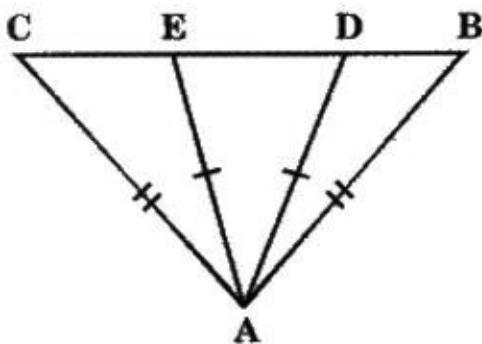


National Level Science Talent Search Examination - 2013

Class : VII

Mathematics

- 1 The product of 3 integers is odd. What can their sum be?
(A) Odd (B) Even (C) Positive (D) Negative
- 2 In the given figure, $AB = AC$ and $AD = AE$.



Which of the following statements is not true?

- (A) $\angle CAE = \angle DAB$ (B) $\triangle ACE \cong \triangle ABD$
(C) $\triangle AEC \cong \triangle ABD$ (D) $BE = DC$

- 3 The S.I. on a sum of money is $\frac{1}{9}$ th of the principal and the number of years is equal to the rate percent per annum. Find the rate percent.

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

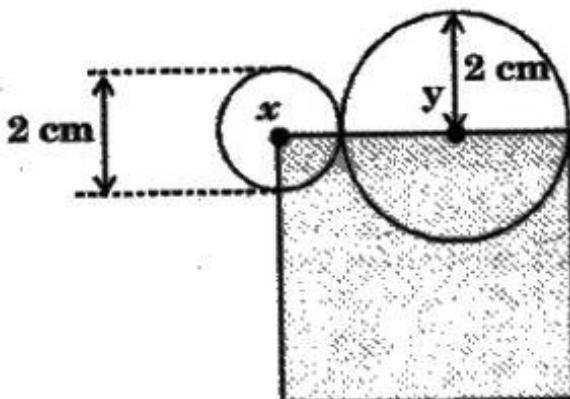
- 4 Identify the sum of the given sequence.

$$1 - 2 + 3 - 4 + \dots + 2009 - 2010 + 2011 - 2012$$

- (A) -2000 (B) -1 (C) +1000 (D) -1006

5

x and **y** are centres of the 2 circles as shown in the figure. What is the area of the shaded square?



- (A) 5 cm^2 (B) 9 cm^2 (C) 16 cm^2 (D) 25 cm^2

6

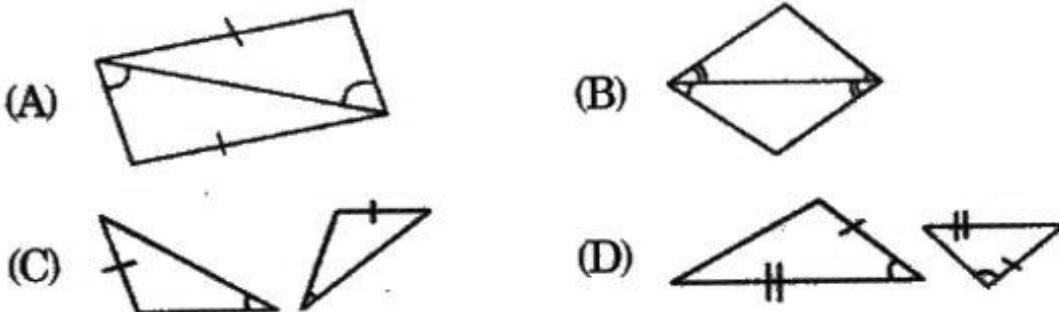
Identify the value of **x** in the given equation.

$$\frac{x-4}{3} - \frac{2x+1}{6} = \frac{5x+1}{2}$$

- (A) $\frac{3}{5}$ (B) $\frac{4}{5}$ (C) $\frac{5}{6}$ (D) $\frac{-4}{5}$

7

Identify the pair of triangles that are congruent.



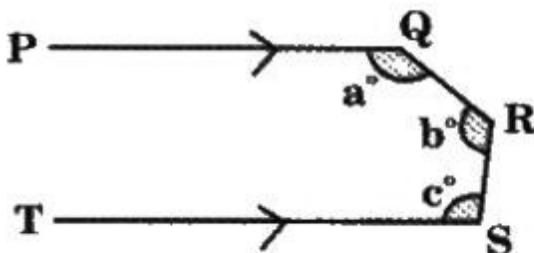
8

What is the percentage of the least number in the greatest number among $\frac{3}{5}, \frac{9}{5}, \frac{1}{5}$ and $\frac{7}{5}$?

- (A) $11\frac{1}{9}\%$ (B) $9\frac{2}{3}\%$
 (C) 10% (D) 25%

9

In the given figure, PQ and TS are parallel. Identify the value of $a^\circ + b^\circ + c^\circ$.



- (A) 270° (B) 225° (C) 360° (D) 180°

10

Which of the following pairs represents the same rational number?

- | | |
|--|---|
| (A) $\frac{-7}{21}$ and $\frac{1}{3}$ | (B) $\frac{1}{3}$ and $\frac{-1}{9}$ |
| (C) $\frac{-5}{-9}$ and $\frac{5}{-9}$ | (D) $\frac{8}{-5}$ and $\frac{-24}{15}$ |

11

Jack and Jill went up the hill to fetch a pail of water. Having filled the pail to the full, Jack fell down, spilling $\frac{2}{3}$ of the water, before Jill caught the pail. She then tumbled down the hill, spilling $\frac{1}{5}$ of the remainder.

What fraction of the water fills the pail?

- (A) $\frac{4}{15}$ (B) $\frac{1}{3}$ (C) $\frac{11}{15}$ (D) $\frac{1}{15}$

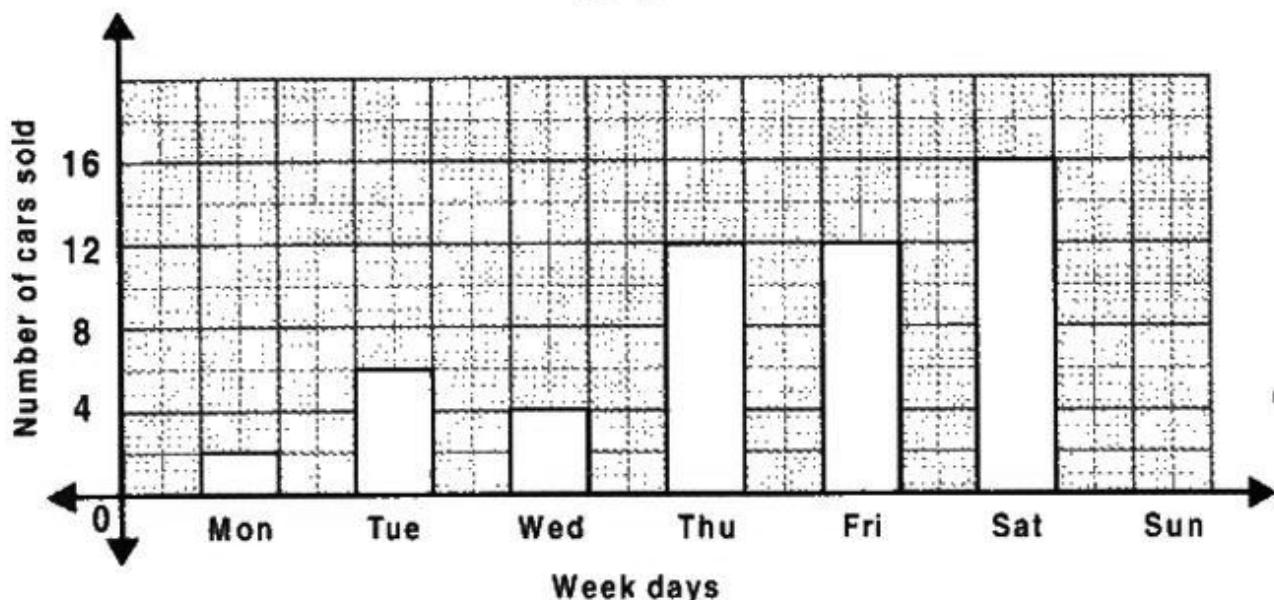
12

If 24 - carat gold is 100% pure gold, then what percentage of pure gold is in 22 - carat gold?

- | | |
|-----------------------|-----------------------|
| (A) $61\frac{2}{3}\%$ | (B) $71\frac{2}{3}\%$ |
| (C) $81\frac{2}{3}\%$ | (D) $91\frac{2}{3}\%$ |

13

The following bar graph shows the number of cars sold by a group of salesmen in one week. Study it and answer the following question.

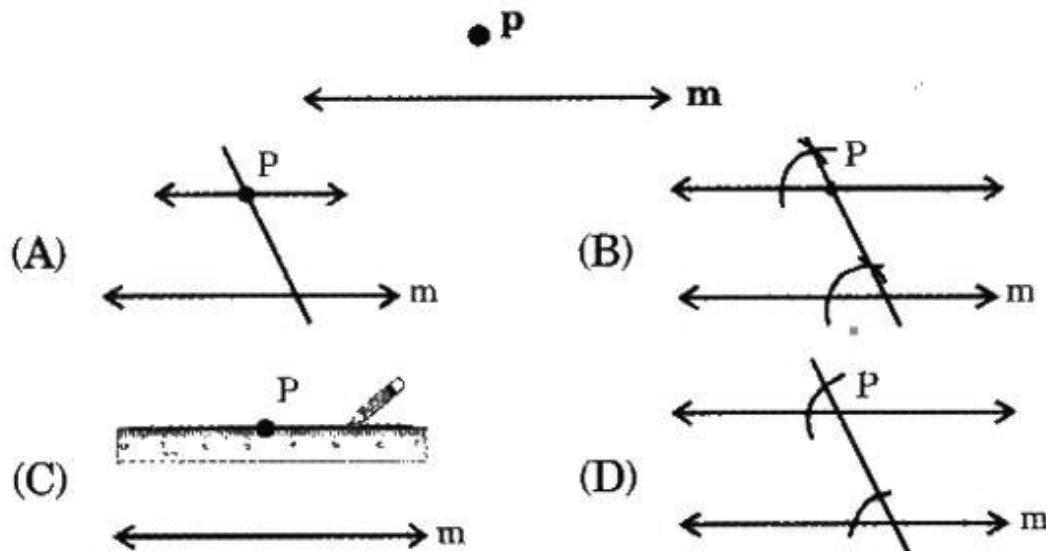


What was the average number of cars sold each day to the nearest whole number?

- (A) 7 (B) 8 (C) 9 (D) 10

14

Point P is given on line 'm'. Identify the correct construction of a line parallel to 'm' through P.



15

After a deduction of 5% from a certain sum and then 10% from the remainder, a sum of ₹ 171 is left. What was the original sum?

- (A) ₹ 200 (B) ₹ 250 (C) ₹ 150 (D) ₹ 300

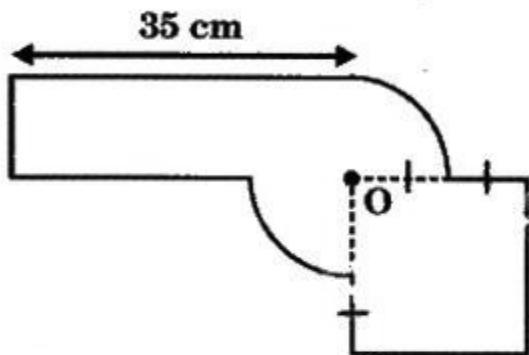
16

Three consecutive even numbers are such that the difference between six times the smallest number and four times the largest number is equal to the middle number. What is the middle number?

- (A) 18 (B) 16 (C) 20 (D) 22

17

In the figure given, O is the centre of the circle which has a diameter of 14 cm. Find the perimeter of the figure.



- (A) 98 cm (B) 125 cm (C) 134 cm (D) 148 cm

18

Pankaj has 96 marbles and Arun has 63 marbles. How many marbles should Arun give to Pankaj so that Pankaj will have twice as many marbles as Arun?

- (A) 9 (B) 12 (C) 7 (D) 10

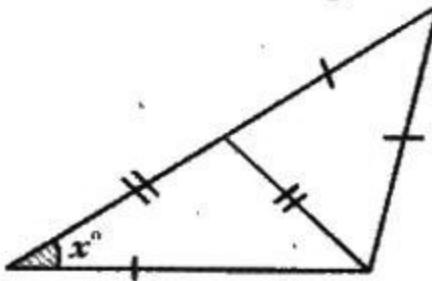
19

The Indian cricket team played 60 games and won 30% of the games played. After a phenomenal winning streak, this team raised its average to 50%. How many games did the team win in a row to attain this average?

- (A) 36 (B) 24 (C) 48 (D) 12

20

Find the measure of the angle marked x° .



- (A) 13° (B) 15° (C) 36° (D) 40°

21

Identify the rational number between $\frac{3}{4}$ and $\frac{9}{11}$.

- (A) $\frac{1}{2}$ (B) $\frac{13}{11}$ (C) $\frac{69}{88}$ (D) $\frac{1}{4}$

22

A teacher has a list of marks as given in the box.

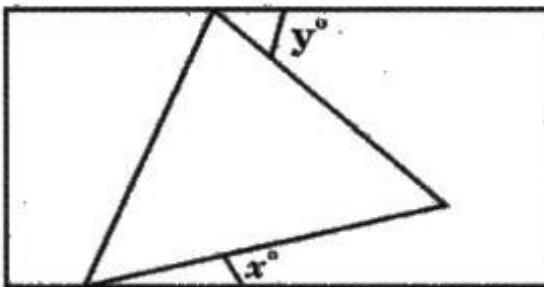
17, 13, 5, 10, 14, 9, 12, 16

Which two marks can be removed without changing the mean?

- (A) 12 and 17 (B) 5 and 17 (C) 10 and 12 (D) 10 and 14

23

The diagram shows an equilateral triangle inside a rectangle. What is the value of $x^\circ + y^\circ$?



- (A) 45° (B) 90°
 (C) 60° (D) 75°

24

Which one of the following represents the largest area?

- (A) $\frac{1}{4}$ of a circle of radius 3 cm.
 (B) A square of side 2 cm.
 (C) A rectangle of dimensions 3 cm by 1 cm.
 (D) A triangle of base 3 cm and vertical height 4 cm.

25

Which of the following are the angles of a right angled triangle?

- (A) $35^\circ, 65^\circ, 90^\circ$ (B) $90^\circ, 5^\circ, 65^\circ$
 (C) $40^\circ, 60^\circ, 90^\circ$ (D) $55^\circ, 35^\circ, 90^\circ$

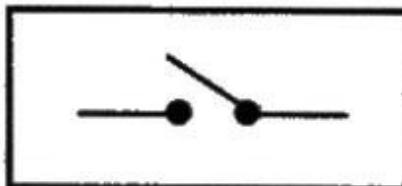


Q26 Which of the following has the fastest speed?

- (A) Cheetah (B) Rabbit (C) Falcon (D) Squirrel



Q27 Observe the given symbol.



Which of the components is represented by it?

- (A) A switch in the 'ON' position
(B) A switch in the 'OFF' position
(C) A fuse
(D) A battery



Q28 When soap bubbles are blown into the air, they appear colourful. What is this phenomenon due to?

- (A) Refraction of light (B) Dispersion of light
(C) Reflection of light (D) Both (A) and (C)



Q29 'X' is a safety device which prevents the damages to electrical circuits and possible fires. Identify 'X'

- (A) An electromagnet (B) A fuse
(C) An electric cell (D) A tube light



Q30 When you heat water in a pot, it boils. What can you infer from this activity?

- (A) Water attained a temperature greater than 100 °C
(B) Heat is transferred from the flame to the pot by radiation
(C) Water generated heat on its own
(D) Water boiled by itself



Q31 Which characteristic(s) of digital thermometers makes it preferable for use over clinical thermometers?

- (A) Ease of reading values
(B) Absence of toxic substance like mercury
(C) Use of electrical energy for their operation
(D) Both (A) and (B)

32

Identify the instrument fixed in the vehicle that is used to measure the distance moved by it at different times of the journey?

- (A) Odometer
- (B) Thermometer
- (C) Speedometer
- (D) Galvanometer

33

What happens when a concave lens is placed between a candle flame and a screen?

- (A) A real image is formed on the screen.
- (B) A virtual image is formed on the screen.
- (C) A diminished image is formed on the screen.
- (D) No image is formed on the screen.

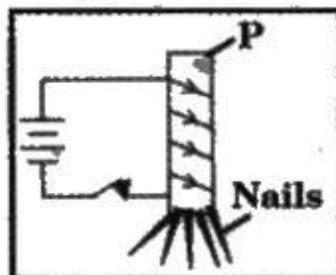
34

Which of the following is NOT true?

- (A) Heat radiations are transmitted in straight lines.
- (B) Heat from the sun reaches us directly by radiation.
- (C) The transfer of heat by radiation requires a medium.
- (D) The heat reaching us from a room heater is due to radiation.

35

Study the given figure.



A coil is wound around a core 'P'. When the switch is closed, nails are attracted to P as shown in the figure. On opening the switch, all the nails get detached. Which material could 'P' be?

- (A) Steel
- (B) Plastic
- (C) Soft iron
- (D) Both (A) and (B)

36

In a long distance race, the athletes were expected to take two rounds on a circular track. An athlete completed one round of this track of diameter 300 m in 60 s. If the athlete takes the same time for both the rounds, what is his speed in the race?

- (A) 15.7 m s^{-1}
- (B) 7.85 m s^{-1}
- (C) 31.4 m s^{-1}
- (D) 13.8 m s^{-1}

37

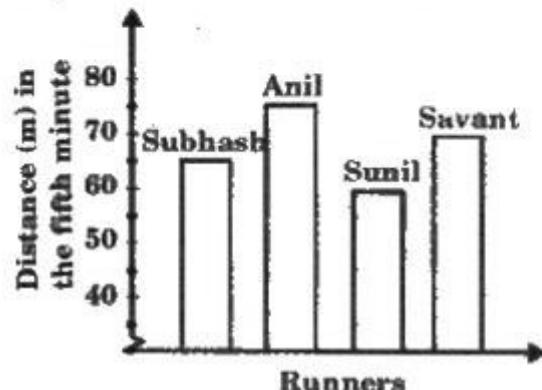
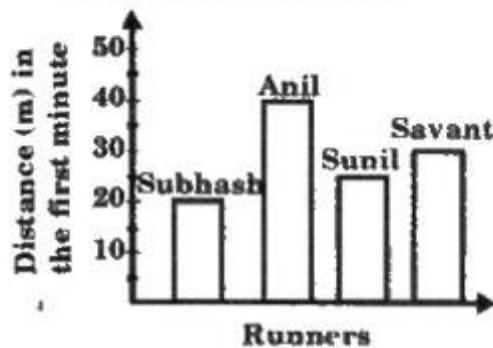
In which of the following applications is an electromagnet used?



- (A) Only (i) and (ii) (B) Only (ii) and (iii)
 (C) Only (i) and (iii) (D) (i), (ii) and (iii)

38

Study the given graphs showing the positions of four runners, Subhash, Anil, Sunil and Savant at two different times.



Who ran the fastest in between the first and the fifth minutes?

- (A) Subhash (B) Anil (C) Sunil (D) Savant

39

Read the given information.

- (i) Acts as reflector in head lights of cars, scooters, buses etc.
- (ii) Used for shaving
- (iii) Used by dentists and E.N.T. doctors

The use of which mirror is discussed?

- (A) Plane mirror (B) Concave mirror
 (C) Convex mirror (D) Both (A) and (C)

40

Which of the following is one billionth of a second?

- (A) Second (B) Milli second
 (C) Micro second (D) Nano second

41

How can an electromagnet be made stronger?

- (A) By winding the coil around a steel core
- (B) By decreasing the number of turns of wire on the coil
- (C) By using a battery in the circuit
- (D) By increasing the strength of current passing through the circuit

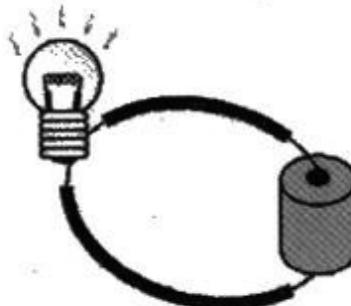
42

Which of the following reflecting surfaces gives a wider field of vision?

- | | |
|--------------------|-----------------------------------|
| (A) Plane mirror | (B) Highly polished metal surface |
| (C) Concave mirror | (D) Convex mirror |

43

Identify the energy changes that take place when a bulb is made to glow with the help of a cell.



- (A) Electrical → Light
- (B) Electrical → Heat → Light
- (C) Chemical → Electrical → Heat → Light
- (D) Chemical → Electrical → Light → Heat

44

What precautions must be taken while using a clinical thermometer?

- (i) Avoid keeping the thermometer in the mouth of infants
 - (ii) Avoid keeping the thermometer in boiling water
 - (iii) Avoid keeping the thermometer near a flame

- (A) Only (i) and (ii)
- (B) Only (ii) and (iii)
- (C) Only (i) and (iii)
- (D) (i), (ii) and (iii)

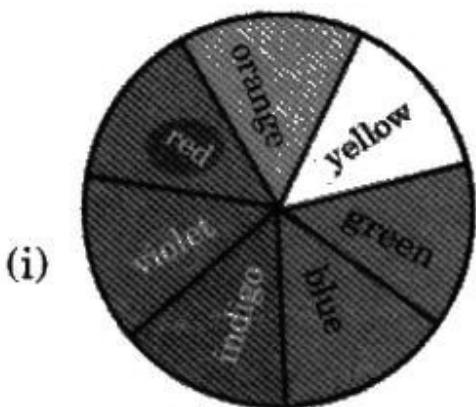
45

Identify the element that starts glowing when heated upto a very high temperature in an electric bulb.

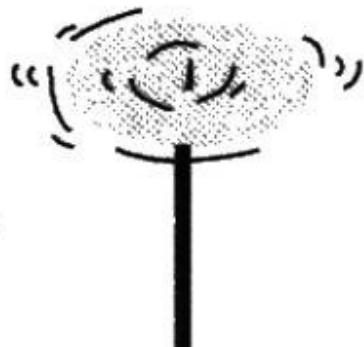
- (A) Tungsten
- (B) Copper
- (C) Aluminium
- (D) Silver

46

Look at the given figures of discs.



(i)



(ii)

Identify the colour and the name of the disc that is formed when seven coloured disc is rotated by using a pencil at its centre?

- (A) Black, compact disc
- (B) White, Newton's disc
- (C) Multicolour, brass disc
- (D) Orange, copper disc

47

A laboratory thermometer is placed in a liquid and a rise in the level of mercury thread is observed and found to be steady at a certain level. But the level of mercury decreased on taking it out of the liquid. What can be inferred?

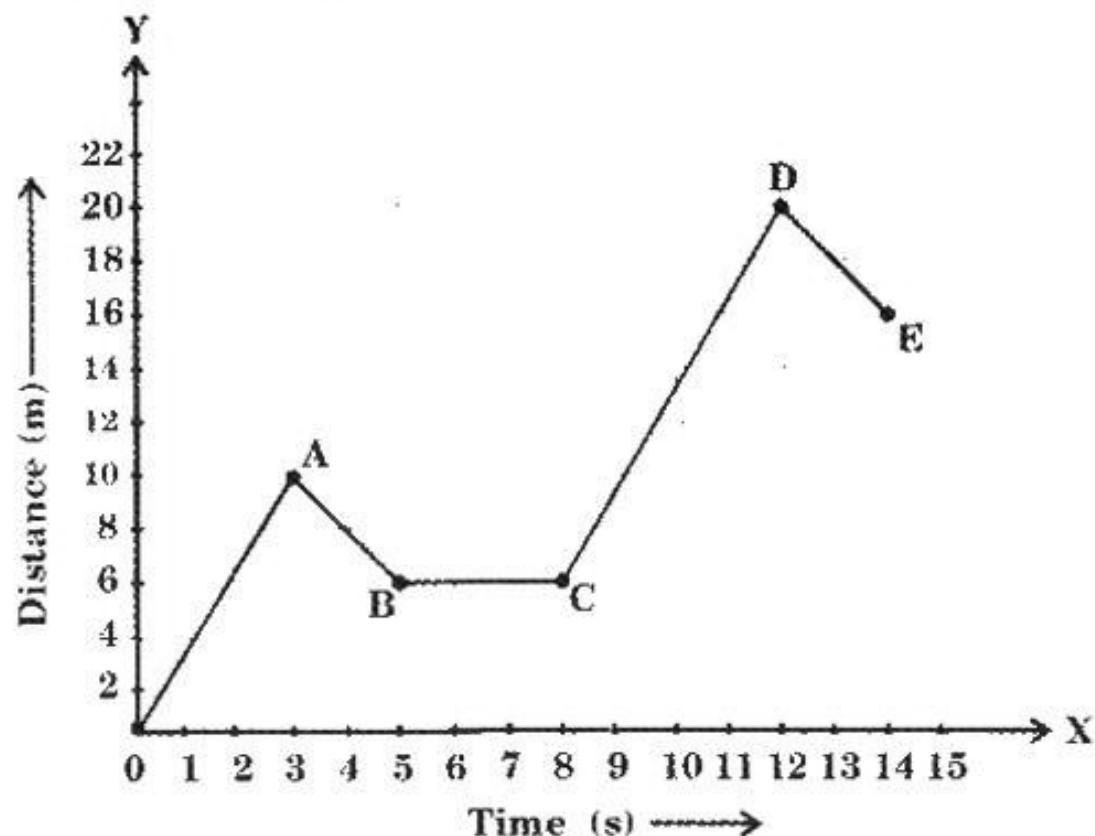
- (i) The liquid is at a higher temperature than the surrounding temperature
- (ii) Heat is gained by the mercury on placing it in the liquid
- (iii) Matter expands on heating

- (A) Only (i) and (ii)
- (C) Only (i) and (iii)

- (B) Only (ii) and (iii)
- (D) (i), (ii) and (iii)

48

From the distance-time graph, find the speed of a body as it moves from C to D.



- (A) 2.5 m s^{-1} (B) 3.5 m s^{-1} (C) 4.5 m s^{-1} (D) 5.5 m s^{-1}

49

A stop-watch used to track various sports events shows time upto

- (A) $1/10^{\text{th}}$ of a second (B) $1/100^{\text{th}}$ of a second
(C) $1/1000^{\text{th}}$ of a second (D) $1/10000^{\text{th}}$ of a second

50

Which of the given factors are necessary for making elements in electric room heaters to produce heat?

- (A) Length and thickness of the wire
(B) Material of the wire
(C) Amount and duration of current passing through it
(D) All of the above

51

In which of the following acids, is glass soluble?

- (A) Hydrochloric (B) Nitric (C) Sulphuric (D) Hydrofluoric

52

Which of the following is/are the precautions to be taken during a storm?

- (A) Do not take shelter under a tree.
 (B) Do not lie down on the floor or ground.
 (C) Close all the doors and windows in the house.
 (D) All of the above

53

Observe the given figures.



A few drops of phenolphthalein are added to each of the solutions. What change in colour is observed in the basic solution?

- (A) Pink (B) Red (C) Blue (D) Remains colourless

54

Adding salt to water makes it salty. Which of the following is true regarding this change?

- (A) It is a chemical change because a new substance is formed.
 (B) It is a reversible change because the original substances can be recovered.
 (C) It is a chemical change because heat is liberated.
 (D) It is a chemical change because there is a change in taste.

55

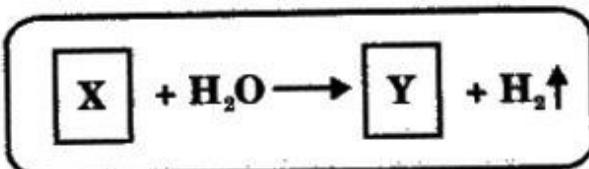
While drinking soft drink with the help of a straw, the change in which of the following enables it to enter into the straw?



- (A) Wall pressure of the bottle
 (B) Atmospheric pressure outside the bottle
 (C) Liquid pressure inside the bottle
 (D) Air pressure inside the straw

56

Study the given chemical reaction in the box.



When china rose indicator is added to Y, it changed to green. Identify X and Y.

X	Y
(A) NaOH	NaCl
(B) KCl	KNO ₃
(C) NaOH	HNO ₃
(D) Na	NaOH

57

Which of the following statements is false about groundwater?

- (A) It is not generally pure and potable.
- (B) It is used in agriculture.
- (C) It has many salts dissolved in it.
- (D) It is constant at all places.

58

Which of the following statements is true?

- (A) The air in the regions of 0° – 30° latitude belt rises up.
- (B) The air in the regions of 60° latitude is cool.
- (C) Winds blow from the ocean towards the land.
- (D) Winter winds blow from the land towards the oceans.

59

An ant bit Anita on her hand. It became red and swollen. The solution containing which of the following compounds can be applied on her skin to give her relief?

- (A) Zinc carbonate
- (B) Sodium hydroxide
- (C) Potassium hydroxide
- (D) Sodium chloride

60

Which of the following equations is an example of a neutralisation reaction?

- (A) Mg + 2HCl → Mg Cl₂ + H₂
- (B) Na₂O + CO₂ → Na₂CO₃
- (C) Na + 2H₂O → 2NaOH + H₂
- (D) HCl + NaOH → NaCl + H₂O

61

Warm air is heavier than cold air. State whether this statement is true or false and give reasons.

- (A) True, because warm air contains more heat.
- (B) True, because molecules are closer in warm air.
- (C) False, because warm air expands and becomes lighter.
- (D) Both (A) and (B)

62

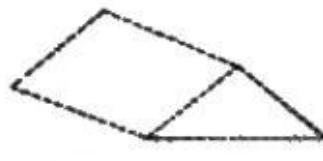
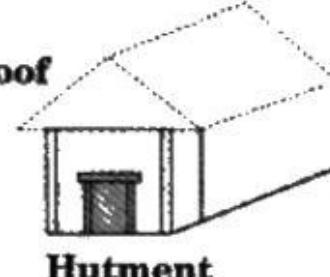
Manisha took a sample of soil from her garden and mixed it with water. When she dipped a blue litmus paper in the mixture, it turned red. By adding which of the following to the soil in her garden will she get a better plant growth?

- (A) Hydrochloric acid (B) Slaked lime
- (C) Water (D) Salt

63

Look at the given figures.

Blowing wind :



Roof Blown off

Why do the roofs of hutments blow away whenever there are strong winds?

- (A) Constant air pressure above the roof and inside the hut.
- (B) High air pressure above the roof and low air pressure inside the hut.
- (C) Low air pressure above the roof and high air pressure inside the hut.
- (D) Both (A) and (B)

64

Which of the following compounds is present in an antacid?

- (A) Calcium hydroxide (B) Sodium hydroxide
- (C) Magnesium hydroxide (D) Barium hydroxide

65

Which of the following statements is/are correct?

- (i) A chemical change is permanent
- (ii) Energy changes occur during a chemical change
- (iii) Heat energy is evolved or absorbed during a physical change

- (A) Only (i) and (ii)
- (B) Only (ii) and (iii)
- (C) Only (i) and (iii)
- (D) (i), (ii) and (iii)

66

What happens during a cyclone?

- (A) Heat is absorbed from the atmosphere.
- (B) Warm air rises up and causes a drop in the pressure.
- (C) Cool air, being heavier, settles down with increased pressure.
- (D) Low-speed winds revolve around the high pressure system.

67

Which of the following correctly defines an aquifer?

- (A) Water percolates into the soil and remains there as moisture.
- (B) Clouds bring fresh water as rain to the land.
- (C) The groundwater is stored between layers of hard rock below the water table.
- (D) Rain water is used to recharge ground water.

68

An iron nail was put in a dilute solution of blue vitriol.

What change took place?

- (A) The solution changed from bright blue to greenish black.
- (B) The solution changed from bright blue to bright yellow.
- (C) The colour of the nails changed to blue.
- (D) The colour of the nails changed to green.

69

Which of the following is NOT true?

- (A) During a cyclone, sea water enters low-lying coastal areas.
- (B) Cyclones reduce the fertility of the soil.
- (C) Cyclones damage the telephone and other communication systems.
- (D) Hurricanes travel with a speed of about 60 km per hour.

70

The depletion of water table is NOT caused due to which of the following?

- (A) Over population
- (B) Industrialisation
- (C) Deforestation
- (D) Global warming

71

Given are the various steps involved in the process of nutrition in animals.

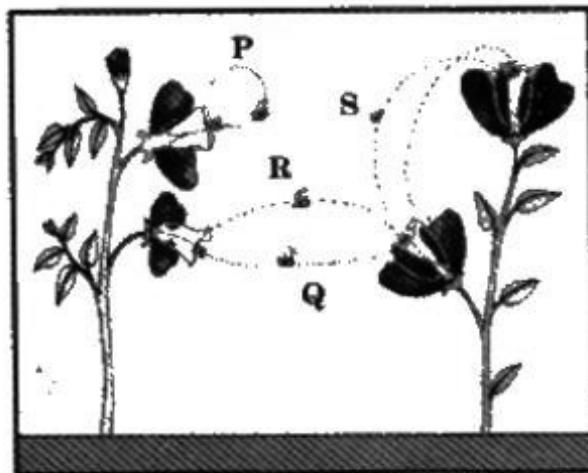
- (i) Assimilation
- (ii) Ingestion
- (iii) Absorption
- (iv) Digestion
- (v) Egestion

Which of the following sequences represents the correct order of steps?

- (A) (iii), (ii), (iv), (i), (v) (B) (iii), (i), (iv), (v), (ii)
 (C) (ii), (iv), (iii), (i), (v) (D) (iii), (iv), (ii), (v), (i)

72

The given figure shows transfer of pollen grains from a mature anther to the stigma.



Which of the following labelled arrows represents cross pollination?

- (A) P and Q only (B) P and S only
 (C) P and R only (D) R and Q only

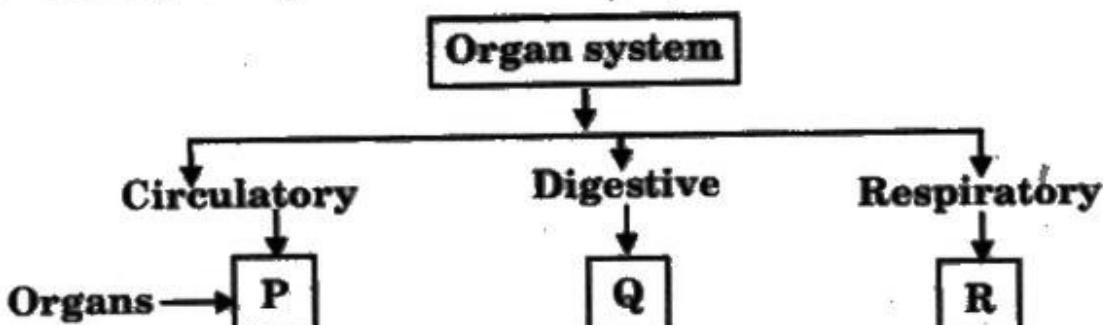
73

What is formed when microbes act on sugar?

- (A) Starch (B) Dentine
 (C) Enamel (D) Acids

74

Study the given classification.

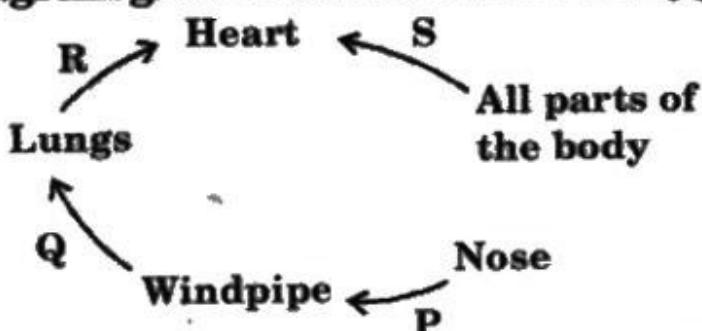


Which of the following correctly represents the main organs P, Q and R, of the given systems?

	P	Q	R
(A)	Kidneys	Liver	Heart
(B)	Liver	Stomach	Kidneys
(C)	Heart	Stomach	Lungs
(D)	Lungs	Kidneys	Stomach

75

The diagram given shows the flow of oxygen in our body.

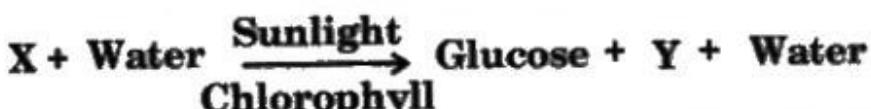


Which of the labelled arrows is drawn INCORRECTLY?

- (A) P (B) Q (C) R (D) S

76

The equation given in the box represents the process of photosynthesis.



Which of the following represents X and Y in the given equation?

- (A) X - Oxygen, Y - Carbon dioxide
 (B) X - Carbon dioxide, Y - Oxygen
 (C) X - Carbon, Y - Hydrogen
 (D) X - Oxygen, Y - Hydrogen

77

Why do earthworms come out of water logged soil during heavy rains?

- (A) To feed on insects. (B) To keep its skin moist.
 (C) To breathe in air. (D) To swim in the water.

78

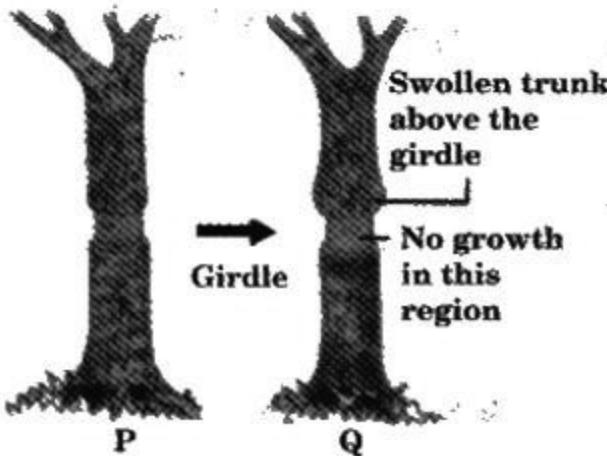
What is the similarity of the plants given in the box?

Nepenthes, Sundew, Utricularia

- (A) Root parasites (B) Saprophytes
 (C) Insectivores (D) Stem parasites

79

The given figure shows girdling experiment in plants.



The removal of which of these tissues causes swelling above the girdle?

- (A) Phloem tissue (B) Cork (C) Xylem tissue (D) Bark

80

Match the following terms in Column-I with those in Column-II.

	Column - I		Column - II
i.	Symbiotic relationship	p.	Viscum
ii.	Parasitic plant	q.	Cow
iii.	Ruminants	r.	Lichens
iv.	Saprophyte	s.	Mould

- (A) i - s, ii - r, iii - q, iv - p (B) i - r, ii - p, iii - q, iv - s
 (C) i - p, ii - q, iii - r, iv - s (D) i - s, ii - p, iii - r, iv - q

81

The information in the given box describes the process of fertilisation, but not in correct sequence.

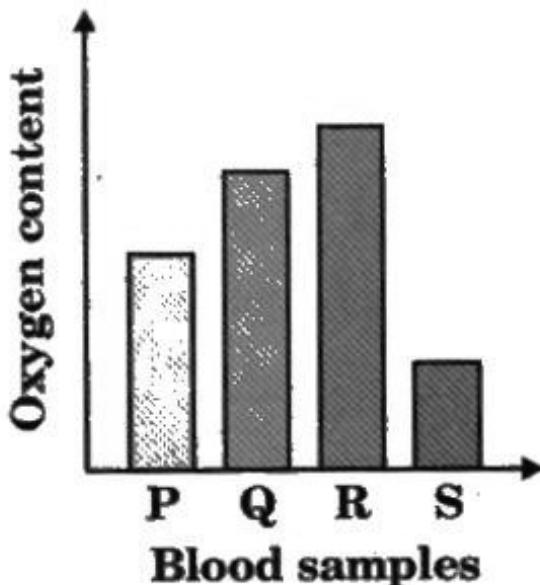
- W : The pollen tube reaches the ovary
X : The pollen tube grows out from the pollen
Y : The male gamete moves into the ovule to fuse with the egg
Z : The pollen tube grows down through the style

Identify the correct sequence that takes place during the process of fertilisation.

- (A) WXYZ (B) XZWy
(C) YWZX (D) WZXY

82

The given bar graph shows the oxygen content in four samples of blood taken from four different blood vessels of the body.



Which sample is most probably taken from a pulmonary artery?

- (A) P (B) Q (C) R (D) S

83

A student identified the following characteristics in an animal.

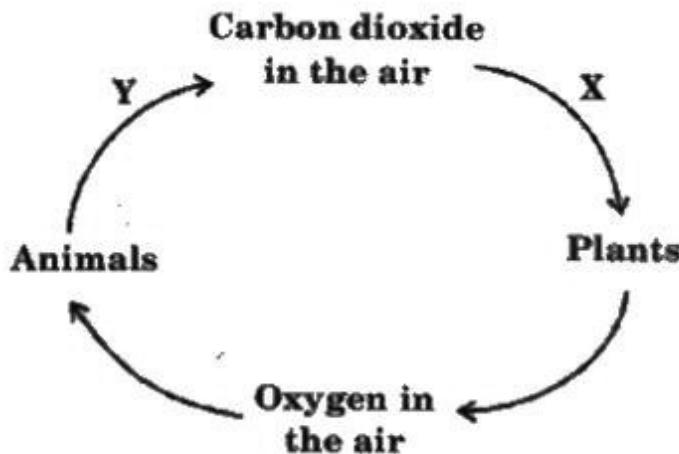
- Has long arms and legs
- Has prehensile tail to grasp branches
- They show their teeth that gives grin like appearance

Which of the following animals exhibits the given characteristics?

- (A) Camel (B) Giraffe (C) Monkey (D) Bear

84

The figure given shows the relationship between plants and animals, which maintain the balance of oxygen and carbon dioxide in the air.



Which of the following processes represents X and Y in the given figure?

X	Y
(A) Respiration	Transpiration
(B) Transpiration	Photosynthesis
(C) Respiration	Photosynthesis
(D) Photosynthesis	Respiration

85

Which of the following soils is good for growing plants as it is a mixture of sand, clay and humus?

- (A) Clayey soil (B) Loamy soil
 (C) Sandy soil (D) All of these

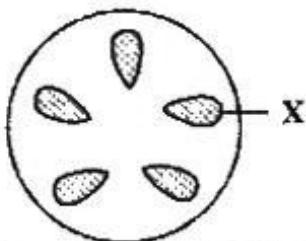
86

Which of the following is used by amoeba to procure its food?

- (A) Cilia (B) Pseudopodia (C) Proboscis (D) Flagella

87

The diagram given shows a cross section of a stem.



Which of the following is NOT transported by the part labelled as 'X' in the given figure?

- (A) Sugar (B) Water (C) Carbon dioxide (D) Mineral salts

88

The information in the box given shows the parts of human respiratory system.

- | |
|----------------|
| P - Alveolus |
| Q - Bronchus |
| R - Trachea |
| S - Bronchiole |

Identify the correct sequence of the path taken by a molecule of carbon dioxide during exhalation.

- | | |
|----------------|----------------|
| (A) R, Q, S, P | (B) R, Q, P, S |
| (C) P, S, R, Q | (D) P, S, Q, R |

89

Why is defecation NOT considered as excretion?

- (A) The waste material is a product of chemical reactions in the cells.
(B) The waste materials have not undergone any chemical reactions.
(C) The waste material does not have a specific excretory organ.
(D) The waste material have not entered the cells of the body.

90

Which of the following organisms convert dead plants and animals into minerals?

- | | |
|-----------------|---------------|
| (A) Scavengers | (B) Consumers |
| (C) Decomposers | (D) Parasites |

- 91 How many medals did India win at the London 2012 Summer Olympic games?
(A) 4 (B) 6 (C) 5 (D) 3
- 92 Who reports news and writes for a newspaper?
(A) A cartoonist (B) An architect
(C) A news reader (D) A journalist
- 93 What does 'infantry' mean?
(A) Soldiers on foot (B) Soldiers on horse-back
(C) Mounted guns (D) Specially trained troops for naval attack
- 94 Identify the correct collective noun.
(A) A class of fish (B) A caravan of frogs
(C) A chain of islands (D) A school of caterpillars
- 95 Who is a person who listens to the conversation of others?
(A) A volunteer (B) An eavesdropper
(C) A tyrant (D) An angler
- 96 Which of these places is called the 'Island of Pearls'?
(A) Jaipur (B) China (C) Japan (D) Bahrain
- 97 In which sport does Limba Ram excel?
(A) Archery (B) Rifle shooting (C) Badminton (D) Skiing
- 98 What do you call an eighty-year old person?
(A) Septuagenarian (B) Octogenarian
(C) Centenarian (D) Nonagenarian
- 99 Identify the famous dance form of Punjab.
(A) Kathak (B) Kuchipudi (C) Bhangra (D) Bharatnatyam
- 100 What is the full form of NREGS?
(A) National Regional Employment Guarantee Scheme
(B) National Regional Education Guarantee Scheme
(C) National Rural Education Guarantee Scheme
(D) National Rural Employment Guarantee Scheme

••• — Key for IIT-JEE-2013 — •••

1.	A	2.	C	3.	B	4.	D	5.	D	6.	D	7.	B	8.	A	9.	C	10.	D
11.	C	12.	D	13.	A	14.	B	15.	A	16.	C	17.	C	18.	D	19.	B	20.	C
21.	C	22.	D	23.	C	24.	A	25.	D	26.	C	27.	B	28.	B	29.	B	30.	A
31.	D	32.	A	33.	D	34.	C	35.	C	36.	A	37.	D	38.	A	39.	B	40.	D
41.	D	42.	D	43.	C	44.	D	45.	A	46.	B	47.	D	48.	B	49.	B	50.	D
51.	D	52.	D	53.	A	54.	B	55.	D	56.	D	57.	D	58.	D	59.	A	60.	D
61.	C	62.	B	63.	C	64.	C	65.	D	66.	B	67.	C	68.	A	69.	D	70.	D
71.	C	72.	D	73.	D	74.	C	75.	D	76.	B	77.	C	78.	C	79.	A	80.	B
81.	B	82.	D	83.	C	84.	D	85.	B	86.	B	87.	C	88.	D	89.	D	90.	C
91.	B	92.	D	93.	A	94.	C	95.	B	96.	D	97.	A	98.	B	99.	C	100.	D