sqrt{3}}$ is
 A) $3\sqrt{2}$ B) $\frac{1}{3\sqrt{2}}$ C) $\frac{1}{\sqrt{3}}$ D) $\sqrt{3}$

69)



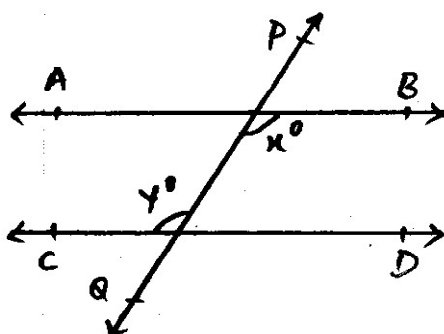
In the figure above, length of OC on the number line is represented as the value of

- A) $\sqrt{12}$ B) $\sqrt{8}$ C) $\sqrt{3}$ D) $\sqrt{2}$
- 70) An irrational number among these is
 A) $\sqrt{4}$ B) $-\sqrt{9}$ C) $\sqrt[3]{8}$ D) $\sqrt{8}$

71) By using equations $\angle AOB + \angle BOC = 180^\circ$ and $\angle BOC + \angle COA = 180^\circ$, if a mathematics teacher writes $\angle AOB + \angle BOC = \angle BOC + \angle COA$, Euclid's axiom used by the teacher here is

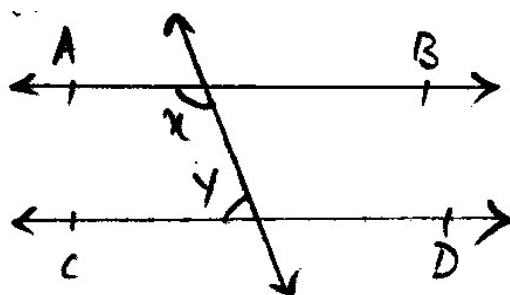
- A) equal items when added to equals, the sum is equal
- B) when equal items are subtracted from equals, left parts are equal
- C) equals are equal to one another
- D) halves of equals are equal

72) In the diagram given, $AB \parallel CD$, PQ is the transversal correct statement with respect to angle x and y is



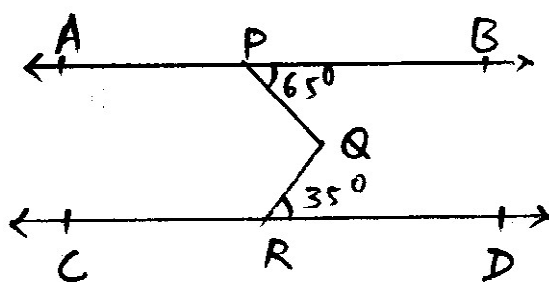
- A) $x = y$
- B) $x < y$
- C) $x > y$
- D) $x + y = 180^\circ$

73) In the diagram, $AB \parallel CD$, then what will be the respective values of x and y



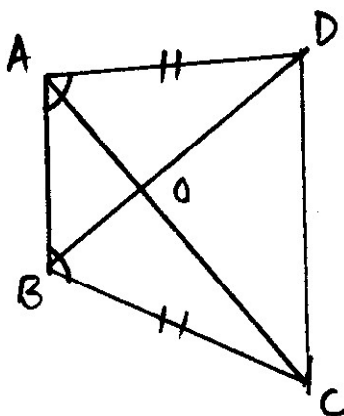
- A) $30^\circ, 60^\circ$
- B) $120^\circ, 60^\circ$
- C) $60^\circ, 120^\circ$
- D) $60^\circ, 30^\circ$

74) In the diagram, $AB \parallel CD$, $\angle BPQ = 65^\circ$, $\angle DRQ = 35^\circ$, the measure of $\angle PQR$ is



- A) 65°
- B) 110°
- C) 100°
- D) 50°

- 75) An example for an algebraic expression having degree 5 is
 A) 3^2x^5 B) $2x^3 + x^2$ C) $2^5x^4 + 3$ D) $5x^3 + x^2$
- 76) If $P(x) = x^2 - 3$ then $P(-1)$ is
 A) -4 B) -1 C) -2 D) 0
- 77) If $P(y) = 2 + y$, then zero of the equation is
 A) 0 B) 2 C) 1 D) -2
- 78) Length and breadth of a rectangle having area $x^2 - 5x + 6$ are respectively
 A) $(x + 3)$ and $(x + 2)$ B) $(x - 3)$ and $(x - 2)$
 C) $(x - 6)$ and $(x - 1)$ D) $(x - 6)$ and $(x + 1)$
- 79) Remainder obtained when $a^3 + 1$ is divided by $a + 1$
 A) 1 B) -1 C) 0 D) 2
- 80) Expansion form of $(x + y + z)^2$ is
 A) $x^2 + y^2 + z^2$
 B) $x^2 + y^2 + z^2 + xy + yz + zx$
 C) $x^2 + y^2 + z^2 + 2xy + 2yz + 2zx$
 D) $x^2 + y^2 + z^2 + 3xyz$
- 81) Cuboid having the base area $(3x) \text{ m}^2$ has the volume $(3x^2 - 12x) \text{ m}^3$, then its height is
 A) $(x - 12) \text{ m}$ B) $(x + 4) \text{ m}$
 C) $(3x - 4) \text{ m}$ D) $(x - 4) \text{ m}$
- 82) In the diagram, $AD = BC$ and $\angle DAB = \angle CBA$, then a pair of similar triangles are



- A) $\triangle ABD$ and $\triangle ABC$ B) $\triangle ABD$ and $\triangle BDC$
 C) $\triangle ABC$ and $\triangle ADC$ D) $\triangle ABO$ and $\triangle DCO$
- 83) Three angles $\angle A$, $\angle B$, $\angle C$ of $\triangle ABC$ are in the ratio $2 : 3 : 4$, then the longest side is
 A) BC B) AB C) CA D) AD

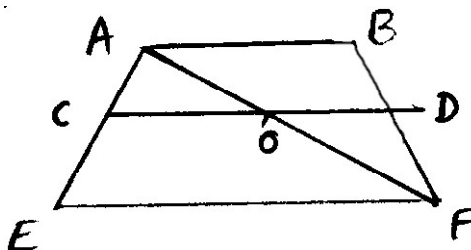
84) Steps of constructing angle $112\frac{1}{2}^\circ$ using compass and scale are given

- A) construction of right angle B) halving a right angle
C) drawing a straight line D) halving 45°

Steps of construction in order

- A) A, B, C, D B) D, C, B, A C) C, A, B, D D) C, D, B, A

85) In the diagram, $AB = 8$ cm, $EF = 10$ cm, C and D are respectively the midpoints of AE and BF, then CD measures



- A) 9.5 cm B) 8.5 cm C) 8.75 cm D) 9 cm

86) The measure of each side of the triangle formed by joining the mid points of sides of an equilateral triangle having the perimeter 24 cm is

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

87) 4 angles of a quadrilateral are in the ratio 3 : 5 : 7 : 9. Big angle measures

- A) 75° B) 105° C) 135° D) 45°

88) Two diagonals are drawn in a rhombus, then they

- A) bisect at right angles B) bisect slantly
C) meet at the end points D) are parallel

89) Quadrilateral having opposite sides parallel and unequal is

- A) kite B) rhombus C) trapezium D) rectangle

90) In which of the following quadrilateral, diagonals are equal

