ಕರ್ನಾಟಕ ಸರ್ಕಾರ
ಸಾರ್ವಜನಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ

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

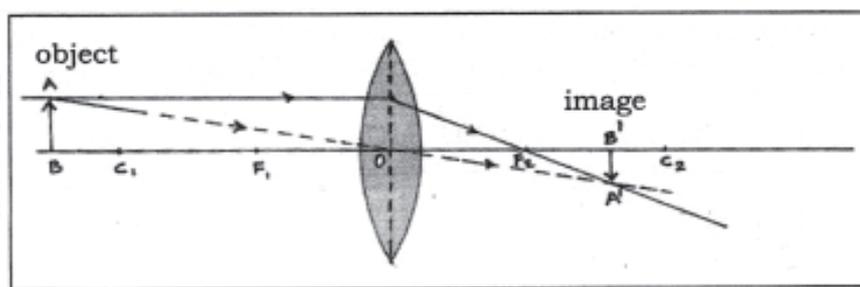ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಸೂಚನೆಗಳು :   ಸಮಯ : 2.30 ಗಂಟೆ

1. ಪ್ರಶ್ನೆಗಳನ್ನು ಮೊದಲು ಓದಿ ಅರ್ಥೈಸಿಕೊಳ್ಳುವುದು.

2. ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯಲ್ಲಿ ಬಲಗಡೆ ನೀಡಿರುವ ಸಂಖ್ಯೆಯನ್ನು ಒ.ಎಂ.ಆರ್.ನಲ್ಲಿ ನಿಗದಿಪಡಿಸಿದ ಸ್ಥಳದಲ್ಲಿ ಕಡ್ಡಾಯವಾಗಿ '✓' ಮಾಡುವುದು.

3. ಪ್ರತಿ ಪ್ರಶ್ನೆಗೆ A. B. C. D. ಎಂಬುದಾಗಿ 4 ಆಯ್ಕೆಯ ಉತ್ತರಗಳನ್ನು ನೀಡಲಾಗಿರುತ್ತದೆ. ಅವುಗಳಲ್ಲಿ ಸರಿಯಾದ ಒಂದು ಉತ್ತರಕ್ಕೆ ಮಾತ್ರ ಒ.ಎಂ.ಆರ್.ನಲ್ಲಿ '✓' ಮಾಡುವುದು.

    ಉದಾಹರಣೆ: 2ನೇ ಪ್ರಶ್ನೆಗೆ B. ಸರಿ ಉತ್ತರವಾಗಿದ್ದಲ್ಲಿ ಹೀಗೆ '✓' ಮಾಡುವುದು.   2. A□ B☑ C□ D□

4. ಒ.ಎಂ.ಆರ್.ನಲ್ಲಿ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ನಿಗದಿಪಡಿಸಿದ ಸ್ಥಳದಲ್ಲಿ ವಿದ್ಯಾರ್ಥಿಗಳು ಸಹಿ ಮಾಡುವುದು ಹಾಗೂ ಶಿಕ್ಷಕರು ಶಿಕ್ಷಕರಿಗೆ ನಿಗದಿಪಡಿಸಿರುವ ಸ್ಥಳದಲ್ಲಿ ಸಹಿ ಮಾಡುವುದು.

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1) **The form of coal that has 50% to 65% of carbon among the following is:**
    A) Anthracite   B) Peat   C) Lignite   D) Bituminous

2) **The heaviest fundamental particle in an atom among the following is:**
    A) Proton   B) Electron   C) Positron   D) Neutron

3) **Related to algae the correct pair among the following is:**
    A) Kingdom Protista-Unicellular algae   B) Kingdom Monera-Unicellular algae
    C) Kingdom Plantae-Blue green algae   D) Kingdom Protista-Blue green algae

4) **The correct option for the disease spread by micro-organisms, its symptoms and preventive measure is:**
    A) Influenza, severe chills and fever, controlling of mosquitoes
    B) Malaria, severe chills and fever, controlling of mosquitoes
    C) Cholera, cough, difficulty in breathing, staying away from infected people
    D) Aspergillosis, vomiting, diarrhoea, avoid eating contaminated food

5) **The impossible statement among the following with respect to any two points X and Y is :**
    A) Displacement is greater than distance travelled
    B) Distance travelled is greater than displacement
    C) Displacement is lesser than distance travelled
    D) Distance travelled is equal to displacement

6) **An example for a chemical change among the following is:**
    A) Evaporation of water   B) Combustion of coal
    C) Breaking of glass   D) Tearing of paper

7) **The pair of physical quantities having the different units of measurement among the following:**
   A) Speed and velocity
   B) Work and energy
   C) Distance and displacement
   D) Velocity and acceleration

8) **The Non-crystalline allotrophic form of carbon among the following is:**
   A) Diamond   B) Fullerene   C) Coke   D) Graphite

9) **The appliance that works with the heating effect of electric current is:**
   A) Electric fuse   B) Laptop   C) Table Fan   D) Washing machine

10) **The odd man out among glass, cowdung, rubber, D.D.T with reference to biodegradation:**
   A) Glass   B) Cowdung   C) Rubber   D) D.D.T

11) **In most of the ecosystems, the pyramid of numbers is upright. The reason for this:**
   A) The number of individuals remain constant as they reach upper trophic levels
   B) The number of individuals increase as they reach upper trophic levels
   C) The number of individuals decrease as they reach upper trophic levels
   D) The number of individuals decrease as we come down the trophic levels.

12) **The correct statement related to lysosomes among the following is:**
   A) Generally in plant cells it contains chemicals
   B) Generally in prokaryotic cells it contains chemicals
   C) Generally in plant cells it produces proteins
   D) Generally in animal cells it contains hydrolytic enzymes.

13) **The correct pair of characteristic feature and levels related to human classification:**
   A) Erect posture, binocular vision - Order Primate
   B) Mammary gland - Phylum Chordata
   C) Heterotroph, movement - Genus Homo
   D) Notochord - Family Hominidae

14) **The correct pair of the nature of the image and its application for the given diagram:**

   A) Real, erected, diminished → Photographic camera
   B) Real, inverted, larger size → Cinema projector
   C) Real, inverted, diminished → Photographic camera
   D) Real, erected, same size → Terrestrial telescope

15) **The type of asexual reproduction in spirogyra is called 'fragmentation' because:**
A) The parent body divides into more than two new cells.
B) The bud is developed from the parent body and gradually breaks.
C) Spores are produced in the parent body
D) The parent body breaks into pieces and each piece develops into complete new organism.

16) **The group representing fungi among the following:**
A) Volvox, Spirogyra, Ulothrix   B) Penicillium, Aspergillus, Rhizopus
C) Spirogyra, Aspergillus, Euglena   D) Ulothrix, Paramecium, Yeast

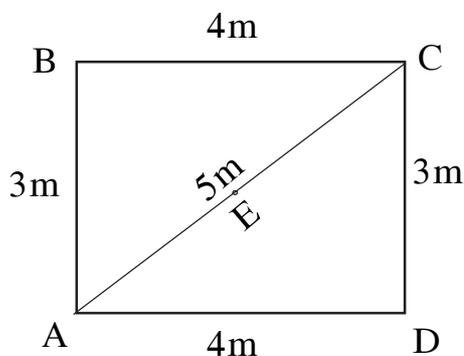**17)** Two persons X and Y start from point A and reach C in the figure below:
Time taken by both X and Y is 10s.
The path taken by X is A to B to C.
The path taken by Y is A to E to C.
Which of the following statements is correct:

A) Speed of X is $\dfrac{5}{10}$ m/s

B) Speed of Y is $\dfrac{7}{10}$ m/s

C) Velocity of X is $\dfrac{5}{10}$ m/s

D) Velocity of Y is $\dfrac{7}{10}$ m/s

18) **The momentum of two bodies of mass m_1 and m_2 moving with velocities V_1 and V_2 respectively is same. Then the appropriate condition is :**
A) If $m_1 < m_2$ then $V_1 > V_2$ B) If $m_1 > m_2$ then $V_1 > V_2$
C) If $m_1 < m_2$ then $V_1 < V_2$ D) If $m_1 > m_2$ then $V_2 < V_1$

19) **The correct option indicating the formula used to find out the number of electrons in the M shell and the maximum number of electrons is:**
A) $2n^2$ and 32   B) $2n^2$ and 18   C) $2n^3$ and 18   D) $2n$ and 8

20) The atomic number of oxygen is 8.
The distribution of electrons in various shells can be represented as :
A) K = 2, L = 2, M = 4   B) K = 4, L = 4
C) K = 2, L = 6   D) K = 2, L = 4, M = 2

21) **The molecular mass of ordinary water is 18μ. The molecular mass of heavy water is:**
A) 20, because it contains more number of oxygen atoms than ordinary water
B) 20, because it contains more number of hydrogen atoms than ordinary water
C) 18, because heavy water and ordinary water are the same
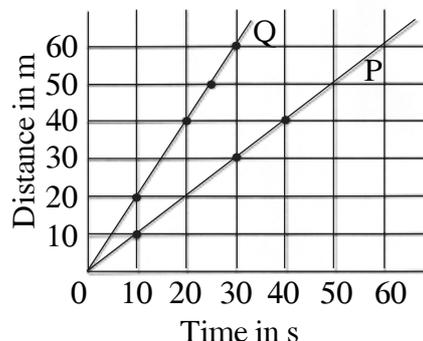D) 20, because heavy water is formed from Deuterium.

22) **The percentage composition of each element in sulphur dioxide (SO_2) is:**
  A) S = 50% and O = 50%   B) S = 75% and O = 25%
  C) S = 65% and O = 35%   D) S = 60% and O = 40%

23) The distance - Time graph of two bodies are shown.
  The speed of P and Q respectively is :
  A) 10m/s and 20m/s
  B) 1m/s and 2m/s
  C) 2m/s and 1m/s
  D) 20m/s and 10m/s

24) **The velocity 'V' of a body of mass 'm' is doubled in one second. The expression indicating the force needed to double its velocity is :**
  A) F = 2mV   B) F = 2V   C) F = mV   D) F = mu

25) **In a row boat, to move the boat forward, the water has to be pushed**
  A) side ways   B) backward   C) downward   D) in a circular motion

26) The potential energy of a freely falling body from a height of 4m is 80J.
  If the acceleration due to gravity is $10ms^{-2}$, the mass of the object is :
  A) 2kg   B) 20kg   C) 80kg   D) 320kg

27) **In Rutherford's experiment, most of the alpha particles passed through the gold foil without deflection. The conclusion drawn from this observation is:**
  A) the nucleus consists of negative charge
  B) the nuclear size is very small compared to atomic size
  C) the number of electrons is lesser than the number of neutrons in the nucleus
  D) most of the atomic size is occupied by the nucleus

28) $_{17}Cl^{35}$ and $_{17}Cl^{37}$ **are called isotopes because:**
  A) The number of protons is same, the number of neutrons is different
  B) The number of protons is equal to the number of electrons
  C) The number of protons is equal to the number of neutrons
  D) Atomic mass is same, atomic number is different

29) **In the chemical reaction Zinc displaces hydrogen from hydrochloric acid, if the reactants are Zinc + hydrochloric acid, then the products are :**
  A) Zinc hydride + Hydrogen   B) Zinc hydride + Chlorine
  C) Zinc chloride + Zinc   D) Zinc chloride + Hydrogen

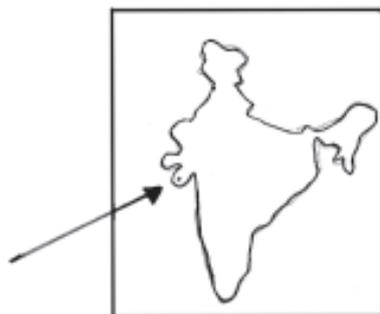**30)** **Dried raisins put in water slowly swell up. This process can be explained like this:**
  A) Due to diffusion, the water molecules have entered dried raisins through semipermeable membrane
  B) Due to active transport, the dried raisins have lost minerals through the semipermeable membrane
  C) Due to Osmosis, the water molecules have entered the dried raisins through semipermeable membrane
  D) Due to diffusion, the water molecules enter dried raisins as the semipermeable membrane dissolves in water

31) **The archaeological source which is associated with the victory of Ranakumbh of chittorgarh**

A) Inscription   B) Coins   C) Monuments   D) Relics

32) **Name the important place related to Harappan civilization in the given map.**

A) Lothal   B) Burjhom   C) Kalibangan   D) Mohenjodaro

33) **One of the important town planning feature of Harappan civilization which even continues till date**

A) Cement Roads   B) Bridges
C) Underground drainage system   D) Parks

34) **The Varna which was added during the Rigveda period became very prominent during the post Rigveda period**

A) Brahmana   B) Shudra
C) Kshatriya   D) Vaishya

35) **If Hammurabi became famous by his laws, Cleopatra of Egyptian civilization became famous for this reason.**

A) She tried to protect the nation of her best
B) She founded the Egyptian empire
C) She gave administration to the people
D) Egyptians were afraid of her beauty

36) **Porcelain and the great wall of China are the contribution of the Chinese civilization, similarly the contribution of Egyptian civilization are**

A) Hieroglyphics and Pyramid   B) Pyramid and Ziggurat
C) Cuneiform and Pyramid   D) Hieroglyphics and Cuneiform

37) **The present vision correctional eye operation was practised even during the period of the following civilizations.**

A) Chinese   B) Egyptians   C) Romans   D) Greeks

38) The incident which is called 'Dharma Chakra Pravarthana' in the life of Gouthama Buddha is
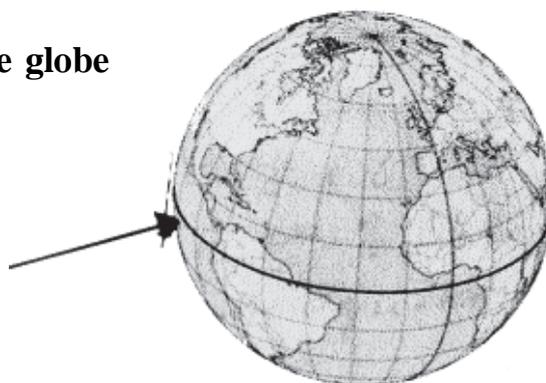
A) He left his home   B) He delivered his first sermon
C) He was crowned as a king   D) He attained Nirvana

39) If four Noble Truths and eight fold paths are the teachings of Gauthama Buddha, the teachings of Vardhamana Mahaveera are

A) Dharma Chakra Pravartana and Mahaparinirvana
B) Good habits and Good life
C) Good speech and Pancharatnas
D) Five vows and three principles

40) Identify the Latitude as marked on the globe

A) Tropic of cancer
B) Equator
C) Tropic of capricon
D) South pole

41) The cricket match will be played at Greenwich near London (England) at 4 PM. The live match can be seen in India at

A) 5:30 PM   B) 4:00 AM   C) 8:30 PM   D) 9:30 PM

42) If a person travells from North America to Asia and crosses the International Date Lines he will

A) Loose a day   B) Loose a day twice
C) Loose two days   D) Loose two days once

43) Igneous rocks are formed by

A) The work of water, air and snow
B) The Spring of Lava from the interior of the Earth
C) Due to rain, Snow and Storm
D) The weathering of rocks in the interior of the Earth

44) The Graphite which is found in your pencil is the formation from this rock

A) Coal   B) Basalt   C) Lime stone   D) Sand stone

45) Mount Fujiyama, which is worshipped by Japanees is an example of

A) Kakratova volcano   B) Dead volcano
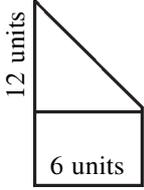C) Active volcano   D) Dormant volcano

46) **No family in Karnataka can have any number of acres of land as per their wish, because**
A) High amount of land tax is fixed
B) Fixation of maximum land limit
C) The government has taken the land into it's possession
D) Difficult to maintain the land

47) **The purpose of Kamaladevi Chattopadyaya meeting Gandhi is**
A) To obtain the permission for women to take part in Salt Sathyagraha
B) To open schools for women education
C) For financial aid to start women self help group
D) For the movement to prevent exploitation of women

48) **The dispute between Karnataka and Maharashtra is reported often in the mass media for the following reason**
A) Political dispute
B) Illegal migration of people
C) Illegal mining
D) Border dispute

49) **The armed force which fought along with army with a slogan 'duty unto death' is**
A) Indian Air Force
B) Indian naval force
C) Indian land army
D) Border security force

50) **The amendment which can be made with simple majority is**
A) Fundamental rights
B) Directive principles of state policy
C) The qualification of Indian citizenship
D) The election of president of India

51) **Though the agricultural land is less in Australia, Sheep rearing is a predominating occupation, the reason is**
A) Irie Lake   B) River Darling   C) Artesian Wells   D) River Marrey

52) **The branch of Social Science that deals in establishing peaceful, progressive and welfare state**
A) Anthropology B) Political Science C) Geography D) Business Studies

53) **One of the work of Loka Seva Ayag of Karnataka is to**
A) Conduct interview of the directly appointed candidates
B) Conduct examination to the government workers for five times
C) Advise the President of India in discipline and promotion
D) Conduct examination for 'A' and 'B' group of services.

54) **Social Studies has become Social Science but not Physical Science because**
A) It studies different aspects of animal world
B) It studies the wealth of man earned in his daily life
C) It involves men in different dimensions of experiment
D) It studies social life of human society

55) **The food habits of North Karnataka is different from South Karnataka. This shows**
A) Natural co-existence   B) Learning of food
C) Diversity of culture   D) Continuity of food

56) **The tablos exhibited in the parade during Republic day shows**
A) Cultural diversity   B) Political diversity
C) Colourful pictures   D) Wealth of nature

57) **Your friend purchases a book in a shop for the purpose of his studies. This economic activity is called**
A) Production   B) Consumption   C) Exchange   D) Distribution

58) **The study of subject which clarifies whether a company should produce mobile phones or sim cards**
A) The study of Geography   B) The study of law
C) The study of sociology   D) The study of Economics

59) **MSIL is a government undertaken enterprise. This economic system is**
A) Mixed economic system   B) Capitalistic economic system
C) Socialistic economic system   D) Coalition economic system

60) **The picture given here shows a stage of developing business**
A) Animal husbandry stage

B) Agricultural stage

C) Handicraft stage

D) Hunting & fishing stage

61) Percentage form of $\frac{3}{5}$ is

    A) 75%   B) 60%   C) 35%   D) 53%

62) Equivalent to $5^{3 \times 2}$

    A) $5^3 \times 5^2$ B) $5^3 + 5^2$ C) $5^3 \div 5^2$ D) $(5^3)^2$

63) By the process of halving which of the following angle, we get the angle 11.25°?

    A) 24.5°   B) 42.5°   C) 90°   D) 120°

64) When swathi throws a dice once, the probability of getting 0 is in the event of occurrence of

    A) square of 3   B) a prime number

    C) an even number   D) an odd number

65) There is a triangular shaped garden adjoining a square shaped school ground. On a bagless day boys have cleaned school ground and girls have cleaned school garden. Which among these is correct?

    A) Boys group had cleaned more area

    B) Girls group had cleaned more area

    C) Both groups had cleaned equal area

    D) Boys group had cleaned twice the area than that of girls

66) Out of 18m length of a ribbon, kavya cuts two pieces of length 'x' m and gives one each to Jan and Adi. Now kavya has 12m of Ribbon. Then the value of x is

    A) 6m   B) 3m   C) 2m   D) 1m

67) In this magic square, the number to be written in place of 'x' is

    A) 9

    B) 1

    C) 3

    D) 6

6	11	4
5	7	x
10	3	8

68) Test of divisibility to check whether a given number is completely divisible by '6' without leaving any remainder among the following is

    (a) Given number should contain even number in Units place

    (b) Sum of digits of the given number should be the multiple of 3

    (c) Sum of digits of the given number should be the multiple of 6

    (d) Given number should contain odd number in Units place

    A) (a) only   B) (b) only

    C) (a) and (b) only   D) (a) and (d) only

69) **Least number to be filled in the blank space of 9–8082, so that it is divisible by 11 without leaving any remainder is**

A) 3   B) 2   C) 0   D) 1

70) **Value of $2^3 + \sqrt{25} - 3^2$ is**

A) 4   B) 5   C) 24   D) 2

71) **Value of $\sqrt{121 \times 64}$ is**

A) 84   B) 88   C) 82   D) 86

72) **Which among the following is correct about the factors of a cube number**

A) repeats twice   B) repeats five times

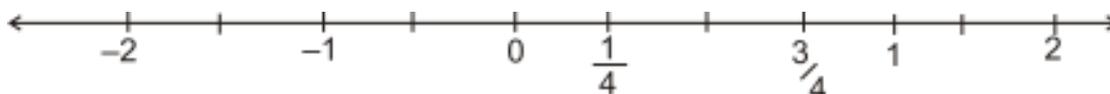C) repeats thrice   D) repeats four times

73) **Shama writes $\frac{1}{3} + \left(\frac{1}{4} + \frac{1}{5}\right)$ as $\frac{1}{3} + \left(\frac{1}{5} + \frac{1}{4}\right)$. Which property of rational numbers does it represent?**

A) Closure property   B) Distributive property

C) Associative property   D) Commutative property

74) **Numbers of the form p/q are rational numbers. Correct statement about p and q is**

A) p is an integer, q = 0

B) p and q are integers, but p = 0

C) p & q are integers and q > 0

D) p and q are natural numbers only

75) **How many rational numbers can be recognized between $\frac{1}{4}$ and $\frac{3}{4}$ in the given number line?**

A) Only one   B) Infinite   C) Only two   D) None

76) **Area of the rectangle whose length 'l' is increased by 1 unit and breadth 'b' is increased by 2 units**

A) $lb + 2l + b + 2$ B) $l^2 + b^2 + 2bl$

C) $l^2 + b^2 - 2bl$ D) $lb - 2l + b - 2$

77) In the given multiplication table, algebraic terms to be filled in place of **M** and **N** are

A) – 6p, – 6p

B) 6p, 6p

C) – 6p, 6p

D) 6p, – 6p

X	3p	–3p
2	6p	–6p
–2	M	N

78) The heighest degree of the algebraic expression $2x^3 + 3x^5 + 2x + 5$ is

A) 3   B) 5   C) 1   D) 9

79) Factors of trinomial $3x^2 + 5x + 2$ are

A) $(3x + 1)$ and $(x + 2)$ B) $(3x + 2)$ and $(x + 1)$

C) $(3x – 2)$ and $(x – 1)$ D) $(3x – 2)$ and $(x + 1)$

80) Values which match with p and q in the table are respectively

p + q	pq	p	q
–2	–15	?	?

A) 5, 3   B) –5, –3   C) 5, –3   D) –5, 3

81) One of the factor of $m^3 + 2m^2 + 5mn + 10n – 3m – 6$ is $(m + 2)$, then another factor is

A) $m^2 – 5n – 3$ B) $m^2 – 5n + 3$ C) $m^2 + 5n – 3$ D) $m^2 + 5n + 3$

82) Age of kishore's father is three times that of kishore. Sum of their ages after 10 years is 60. Equation form of this statement is

A) $(3x + 10) + (x + 10) = 60$ B) $3x + x = 60$

C) $3x + 10 = 60$ D) $(3x + x) + 10 = 60$

83) The side of an equilateral triangle shaped park is $(x + 5)$ units. Then its perimeter is
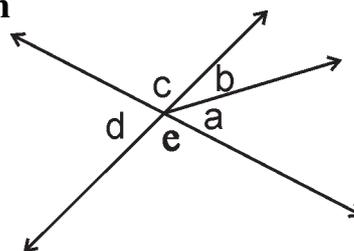
A) $(x + 15)$ units   B) $(3x + 15)$ units

C) $(3x + 5)$ units   D) $(x^2 + 10x + 25)$ units

84) When 3 times of a number is added to 5, it yields 41. Then that number is
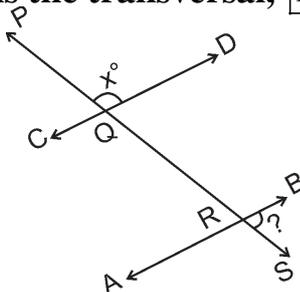
A) 33   B) 16   C) 15   D) 12

85) Pair of adjacent angles in the given diagram

A) c and a

B) c and e

C) c and b

D) a and d

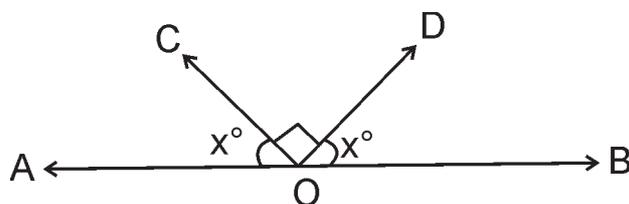**86)** In the diagram, AB∥CD, PS is the transversal, $\lfloor PQD = x°$, then $\lfloor BRS$ measures

A) $x°$

B) $(180 - x)°$

C) $2x°$

D) $(90 - x)°$

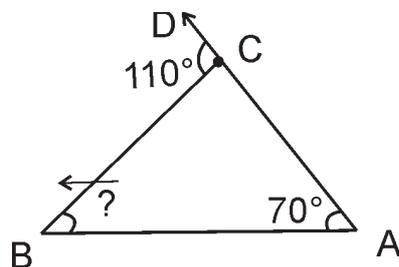**87)** Maximum number of straight lines passing through both the points A and B

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

88) In the diagram, value of x is

A) 180°   B) 90°   C) 30°   D) 45°

89) In the diagram, $\lfloor BCD = 110°, \lfloor BAC = 70°$, then $\lfloor ABC$ measures

A) 35°   B) 55°   C) 30°   D) 40°

90) In ΔABC, $\overline{AB} = \overline{AC}$ and $\lfloor A = 80°$ then $\lfloor C$ measures

A) 50°

B) 60°

C) 70°

D) 80°