Super Scholar 2018 Class VII Sample Questions

1. The relationship where two organisms live together and get benefit from each other is called symbiosis. This relationship is shown by

A. Mushroom **B.** Lichens **C.** Pitcher plant **D.** Cuscuta

2. Which of the following cannot be proved experimentally?

A. Light is necessary for photosynthesis
B. Chlorophyll is necessary for photosynthesis
C. CO_2 is necessary for photosynthesis
D. None of the above

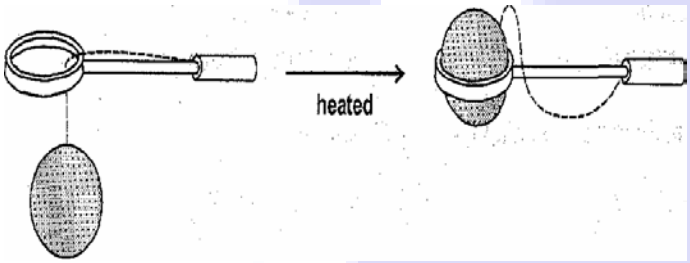
3. A very expensive but fine fibre is obtained from a goat found in mountains of China and Tibet that grows fine fur-like hair on its body during severe winter months. What brand of wool is obtained from this goat?

A. Angora **B.** Mohair **C.** Cashmere **D.** Merino

4. Bharat Merino is a sheep which yields very fine wool used for clothing. This breed was evolved at the Central Sheep and Wool Research Institute, which is located in

A. Gujarat **B.** Jammu and Kashmir **C.** Rajasthan **D.** Delhi

5.



The above experiment shows that heat causes solids to change in their _____

A. Sizes **B.** States **C.** Shapes **D.** Composition

6. A thermos flask prevents loss or gain of heat by

A. Conduction only **B.** Convection only **C.** Radiation only **D.** All of these

7. A colourless liquid turns blue litmus red and reacts with magnesium to produce a gas. What type of substance must the colourless liquid be?

A. Acidic **B.** Basic **C.** Neutral **D.** Both (B) & (C)

8. Neha was performing an experiment bare handed. After the experiment was over, she realised that her palms became slippery and slimy. What do you think is the reason for it?

A. She must have dropped NaOH on her hands
B. She must have dropped $H_2 SO_4$ on her hands
C. She must have dropped NaCl on her hands
D. None of these

9. Observe the given flow chart carefully and answer

$$Mg + O_2 \xrightarrow{heat} \underset{(White\ \ wash)}{X} \xrightarrow{H_2O} Y \xrightarrow[solution]{red\ \ litmus} > Z$$

What is Y ?

A. MgOH **B.** Mg_2OH **C.** $Mg(OH)_2$ **D.** None of these

10. What happens when we cut an apple and keep the slices exposed to air for sometime?

A. The colour of the cut surface becomes brown
B. The change in colour is due to chemical reaction between air and enzymes
C. Both (A) & (B)
D. None of these

11. How does the plant in the figure adapt to reach sunlight?

Wall 

A. By creeping along the ground
B. By growing thorns to hook on for support
C. By growing tendrils
D. By growing clasping roots

12. Which of the following are true for the cactus plant?

(i) Their leaves are needle-like
(ii) Their leaves can carry out photosynthesis
(iii) Their stems are thick
(iv) Their stems cannot carry out photosynthesis

A. (i) & (ii) **B.** (i) & (iii) **C.** (ii) & (iv) **D.** (iii) & (iv)

13. A lightning conductor installed in a building

A. Does not allow the lightning to fall on the building
B. Repels the lightning
C. Forces the lightning to fall in an area where there are no buildings
D. Conducts electric charge to the ground when lightning strikes the building

14. During a cyclone air moves from

A. Region of high pressure to low pressure **B.** Region of low pressure to high pressure
C. Region of low velocity to high velocity **D.** Region of high pressure to low velocity

15. Observe the following figures carefully.

If (i) represents all the water present on the earth then what does (iv) represent?

A. Total freshwater on the earth **B.** Ground-water
C. Water present in all the lakes and rivers of the world **D.** None of the above

16. 16. Which of the following is not a correct food chain?

A. 

B. 

C. 

D. Both (A) & (B)

17. When a person breathes in, what happens to the diaphragm and to the rib cage?

A.

Diaphragm	Rib cage
Becomes flatter	downwards and inwards

B.

Diaphragm	Rib cage
Becomes flatter	outwards and upwards

C.

Diaphragm	Rib cage
Becomes more curved	downwards and inwards

D.

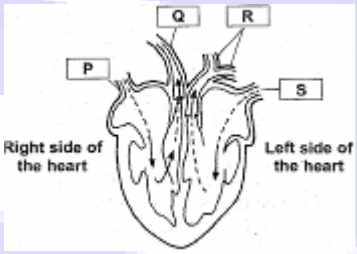
Diaphragm	Rib cage
Becomes more curved	outwards and upwards

18. Ritu, Shweta and Urvashi wanted to find out who among them had the biggest lung capacity. They decided to blow into a balloon in one breathe and see how big it will become. Which of the following factors they must keep the same to make the test a fair one?

i) Colour and design of the balloon.
ii) Size and shape of the balloon.
iii) Whether to breathe in before blowing.
iv) Material the balloon is made of

A. (i) & (ii) **B.** (ii) & (iii) **C.** (i), (iii) & (iv) **D.** (ii), (iii) & (iv)

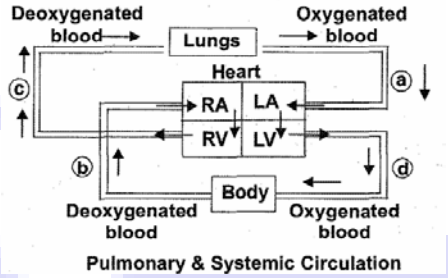
19. Fill in the boxes in the given figure with the following phrases (that show movement of blood) and select the correct option



(i) To lungs
(ii) To rest of the body
(iii) From the rest of the body
(iv) From the lungs Right side of

A. P - (i), Q - (iv), R - (iii), S - (ii)
B. P - (ii), Q - (i), R - (iii), S - (iv)
C. P - (iv), Q - (ii), R - (i), S - (iii)
D. P - (iii), Q - (i), R - (ii), S - (iv)

20. The figure shows the pulmonary and systemic circulation. Recognise the parts labelled as a, b, c, & d in the diagrammatic representation



Pulmonary & Systemic Circulation

A.

a	Pulmonary artery
b	Pulmonary vein
c	Aorta
d	Veins

B.

a	Pulmonary vein
b	Veins
c	Pulmonary artery
d	Veins

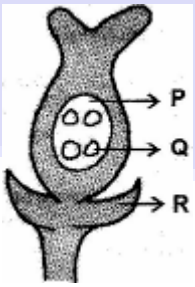
C.

a	Aorta
b	Veins
c	Veins
d	Pulmonary Veins

D.

a	Pulmonary artery
b	Veins
c	Pulmonary vein
d	Pulmonary artery

21. The given figure shows the parts of a plant. Which of the part labelled 'P', 'Q' or 'R' eventually develops into a fruit?



A. P **B.** Q **C.** R **D.** None of the above

22. Which of the following is a correct match

A.

Fruit	Agent of dispersal	Part of seed which helps in dispersal
Drum stick	Water	Wings of seed

B.

Fruit	Agent of dispersal	Part of seed which helps in Dispersal
Madar	Water	Hairy seeds

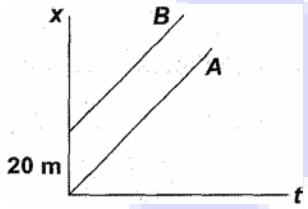
C.

Fruit	Agent of dispersal	Part of seed which helps in dispersal
Coconut	Water	Spongy outer coat

D.

Fruit	Agent of dispersal	Part of seed which helps in dispersal
Xanthium	Animals	Hooks in seeds

23. The displacement-time graphs of two bodies A and B are shown in fig. Which of the following statements is correct?



A. A is moving faster than B
B. B is moving faster than A
C. B is always 20 m behind A
D. A is always 20 m behind B

24. When electric current is flown through a conductor, some amount of

A. Electrical energy is converted into heat energy
B. Electrical energy is converted into mechanical energy
C. Mechanical energy is converted into electrical energy
D. Heat energy is converted into electrical energy

25. The image of the teeth seen by a dentist while testing teeth is

A. Erect and real
B. Erect and virtual
C. Inverted and virtual
D. Inverted and real

26. An insect crawls up 5 cm every second on a 60 cm vertical rod and then falls down 2 cm over the next second. How many seconds will it take to climb the rod?

A. 20 seconds **B.** 40 seconds **C.** 60 seconds **D.** 30 seconds

27. If
p : 0 ÷ (- 7) = 0
q: (- 8) ÷ 0 = not defined, then _____ .

A. Both p and q are true **B.** p is true and q is false
C. p is false and q is true **D.** Both p and q are false

28. $\dfrac{1}{1+\dfrac{1}{2+\dfrac{1}{3}}} =$

A. $\frac{1}{6}$ **B.** $\frac{3}{10}$ **C.** $\frac{7}{10}$ **D.** $\frac{5}{6}$

29. The value of $\left[\left(-2\frac{3}{4}\right)-\left(-1\frac{3}{4}\right)\right]+\left[\left(-2\frac{3}{4}\right)-\left(-1\frac{3}{4}\right)\right]+\ldots\ldots$ upto 30 times is _____.

A. -1 **B.** 1 **C.** 30 **D.** -30

30. A person travelled $\frac{5}{8}$th of the distance by train, $\frac{1}{4}$th by bus and the remaining 15 km by boat. The total distance travelled by him was _____.

A. 90 km **B.** 120 km **C.** 150 km **D.** 180 km

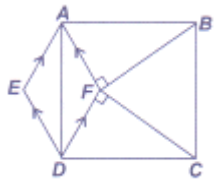
31. One third of Arun's marks in Mathematics exceeds a half of his marks in English by 30. If he got 240 marks in the two subjects together, how many marks did he get in English?

A. 180 **B.** 60 **C.** 78 **D.** 110

32. Two supplementary angles are in the ratio 7: 11, then the angles are _____.

A. 70°, 120° **B.** 60°, 120° **C.** 70°, 110° **D.** 50°, 130°

33. In the adjoining figure, ABCD is a square, BCF is an equilateral triangle and AEDF is a rhombus. Find $\angle$EAF.



A. 30^0 **B.** 120^0 **C.** 150^0 **D.** None of these

34. If two sides of an isosceles triangle are 3 cm and 8cm, then the length of the third side is _____

A. 2 cm **B.** 8 cm **C.** 2 cm or 1 cm **D.** 1 cm

35. In ΔABC, AB = AC and AD is perpendicular bisector of BC. The property by which ΔADB is not congruent to ΔADC is _____.

A. SAS property **B.** SSS property **C.** RHS property **D.** AAA property

36. What percent of 1 day is 36 minutes?

A. 25% **B.** 2.5% **C.** 3.6% **D.** 0.25%

37. A dealer allows a discount of 10 % and still gains 5%. What percent above the cost price must he mark his goods?

A. 15% **B.** 20% **C.** $16\frac{2}{3}\%$ **D.** 50%

38. The number of diagonals drawn from one vertex of a polygon of n sides is _____

A. (n -1) **B.** (n -2) **C.** (n - 3) **D.** n

39. If 4l2 + (k + 10) lm + 25m2 is a perfect square, then the value of k is _____.

A. -9 **B.** 10 **C.** 0 **D.** 5

40. If $8^{x-1} = 2^{x+3}$, then x is _____.

A. 2 **B.** 4 **C.** 1 **D.** 3

41. By what number should we multiply 4-3 so that the product may be equal to 64?

A. 4^5 **B.** 2^{12} **C.** 2^6 **D.** 2^8

42. How many square centimetres of construction paper does Reema need in order to exactly cover, with no overlap, 5 sides of a cube with edges that are 12 centimeters long?

A. 60 cm^2 **B.** 144 cm^2 **C.** 300 cm^2 **D.** 720 cm^2

43. When a coin is tossed at random, then the probability of getting a head is _____.

A. 0 **B.** $\frac{1}{2}$ **C.** 1 **D.** 2

44. Which of the following numbers does not fit in the given series?
0, 1, 3, 6, 10, 15, 21, 28, 37, 45

A. 0 **B.** 21 **C.** 37 **D.** 45

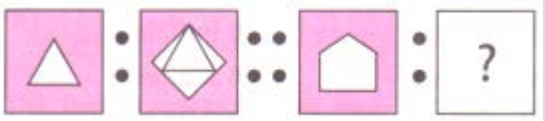
45. Ishika and her grandfather both had birthdays last week. The sum of their ages is 100 years. Her grandfather's age is 4 times Ishika's age. How old is Ishika?

A. 16 years **B.** 20 years **C.** 22 years **D.** 25 years

46. In each of the following questions, choose the missing term to complete the given series.
2,1,?,9,90,89,890

A. 10 **B.** 8 **C.** 7 **D.** 6

47. There is a certain relationship between the pair of figures on the either side of::. Identify the relationship and finding the missing figure.



A.  **B.**  **C.**  **D.** 

48. In a certain code language, '234' means 'spark and fire', '456' means 'spark is cause' and '258' means 'fire is effect'. Which of the following numerals is used for 'cause'?

A. 3 **B.** 4 **C.** 6 **D.** 8

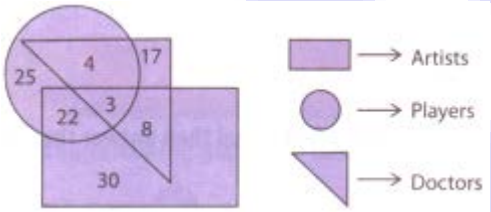
49. Pointing to a photograph Kavita said, “He is the son of the only son of my grandfather:’ How is the man in the photograph related to Kavita?

A. Brother **B.** Uncle **C.** Son **D.** Data inadequate

50. P started from his house towards West. After walking a distance of 25 m, he turned to the right and walked 10 m. He then again turned to the right and walked 15 m. After this he has to turn to his right ab135° and to cover 30 m. In which direction should he go?

A. West **B.** South **C.** South-West **D.** South-East

51. Study the given Venn diagram and answer the following questions.



How many artists are neither players nor doctors?

A. 10 **B.** 17 **C.** 30 **D.** 15

52. How many P’s are both immediately preceded and followed by ‘F’ in the following series?
F P F P P C F FF P F P F P F P P F F P PP F FF P F P F P F P P F F P F

A. 2 **B.** 6 **C.** 8 **D.** 9

53. Which of the following interchanges in signs would make the given equation correct?
16-4x2+5÷1 =12

A. + and - **B.** - and x **C.** ÷ and - **D.** + and ÷

54. Count the number of triangles in the given figure.

A. 13 **B.** 16 **C.** 19 **D.** 15

55. Identify the correct mirror image of the given fig. (X), if the mirror is placed at the top of the fig. (X).

Fig. (X)

A. 

B. 

C. 

D. 

56. In each of the following questions, find out which of the options can be formed from the pieces given in fig. (X)

Fig. (X)

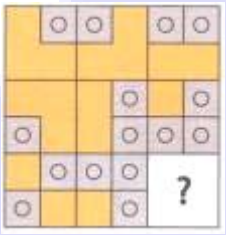
A. 

B. 

C. 

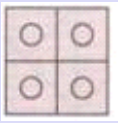
D. 

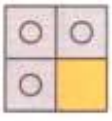
57. In each of the following questions, find out which of the options completes the figure matrix.



A. 

B. 

C. 

D. 

58. In each of the following questions, there are three figures X, V and Z of a sheet of paper. Figure X and Y show the two consecutive folds of the sheet. And figure Z shows cuts on the folded sheet. Choose one figure from the options that resembles the unfolded form of the fig. Z.

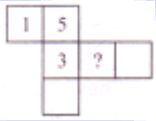
A. 

B. 

C. 

D. 

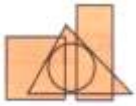
59. A cube has faces numbered 1,2, 3,4,5 and 6.The numbers on the opposite faces of the cube add up to 7. The net of the cube is shown below. The numbers on 3 faces are not shown. Find the number on the face indicated by the'?'



A. 6 **B.** 4 **C.** 2 **D.** 5

60. In each of the following questions, from amongst the options select the one which satisfies the same conditions of placement of the dot(s) as in the figure (X).


Fig. (X)

A. 

B. 

C. 

D.