## PHYSICS

1. Which of the following is not the force at a distance
A) Electrostatic force
B) Gravitational force
C) Frictional force
D) Magnetic force
2. Ravi pushes a rock with a force of 10 N for 5 minutes but it remains as it is. The workdone by him is
A) Positive
B) Negative
C)Zero
D) 50 J
3. A force can bring about these changes
A) Move a stationary object
B) Change the shape of an object
C) Change the direction of an object
D) All of these
4. Which of the following is not a type of force
A) Elastic
B) Muscular
C) Solar
D) Magnetic
5. An inclined plane wrapped around a cylinder is another type of simple machine called
A) Axle
B) Screw
C) Pulley
D) Knife
6. See - saw is an example of
A) Inclined plane
B) Lever of $\mathrm{I}^{\mathrm{st}}$ order
C) Lever of II $^{\text {nd }}$ order
D) Lever of III $^{\text {rd }}$ order
7. The diagram below shows a wheel barrow. Identify the correct positions of fulcrum $F$, load L and effort E
A)

B)

C)

D)

8. Which planet is known as red planet in our solar system
A) Mercury
B) Mars
C) Earth
D) Jupiter
9. Which is the largest planet in the solar system
A) Earth
B) Jupiter
C) Uranus
D) Mars
10. The first artifical satellite was
A) Sputnik - 1
B) Chandrayaan
C) Mangalyaan
D) Explorer
11. Which planet is often known as morning star or evening star
A) Earth
B) Mars
C) Venus
D) Mercury
12. India's first satellite in space was
A) Bhaskara
B) INSAT
C) Rohini
D) Aryabhata
13. Which type of objects make shadow
A) Transparent
B) Translucent
C) Opaque objects
D) Polymer
14. Which one of the following is a translucent object
A) Iron sheet
B) Glass
C) Wood
D) Oiled paper
15. In which path does light travel?
A) Curved line
B) Straight line
C) Circle
D) Elliptical line
16. Sound is produced when objects
A) Rotate
B) Vibrate
C) Circulate
D) Move linearly
17. Period of dry weather longer than normal is known as
A) Flood
B) Disaster
C) Drought
D) Famine
18. An instrument used to measure the strength of an earthquake is known as
A) Seismograph
B) Quake meter
C) Quake graph
D) Radiograph
19. A series of fast moving waves in the ocean caused by powerful earth quakes or volcanic eruptions is called
A) Tide
B) Tornado
C) Tsunami
D) Flood
20. A mountain with a hole on top that some times explodes and produces hot, melted rock and smoke is called
A) Hurricane
B) Volcano
C) Drought
D) Tornado

## CHEMISTRY

21. Which one of the following is an example of non-renewable resources?
A) Wind
B) Water
C) Vegetation
D) Coal and Minerals
22. Burning of Fossil fuels add
A) $\mathrm{CO}_{2}, \mathrm{SO}_{2}, \mathrm{NO}_{2}$ gases in air
B) $\mathrm{C}, \mathrm{SO}_{2}, \mathrm{~N}_{2}$ gases in air
C) $\mathrm{CO}, \mathrm{SO}_{3}, \mathrm{NO}_{3}$ gases in air
D) $\mathrm{CH}_{4}, \mathrm{CO}_{2}, \mathrm{NO}_{2}$ gases in air
23. Inexhaustible resource among the following is
A) Minerals
B) Solar energy
C) Plants
D) Fossil fuels

24 Energy that is trapped in the form of organic matter is called
A) Conventional energy
B) Renewable energy
C) Biomass energy
D) Solar energy
25. Which of the following is an inorganic natural resource?
A) water
B) fossil fuels
C) plants
D) animals
26. Acid rain is caused by oxides of
A) sulphur, nitrogen
B) sulphur, carbon
C) carbon, nitrogen
D) phosphorous, carbon
27. Greenhouse gases and other harmful gases are bringing huge damage to atmosphere like
A) Acid rain
B) Global warming
C) Ozone layer depletion D)
D) All of them
28. Chemical formula of ozone
A) $\mathrm{O}_{3}$
B) $\mathrm{O}_{2}$
C) $\mathrm{O}_{4}$
D) $\mathrm{O}_{5}$
29. Moisture capacity of air is called
A) Vapours
B) Humidity
C) Moist
D) Wet air
30. Carbonisation is
A) Slow conversion of dead vegetation into coal
B) Deposition of soil
C) Falling of trees
D) Formation of $\mathrm{CO}_{2}$
31. Petroleum is formed from
A) Domestic animals
B) Organisms in sea
C) Wild animals
D) Insects
32. The fibres manufacture by petrochemicals are
A) Nylon
B) Polyester
C) Acrylin
D) All of these
33. The main constituent of CNG is
A) Methane
B) Propane
C) Butane
D) Ethane
34. Ozone is formed in the upper atmosphere by a photochemical reaction with
A) Ultra violet solar radiation
B) Infra red radiation
C) Visible light
D) X-rays
35. Which of the following air pollutant reduces the oxygen carring capacity of a blood to large extent.
A) Carbon dioxide
B) Nitrogen monoxide
C) Carbon monoxide
D) Sulphur dioxide
36. One of the following does not contribute in producing acid rain. The one is
A) Nitrogen dioxide
B) Nitrogen monoxide
C) Carbon monoxide
D) Sulphur dioxide
37. Coal tar fuel-200 (TF-200) is a mixture of
A) pitch and creosote oil
B) light oil and pitch
C) anthracene and creosote oil
D) solar oil and pitch
38. Lignite, Bituminous and anthracite are different rank of
A) Nuclear fuel
B) Coal
C) Natural gas
D) Biogas
39. The outer most layer of the earth is
A) Magma
B) Mantle
C) Crust
D) Solid iron core
40. Photovoltaic energy is the conversion of sunlight into
A) Chemical energy
B) Biogas
C) Electricity
D) Geothermal energy
BIOLOGY
41. Living things take ...........inside during breathing
A) Carbondioxide
B) Hydrogen
C) Oxygen
D) Water
42. Which organ belongs to the digestive system
A) Nose
B) Lungs
C) stomach
D) Heart
43. What is first aid ?
A) Completing primary survey
B) The first help given to the victim of an accident
C) Assessing a victim's vital signs
D) Treating a victim for shock completely
44. Which part of the plant makes food for the plant?
A) root
B) leaves
C) stem
D) fruit
45. The process by which plant make their food is called
A) photosynthesis
B) photolysis
C) penosis
D) mitosis
46. The disease caused by the deficiency of iron is
A) anaemia
B) desentry
C) chicken pox
D) malaria
47. The blood cancer is known as
A) haemolysis
B) leukaemia
C) haemophilia
D) thrombosis
48. What part of the environment is nonliving
A) Fish
B) Plants
C) Water
D) Snail
49. What should be done in the case of a snake bite
A) Tie a bandage to cover the wound
B) Wash with soap and water
C) Tie a bandage above the bite
D) Apply on ice pack
50. The following first aids are given for which type of burns?

1) Holding the burnt part under running water
2) Wrapping the burnt part in towel
A) Minor burns
B) severe burns
C) chemical burns
D) third-degree burns
51. How are living things different from non-living?
A) living things are tall. Non-living things are short
B) living things are young. Non-living things are old
C) living things need food, water and air. Non-living things do not
D) none of the above
52. Which of following diseases spreads through contaminated food and water?
A) Malaria
B) Cholera
C) Dengue
D) Filaria
53. In the process of photosynthesis, what is the role of chlorophyll?
A) to excite water molecule
B) to absorb solar energy
C) to break $\mathrm{H}_{2} \mathrm{O}$ and $\mathrm{CO}_{2}$ in to $\mathrm{O}_{2}$
D) all of the above
54. Which part of the plant prevents soil erosion?
A) stem
B) flower
C) root
D) leaves
55. The mode of nutrition in a green plant is
A) heterotrophic
B) saprophytic
C) autotrophic
D) holozoic
56. Animals that have backbones are called
A) invertebrates
B) vetebrates
C) fish
D) birds
57. Which of the following is an unsafe practice?
A) crossing the road by using zebra crossing
B) crossing the road carelessly
C) Before crossing the road we should look at the both the sides of the road
D) none of the above
58. Which of the following is used to put off the fire caused from petrol?
A) sand
B) water
C) cloth
D) cotton
59. If a person swallows poison, what first aid should be given to the person?
A) do not touch the person
B) make him vomit out the water
C) remove excess clothing if any
D) make the person sit in the shade
60. What should be done to sparking switches?
A) They should be replaced with new ones
B) They are of no harm so there isn't any need to change them
C) They can be used at another place
D) Metal wire should be used

## MATHEMATICS

61. What is the missing number
$9000+800+\ldots=9809$
A) 809
B) 90
C) 9
D) 900
62. Number of hundred in a number is 4 . If number of ten's exceeds the number of hundred's by 5 and it exceeds the number of one's in the number is 6 . Then the three digit number is
A) 456
B) 493
C) 492
D) 451
63. Helen enjoys folding paper to make tiny animals. To make some new animals she cuts a colourful sheet of paper into 3 equal pieces. What fraction represents each piece of the sheet of paper
A) $\frac{1}{2}$
B) $\frac{3}{1}$
C) $\frac{1}{4}$
D) $\frac{1}{3}$
64. What number is $\frac{1}{7}$ of 56 ?
A) 8
B) 7
C) 6
D) 9
65. Write eighteen hundredths as a decimal number?
A) 1.8
B) 0.018
C) 0.18
D) 18.00
66. Write 0.79 as a fraction
A) $\frac{79}{100}$
В) $\frac{7.9}{100}$
C) $\frac{0.79}{100}$
D) $\frac{790}{100}$
67. Which number is closer to 1.0 ?
A) 0.1
B) 0.5
C) 0.7
D) 0.8
68. Which one is correct about the following angle?

A) greater than a right angle
B) less than a right angle
C) equal to a right angle
D) None
69. Which one of the following angles are complementary?
A) $60^{\circ}$ and $120^{\circ}$
B) $50^{\circ}$ and $40^{\circ}$
C) $80^{\circ}$ and $30^{\circ}$
D) $40^{\circ}$ and $120^{\circ}$
70. The perimeter of a square notepad is 128 cm . How long is each side?
A) 34 cm
B) 21 cm
C) 42 cm
D) 32 cm
71. A square garden has sides that are 17 m long.Fencing costs ₹ 637.00 per meter. How much would it costs to put a fence around the garden?
A) 43316
B) 43310
C) 32416
D) 48316
72. A rectangular garage is 9 m long and 3 m wide. What is its area?
A) $27 \mathrm{sq} . \mathrm{m}$
B) $24 \mathrm{sq} . \mathrm{m}$
C) $12 \mathrm{sq} . \mathrm{m}$
D) $36 \mathrm{sq} . \mathrm{m}$
73. A rectangular garage is 10 m long and 9 m wide. It costs 128.00 per sq. m to put in a new concrete floor. Flow much would it cost to put a new concrete floor in the garage?
A) ₹ 19620
B) ₹ 11520
C) ₹ 11808
D) ₹ 1152
74. The area of a rectangular sheet is 60 sq.m. It is 6 m wide. How long it is?
A) 6 m
B) 12 m
C) 10 m
D) 5 m
75. The sides of a square - shaped room are 3 m long. Ruben wants to buy carpet to cover the floor of the room. If the carpet costs 2927.00 per sqm. How much will it cost to buy carpet for the room?
A) ₹ 28343
B) ₹ 17562
C) ₹ 35124
D) ₹ 26343
76. A school ordered 34 boxes of paper. There were 37 sheets of paper in each box. How many sheets of paper did the school ordered in all?
A) 1250
B) 1254
C) 1258
D) 1285
77. An airline owns 9 aeroplanes, every aeroplane has 7 rows of seats with 8 seats in each row. Each aeroplane makes 4 flights a day. How many passengers can the airline carry each day?
A) 2018
B) 1593
C) 2016
D) 2032
78. A group of 90 campers volunteered to carry boats down to the lake. If it take 6 campers to carry each boat. How many boats will the group be able to carry?
A) 15
B) 12
C) 10
D) 24
79. What type of triangle is $\triangle \mathrm{ABC}$ where $\mathrm{AB}=\mathrm{BC}=\mathrm{AC}=7 \mathrm{~cm}$ ?

A) Equilateral
B) Isosceles
C) Scalene
D) None of these
80. A triangle has angle measurements of $39^{\circ}, 74^{\circ}$ and $67^{\circ}$. What type of triangle is this?
A) Right
B) Acute
C) Obtuse
D) Scalene

| PHYSICS | CHEMISTRY |  | BIOLOGY |  | MATHS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. C | 21. | D | 41. | C | 61. C |
| 2. C | 22. | A | 42. | C | 62. B |
| 3. D | 23. | B | 43 | B | 63. D |
| 4. C | 24. | C | 44. | B | 64. A |
| 5. B | 25. | A | 45. | A | 65. C |
| 6. B | 26. | A | 46. | A | 66. A |
| 7. A | 27. | D | 47. | B | 67. D |
| 8. B | 28. | A | 48. | C | 68. A |
| 9. B | 29. | B | 49. | C | 69. B |
| 10. A | 30. | A | 50. | A | 70. D |
| 11. C | 31. | B | 51. | C | 71. A |
| 12. D | 32. | D | 52. | B | 72. A |
| 13. C | 33. | A | 53. | B | 73. B |
| 14. D | 34. | A | 54. | C | 74. C |
| 15. B | 35. | C | 55. | C | 75. D |
| 16. B | 36. | B | 56. | B | 76. C |
| 17. C | 37. | A | 57. | B | 77. C |
| 18. A | 38. | B | 58. | A | 78. A |
| 19. C | 39. | C | 59. | B | 79. A |
| 20. B | 40. | C | 60. | A | 80. B |

