

FOUNDATION PROGRAMME CLASS VIII 27-12-2017
SCREENING CUM SCHOLARSHIP TEST

(Students who are studying in Class VII)

PHYSICS + CHEMISTRY + BIOLOGY + MATHS

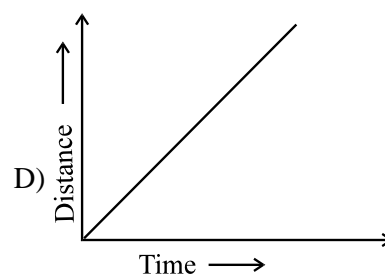
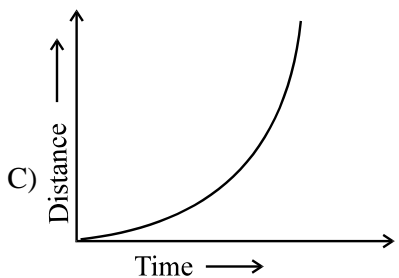
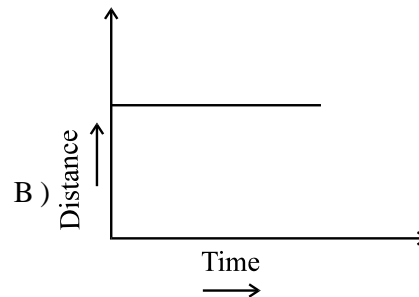
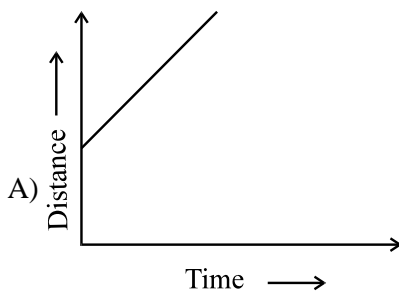
Time : 120 minutes	Number of Questions : 100	Maximum Marks : 400
Name of the Candidate :		
Signature of Candidate :		
Phone Number/Mobile Number:		
Name of the School Studying :		
Class Studying :		Roll. No.
Test Centre:	Signature of Invigilator	

INSTRUCTIONS

1. Please fill in the items such as name, signature, centre etc. of the candidate in the columns given above.
2. Please ensure question booklet code is printed on the top right corner of this page is same as in the OMR answer sheet.
3. This question booklet contains 100 questions. For each question, four answers are suggested and given against (A), (B), (C) and (D) of which, only one will be the **Most Appropriate Answer**. Mark the bubble containing the letter corresponding to the 'Most Appropriate Answer' in the OMR answer sheet, by using either **Blue or Black ball - point pen only**
4. Each correct answer will be awarded **FOUR** marks. ONE mark will be deducted for each incorrect answer. More than one answer marked against a question will be deemed as an incorrect response and will be negatively marked. No negative mark for unattended questions.
5. All the rough work is to be done in the blank space provided in the question paper.
6. **WARNING:** *Any malpractice or any attempt of malpractice, in the Examination, will DISQUALIFY THE CANDIDATE.*
7. **Return the answer sheet to the invigilator at the end of the examination.**

IMMEDIATELY AFTER OPENING THIS QUESTION BOOKLET, THE CANDIDATE SHOULD VERIFY WHETHER THE QUESTION BOOKLET ISSUED CONTAINS ALL THE 100 QUESTIONS IN SERIAL ORDER. IF NOT, REQUEST FOR REPLACEMENT

- If the density of a substance is $2 \times 10^3 \text{ kg m}^{-3}$, then the mass of 5 m^3 of this substance is
 A) 1000 kg B) 10000 g C) 10000 kg D) 100g
- The whole length of a metre scale is divided into 500 equal parts then the smallest Measurement that can be measured by using the scale is
 A) 0.5 m B) 0.005m C) 50 mm D) 2mm
- A faster moving object covers
 A) Less distance in more time B) More distance in more time
 C) Less distance in shorter time D) More distance in shorter time
- If an object moving along a straight line and keeps changing its speed then,
 A) The motion is said to be uniform B) The motion is said to be a non-uniform motion
 C) The object is said to be stationary D) The motion is said to be a fast motion
- A car moves with a speed of 40 km/h for 15 minutes and then with a speed of 60 km/h for the next 15 min. The total distance covered by the car is
 A) 100 km B) 25 km C) 15 km D) 10 km
- 72 km/hr is same as
 A) 72 m/s B) 7.2 m/s C) 200 m/s D) 20 m/s
- A simple pendulum takes 32 sec to complete 20 oscillations. What is the time period of the pendulum
 A) 4s B) 10s C) 1.6 s D) 3s
- The distance between two stations is 240 km. A train takes 4 hrs to cover this distance calculate the speed of the train
 A) 50 km/hour B) 40 km/hour C) 60 km/hour D) 30 km/hour
- Which of the following distance time graphs shows a track moving with speed which is not constant



- Arun bought 500 grams of sugar to make a cake. How many kg of sugar did he buy ?
 A) 0.7 kg B) 0.5 kg C) 0.6 kg D) 0.8 kg

SPACE FOR ROUGH WORK

11. A Football field is 0.7 km long. How many meters long is the Football field?
A) 500m B) 400m C) 300m D) 700m
12. Stainless steel pans are usually provided with copper bottoms. The reason for this is
A) Copper bottom makes the pan more durable
B) Such pans appear colourful
C) Copper is a better conductor of heat than the stainless steel
D) Copper is easier to clean than the stainless steel
13. A wooden spoon is dipped in a cup of ice cream its other end
A) becomes cold by the process of conduction
B) becomes cold by the process of convection
C) becomes cold by the process of radiation
D) does not becomes cold
14. In Fahrenheit scale, water freezes at
A) 0°F B) 32°F C) 40°F D) 212°F
15. A polished silvery surface is
A) good absorber of heat B) good reflector of heat
C) poor reflector of heat D) None of these
16. A Thermo Flask prevents loss or gain of heat by
A) Conduction B) Convection only C) Radiation only D) All the above
17. Bodies transmitting heat via radiation
A) do not require any medium B) are liquid only
C) Make heat travels in one direction only D) Solids only
18. Light travels in
A) Curved lines B) In circular path C) In straight line D) Zig-Zag path
19. Sunlight is
A) Red in colour B) Yellow in colour C) Green in colour D) White in colour
20. A virtual image larger than the object produced by a
A) Plane mirror B) Concave mirror C) Convex mirror D) All of the above
21. The object in which seven colours spread over it appears to be white in colour when rotated is called
A) Galileo's disc B) Newton's disc C) Rather ford's disc D) Faraday's disc
22. Splitting of white light into seven colour's is called
A) reflection of light B) Rectilinear propagation of light
C) Lateral inversion D) Dispersion
23. A glowing Filament will be
A) At a low temperature B) At a high temperature
C) At atmospheric temperature D) 0°C temperature
24. Electric Bell works on the principle
A) Electrical energy is converted into Mechanical energy
B) Electrical energy is converted in to sound energy
C) Mechanical energy is converted in to sound energy
D) Sound energy is converted into electrical energy

SPACE FOR ROUGH WORK

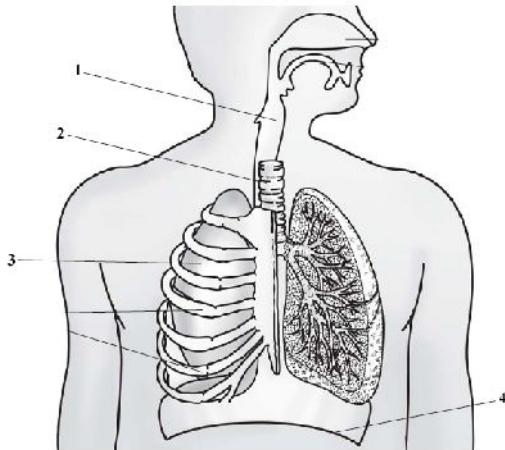
25. The wire which melts and breaks the circuit when large current is allowed to flow through it is called
 A) A fuse wire B) Electric wire C) Connecting wire D) Filament
26. The nucleus of an atom consists of
 A) electrons and neutrons B) electrons and protons
 C) protons and neutrons D) All of the above
27. "Atoms can neither be created nor destroyed". This principle was given by?
 A) Avogadro B) Dalton C) Rutherford D) Niels Bohr
28. Which among the following is called Laughing Gas popularly?
 A) Nitric Oxide B) Nitrous oxide C) Nitrogen penta oxide D) Nitrogen
29. The idea of parmanu was given by
 A) Maharishi Kanad B) Democritus C) Dalton D) William Crookes
30. Which breed gives coarse wool?
 A) Lohi B) Marwari C) Nali D) Patanwadi
31. Which of the following is not a type of silk?
 A) Mulberry silk B) Tassar silk C) Mooga silk D) Moth silk
32. The animal fibre obtained without killing the animal
 A) Woollen B) Silk C) Animal fur D) Leather
33. Selective breeding is a process of
 A) Selecting the offsprings with desired properties B) Selecting the parents with desired properties
 C) Selecting an area for breeding D) Selecting fine hair for good quality wool
34. Which of the following is/are fire resistant fibres?
 A) Asbestos B) Nomex C) Kermel D) All of these
35. The correct way of making a solution acid in water is to
 A) add water to acid B) add acid to water
 C) mix acid and water simultaneously D) Add water to acid in a shallow
36. Turmeric is a natural indicator. On adding its paste to acid and base separately, which colours would be observed
 A) Yellow in both acid and base B) Yellow in acid and red in base
 C) Pink in acid and yellow in base D) Red in acid and blue in base
37. When the soil is too basic, plants do not grow well in it. To improve its quality what must be added to the soil?
 A) Organic matter B) Quick lime C) Slaked lime D) Calamine solution
38. On adding phenolphthalein indicator to a colourless solution, no change is observed. What is the nature of this solution?
 A) Basic B) Either acidic or basic C) Either acidic or neutral D) Either basic or neutral
39. A salt derived from strong acid and weak base will dissolve in water to give a solution, which is
 A) acidic B) basic C) neutral D) None of these
40. The acid found in spinach is
 A) Lactic acid B) Acetic acid C) Tartaric acid D) Oxalic acid
41. Which base is used as an antacid to relieve indigestion?
 A) Sodium hydroxide B) Magnesium hydroxide
 C) Ammonium hydroxide D) Magnesium oxide

SPACE FOR ROUGH WORK

42. Molecular formula of sulfurous acid is
 A) HNO_3 B) HCl C) H_2SO_4 D) H_2SO_3
43. 'Litmus' a natural dye is an extract of which of the following?
 A) China rose (Gudhal) B) Beetroot
 C) Lichen D) Blue berries(Jamun)
44. Iron pillar near the Qutub Minar in Delhi is famous for the following facts. Which of these facts is responsible for its long stability?
 A) It is more than 7 metres high B) It weighs about 6000 kg
 C) It was built more than 1600 years ago D) It has not rusted after such a long period
45. Two drops of dilute sulphuric acid were added to 1g of copper sulphate powder and then small amount of hot water was added to dissolve it (step I). On cooling, beautiful blue coloured crystals got separated (step II). step I and step II are:
 A) Physical and chemical changes respectively B) Chemical and physical changes respectively
 C) both physical change D) both chemical change
46. Galvanisation is a process used to prevent the rusting of which of the following?
 A) Iron B) Zinc C) Aluminium D) Copper
47. Which of the following is/are true when milk changes into curd?
 i) its state is changed from liquid to semi solid
 ii) it changes colour
 iii) It changes taste
 iv) The change cannot be reversed
 Choose the correct option from below
 A) (i) and (ii) are correct B) (ii) and (iii) are correct
 C) (i), (iii) and (iv) are correct D) (i) to (iv) are correct
48. During physical or chemical change mass is,
 A) gained B) conserved C) loss D) None of these
49. A method of obtaining oxygen, which illustrates a physical change and does not involve a chemical change is,
 A) electrolysis of water B) decomposition of H_2O_2
 C) heating potassium chlorate D) distilling liquid air
50. The chemical formula of baking soda is
 A) Na_2CO_3 B) NaHCO_3 C) Na_2HCO_3 D) NaOH
51. The tiny pores present in the leaves of the plants for exchange of gases are called :
 A) Chloroplast B) Stomata C) Epidermis D) Epidermal hairs
52. The associations of organism where they live together and share shelter and nutrients is known as :
 A) Saprophyte B) Autotroph C) Symbiosis D) Parasite
53. Which of the following is not an element of weather?
 A) Humidity B) Temperature C) Rain D) Soil

SPACE FOR ROUGH WORK

54. Given below are some adaptive features of animals :
- (i) Layer of fat under the skin
 - (ii) Long, curved and sharp claws
 - (iii) Thick white fur
 - (iv) Bodies are streamlined and feet have webs
- Which of the above are the adaptive features of a polar bear :
- A) (i) only B) (ii), (iii) and (iv) only
 C) (i), (ii) and (iii) only D) All of the above
55. Name the organism that breathes through its lungs as well as its skin :
- A) Human being B) Earthworm C) Cockroach D) Frog
56. Identify the labelled part :



- A) 1 - Ribs ; 2 - Trachea, 3 - Lungs ; 4 - Diaphragm
 B) 1 - pharynx ; 2 - Trachea, 3 - Diaphragm ; 4 - Lungs
 C) 1 - pharynx ; 2 - Trachea, 3 - Lungs ; 4 - Diaphragm
 D) 1 - pharynx ; 2 - Ribs, 3 - Lungs ; 4 - Diaphragm
57. Find out the correct statement.
- a) The process of breakdown of food in the cell with the release of energy is called cellular respiration
 - b) The taking in of air rich in oxygen into the body is called exhalation and giving out of air rich in CO_2 is known as inhalation
 - c) The number of times a person breathes in a minute is termed as the breathing rate
 - d) During inhalation, ribs move up and outwards and diaphragm moves down
- A) a and b are correct B) a, c and d are correct C) c and d are correct D) all are correct
58. The percentage of oxygen and carbon dioxide in inhaled air respectively :
- A) 16.4% and 4.4% B) 0.04% and 21% C) 21% and 0.04% D) 21% and 16.4%
59. Which one of the following is NOT a type of asexual reproduction :
- A) Budding B) Pollination C) Spores D) Fragmentation
60. Which plant bears spiny seeds with hooks to be dispersed by animals :
- A) Xanthium B) Urena C) Sunflower D) Both A & B

SPACE FOR ROUGH WORK

61. Match the following :

Column I

a) Eyes

b) Buds

c) Wing

d) Fragmentation

Column II

1) Spirogyra

2) Yeast

3) Potato

4) Maple

A) $\frac{abcd}{3214}$

B) $\frac{abcd}{3241}$

C) $\frac{abcd}{3124}$

D) $\frac{abcd}{1234}$

62. Study the following statements given below :

1) In asexual reproduction plant can give rise to new plants without seeds

2) In sexual reproduction new plants obtained from seeds

3) Reproduction is through the vegetative parts of the plants, is known as vegetative propagation

4) Each spore is covered by a hard protective coat to withstand unfavourable conditions

Which of the above statements are correct.

A) 1, 2 and 3

B) 2 and 4 only

C) 2 only

D) All are correct

63. Which of the following is a male reproductive part of a flower.

A) Stamen

B) Pistil

C) Stem

D) Ovule

64. Seeds of drumstick and maple are carried to long distances by wind because they possess :

A) large and hairy seeds

B) spiny seeds

C) Long and ridged fruits

D) Winged seeds

65. Which of the following statements is/are true for sexual reproduction in plants :

1) Plants are obtained from seeds

2) Two plants are always essential

3) Fertilization can occur only after pollination

4) Only insects are agents of pollination

A) 1 and 4

B) 1 and 3

C) 2 and 4

D) 1, 2 and 3

66. Which component of blood in mammals build up defense against harmful germs enter the body?

A) RBCs

B) Plasma

C) Platelets

D) WBCs

67. Vascular tissues that transport water and nutrients in plants are called :

A) Veins

B) Phloem

C) Xylem

D) Root hairs

68. Veins allow blood to flow only :

A) Towards lungs

B) Away from the lungs

C) Towards the heart

D) Away from heart

69. The function of the blood is to transport :

A) Digested food from the parts of the body to the large intestine

B) Digested food from small intestine to the large intestine

C) Digested food from the small intestine to the other parts of the body

D) Digested food from large intestine to other parts of the body

70. The fluid part of blood is called :

A) Plasma

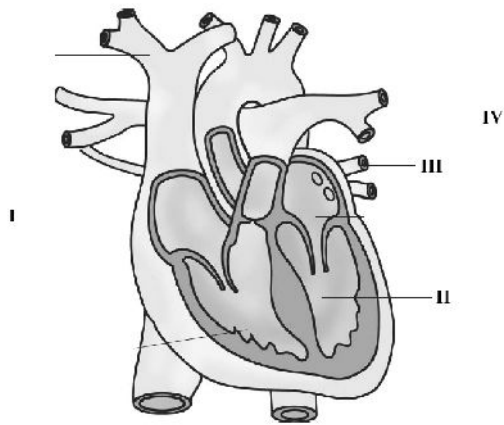
B) RBC

C) WBC

D) Blood platelets

SPACE FOR ROUGH WORK

71. Identify the labelled parts :



- A) I - Left ventricle ; II - Aorta ; III - Pulmonary vein ; IV - Right atrium
B) I - Right atrium ; II - Left ventricle ; III - Pulmonary vein ; IV - Pulmonary artery
C) I - Right ventricle ; II - Left ventricle ; III - Aorta ; IV - Vein
D) I - Right ventricle ; II - Right atrium ; III - Vein ; IV - Aorta
72. A resting person usually has a pulse rate between :
A) 72 and 80 beats per minute B) 80 and 82 beats per minute
C) 52 and 60 beats per minute D) 82 and 90 beats per minute
73. Name the scientist who discovered blood circulation :
A) Issac Newton B) Christian Barnard C) William Harvy D) William Thomson
74. Arrange the following statements in the correct order in which they occur during the formation and removal of urine in human blood :
1) Ureters carry urine to the urinary bladder
2) Wastes dissolved in water is filtered out as urine in the kidneys
3) Urine stored in urinary bladder is passed out through the urinary opening at the end of the urethra
4) Blood containing useful and harmful substances reaches the kidneys for filtration
5) Useful substances are absorbed back into the blood
A) 4, 5, 2, 3, 1 B) 4, 5, 2, 1, 3 C) 1, 2, 4, 3, 5 D) 1, 5, 2, 3, 4
75. The filtering of blood through an artificial kidney is called :
A) Circulation B) Transportation C) Dialysis D) Diffusion
76. An elevator descends into a mine shaft at the rate of 6m/min. If the descent starts from 10m above the ground level, how long will it take to reach -350m
A) 35min B) 50min C) 60 min D) 45 min
77. What is the value of $-80 \div [240 \div (24)] + 7$
A) 1 B) -1 C) 0 D) 2

SPACE FOR ROUGH WORK

78. The sum (-5) and its additive inverse is
 A) 0 B) 5 C) -5 D) 1
79. If the product of two integers is -216 and one of them is -6 then what is the other integer
 A) 25 B) 30 C) 15 D) 36
80. A rectangular sheet of paper is $12\frac{1}{2}$ cm long and $10\frac{2}{3}$ cm wide. Find its perimeter.
 A) $25\frac{1}{2}$ cm B) $10\frac{2}{3}$ C) $46\frac{1}{3}$ D) $46\frac{2}{3}$
81. Simplify $\left[\frac{14}{15} \times \left(\frac{-25}{28}\right)\right] + \left(\frac{2}{3} \times \frac{6}{7}\right)$
 A) $\frac{12}{42}$ B) $\frac{-11}{42}$ C) $\frac{11}{42}$ D) $\frac{42}{64}$
82. The sum of two complementary angle is
 A) 90° B) 180°
 C) 360° D) Any angle between 180° and 360°
83. Angle of a triangle are the ratio 1:2:3 the smallest angle is
 A) 15° B) 90° C) 60° D) 30°
84. If 'x' is a rational number and 'a' and 'b' are whole numbers then the value of $x^a \cdot x^b$ is
 A) x^{a+b} B) x^{a-b} C) x^{ab} D) $x^{a/b}$
85. Subtracting $-3x^2-1$ from 0, we get
 A) $-3x^2-1$ B) $-3x^2+1$ C) $3x^2-1$ D) $3x^2+1$
86. The value of $\frac{1}{2} \times \frac{1}{3} \times 2 \times 3$ is
 A) 0 B) 1 C) 2 D) 3
87. Number of millilitres of a litre is
 A) 10 B) 100 C) 1000 D) $\frac{1}{1000}$
88. The product of $\frac{4}{9}$ and $2\frac{1}{4}$ is
 A) $\frac{16}{81}$ B) $\frac{81}{16}$ C) 1 D) $5\frac{1}{4}$
89. If $\frac{p}{q}$ and $\frac{r}{s}$ are equivalent fractions, then we have
 A) $p + s = q + r$ B) $p \div s = q \div s$ C) $pq = rs$ D) $ps = rq$

SPACE FOR ROUGH WORK

90. The standard form of $\frac{55}{-99}$ is
- A) $\frac{5}{-9}$ B) $\frac{-5}{9}$ C) $\frac{-55}{99}$ D) none of these
91. A rational number $\frac{p}{q}$ is said to be in its simplest form when
- A) 'p' is a prime number B) 'q' is a prime number
 C) 'p' and 'q' both are prime to each other D) all of the above
92. The angle, which is its own supplement
- A) 0° B) 45° C) 90° D) does not exist
93. In a linear pair of angles, one angle is $\frac{2}{3}$ of the other. The measure of the smaller angle is
- A) 108° B) 72° C) 36° D) 54°
94. Which of the following angle half of its supplementary
- A) 120° B) 60° C) 30° D) 90°
95. In a right triangle if hypotenuse is H, perpendicular is p and base is B, then
- A) $B^2 = H^2 + P^2$ B) $H^2 = P^2 + B^2$ C) $H^2 = P^2 - B^2$ D) $P^2 = B^2 + H^2$
96. Least number of possible acute angles in a triangle is
- A) 0 B) 1 C) 2 D) 3
97. If the length of a side of a triangle is 15cm. The difference of other two sides of this triangle must be
- A) equal to 15 cm B) more than 15 cm C) less than 15 cm D) 7.5 cm
98. The value of $(100)^0$ is
- A) 0 B) -1 C) 1 D) none of these
99. If $\left(\frac{3}{4}\right)^x \div \left(\frac{3}{4}\right)^2 = \left(\frac{3}{4}\right)^5$, then x is
- A) 7 B) 3 C) $5/2$ D) -3
100. 20,00,000 in standard form is
- A) 0.2×10^5 B) 2.0×10^6 C) 10.2×10^6 D) 10.2×10^5

SPACE FOR ROUGH WORK

Name



Batch..... Roll No.

27 - 12- 2017

CLASS VIII (VII STUDYING) - KEY

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