1. Vertebrates are the animals having
a) Back bone
b) No Backbone
c) Spiral like structure
d) Both a \& c

Answer (a)
2. Frog is a
a) Vertebrate
b) Invertebrate
c) Sponga
d) None of these

Answer (a)
3. Lemon is a
a) Mustard plant
b) Flowering Plant
c) Non-Flowering Plant
d) None of these

Answer (b)
4. Thuja is a
a) Mustard plant
b) Flowering Plant
c) Non-Flowering Plant
d) None of these Answer (c)
5. Biting \& cutting food is the function of
a) Incisors
b) Premolars
c) Molars
d) Canines

Answer (a)
6. Chewing \& grinding food is done by?
a) Incisors
b) Premolars
c) Molars
d) Canines

Answer (b)
7. Digestive juice is secreted by?
a) Muscles
b) Stomach
c) Liver
d) Kidney

Answer (b)
8. Ecosystem is the formed by?
a) Living things
b) Non-living things
c) Both a \& b
d) None of these Answer (c)
9. Pond is an example of?
a) Ecosystem
b) Community
c) Population
d) Both a \& c

Answer (a)
10. Component of ecosystem is
a) Biotic
b) Abiotic
c) Exbiotic
d) Both a \& b

Answer (d)
11. Consumers are?
a) Biotic
b) Abiotic
c) Exbiotic
d) Both a \& b

Answer (a)
12. Main energy in ecosystem comes from?
a) Dead Bodies
b) Living things
c) Non-living things
d) Sun

Answer (d)
13. Food Chain depends on
a) Living things
b) Non-living things
c) Plants
d) All of these

Answer (d)
14. In between lion \& zebra, lion is
a) Prey
b) Predator
c) Producer
d) All of these

Answer (b)
15. Flu is an
a) Contagious disease
b) Non-Contagious disease
c) Penta disease
d) All of these Answer (a)
16. Polio is an
a) Contagious disease
b) Non-Contagious disease
c) Penta disease
d) All of these

Answer (a)
17. TB is an
a) Contagious disease
b) Non-Contagious disease
c) Penta disease
d) All of these

Answer (a)
18. Covid-19 is an
a) Contagious disease
b) Non-Contagious disease
c) Penta disease
d) All of these Answer (a)
19. Cancer is an
a) Contagious disease
b) Non-Contagious disease
c) Penta disease
d) All of these

Answer (b)
20. Sugar is an
a) Contagious disease
b) Non-Contagious disease
c) Penta disease
d) All of these

Answer (b)
21. Vaccination can be the prevention from
a) Contagious disease
b) Non-Contagious disease
c) Penta disease
d) All of these

Answer (a)
22. Polio drops can be used to protect from
a) Contagious disease
b) Non-Contagious disease
c) Penta disease
d) All of these Answer (a)
23. Children must sleep for
a) 6-8 Hours
b) 8-10 Hours
c) 10-12 Hours
d) 4-8 Hours Answer (b)
24. Calcium is a
a) Mineral
b) Dry-fruit
c) Powder
d) All of these

Answer (a)
25. Global water day is celebrated on
a) $21^{\text {st }}$ March
b) $22^{\text {nd }}$ March
c) $23^{\text {rd }}$ March
d) $4^{\text {th }}$ June Answer (b)
26. Food is grouped into of
a) 2
b) 3
c) 4
d) 5

Answer (c)
27. Solids Maintain their
a) Shape
b) Volume
c) Area
d) All of these

Answer (d)
28. Rubber is a
a) Conductor
b) Semi-conductor
c) Non-conductor
d) Both a \& b

Answer (c)
29. Pencil is a
a) Conductor
b) Semi-conductor
c) Non-conductor
d) Both a \& b Answer (c)
30. Metals are
a) Shiny
b) Brittle
c) Solid
d) Both a \& c
Answer (d)
31. Gold is
a) Hard
b) Soft
c) Brittle
d) Both a \& c Answer (b)
32. Chromium is
a) Dark Blue
b) Light Blue
c) Light Pink
d) All of these Answer (b)
33. Aluminum is
a) Dark Blue
b) Light Blue
c) Light Pink
d) All of these Answer (b)
34. Tin is
a) Dark Blue
b) Light Blue
c) Light Pink
d) All of these

Answer (c)
35. Nickel is
a) Dark Blue
b) Light Blue
c) Light Pink
d) All of these

Answer (c)
36. Football is stopped after covering some distance due to
a) Friction
b) Force
c) Gravity
d) Low kick Answer (a)
37. Brakes is an example of
a) Friction
b) Force
c) Gravity
d) Slipping

Answer (a)
38. If we apply the some force on a football, it will travel longer on
a) Rocky Soil
b) Marble Floor
c) Brick Floor
d) Ground

Answer (b)
39. Which machine consists of a grooved wheel?
a) Lever
b) Pulley
c) Inclined Plane
d) Gear

Answer (b)
40. Water is on earth is
a) $70 \%$
b) $71 \%$
c) $72 \%$
d) $75 \%$

Answer (b)
41. Soil \& water have in them?
a) Air
b) Space
c) Molecules
d) None of these

Answer (a)
42. Forests provide us
a) Timber
b) Habitats
c) Both $a \& b$
d) None of these Answer (c)
43. Gold is a
a) Mineral
b) Salt
c) Raw Material
d) Both a \& b Answer (a)
44. Copper is a
a) Mineral
b) Salt
c) Raw Material
d) Both a \& b Answer ( $a$ )
45. Coal is a
a) Mineral
b) Salt
c) Raw Material
d) Both a \& b Answer (a)
46. Diesel is a
a) Renewable Source
b) Non- Renewable Source
c) Semi-Renewable source
d) Both a \& c Answer (b)
47. Mineral Coal is
a) Renewable Source
b) Non- Renewable Source
c) Semi-Renewable source
d) Both a \& c Answer (b)
48. Forests are
a) Renewable Source
b) Non- Renewable Source
c) Semi-Renewable source
d) Both a \& c

Answer ( a )
49. Wind Energy is
a) Renewable Source
b) Non- Renewable Source
c) Semi-Renewable source
d) Both a \& c

Answer (a)
50. Heat energy except sun is
a) Renewable Source
b) Non- Renewable Source
c) Semi-Renewable source
d) Both a \& c

Answer (a)
51. Intensive sun is in
a) Summer
b) Winter
c) Autumn
d) Storm

Answer (a)
52. South Pole is covered by
a) Tropical Zone
b) Polar Zone
c) Temperate Zone
d) None of these

Answer (b)
53. The hottest temperature in Pakistan was
a) 43.5 degree
b) 53.5 degree
c) 45.5 degree
d) 44 degree Answer (b)
54. The hottest temperature in Pakistan was
a) 10 degree
b) - 10 degree
c) 18 degree
d) - 18 degree

Answer (d)
55. The diameter of Jupiter is
a) 142800 Km
b) 142600 Km
c) 144800 Km
d) 144600 Km

Answer (a)
56. Neptune is located from sun in million kilometers>
a) 4494
b) 4495
c) 4496
d) 4497

Answer (d)
57. Mercury has
a) 1 moon
b) 2 moons
c) 3 moons
d) None of these

Answer (d)
58. Venus has ___ Moons?
a) 2
b) 4
c) 6
d) None of these

## Answer (d)

59. The number of corner of prism is?
a) 2
b) 4
c) 6
d) 8

Answer (c)
60. Saturn has $\qquad$ moon?
a) 0
b) 1
c) 2
d) None of these

Answer (d)

1. Lemon is a
a) Mustard plant
b) Flowering Plant
c) Non-Flowering Plant
d) None of these Answer: B
2. Thuja is a
a) Mustard plant
b) Flowering Plant
c) Non-Flowering Plant
d) None of these

Answer: C
3. Chewing \& grinding food is done by?
a) Incisors
b) Premolars
c) Molars
d) Canines

Answer: B
4. Pond is an example of?
a) Ecosystem
b) Community
c) Population
d) Both a \& c Answer: A
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a) Biotic
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Answer: A
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a) Contagious disease
b) Non-Contagious disease
c) Penta disease
d) All of these

Answer: A
7. Chromium is
a) Dark Blue
b) Light Blue
c) Light Pink
d) All of these

Answer: D
8. Aluminum is
a) Dark Blue
b) Light Blue
c) Light Pink
d) All of these

Answer: B
9. Diesel is a
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c) Semi-Renewable source
d) Both a \& c

Answer: C
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Answer: B
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b) Polar Zone
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d) None of these

Answer: B
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a) 10 degree
b) - 10 degree
c) 18 degree
d) -18 degree

Answer: D
13. Venus has $\qquad$ Moons?
a) 2
b) 4
c) 6
d) None of these

Answer: D
14. The number of corner of prism is?
a) 2
b) 4
c) 6
d) 8

Answer: C
15. Saturn has $\qquad$ moon?
a) 0
b) 1
c) 2
d) None of these

Answer: D
16. Kingdom Monera has
a) 1 cell
b) 2 cells
c) Many cells
d) None of these

Answer: A
17. Kingdom Protista live
a) In water
b) On water
c) On earth
d) None of these

Answer: A
18. Bacteria are example of Kingdom?
a) Monera
b) Protista
c) Fungi
d) Animalia

Answer: A
19. Spirogyra is an example of Kingdom?
a) Monera
b) Protista
c) Fungi
d) Animalia

Answer: B
20. Rhizopus is an example of
a) Monera
b) Protista
c) Fungi
d) Animalia

Answer: C
21. Mushroom is an example of
a) Monera
b) Protista
c) Fungi
d) Animalia

Answer: C
22. Crab is an example of
a) Monera
b) Protista
c) Fungi
d) Animalia Answer: D
23. Maize is an example of?
a) Monera
b) Protista
c) Fungi
d) Plantae

Answer: D
24. Maize is an example of
a) Monocots
b) Dicots
c) Tricots
d) Both a \& c

Answer: A
25. Rose is an example of
a) Monocots
b) Dicots
c) Tricots
d) Both a \& c

Answer: B
26. Catfish is an example of
a) Vertebrates
b) Non-Vertebrates
c) Sponges
d) None of these Answer: A
27. Toad is an example of
a) Vertebrates
b) Non-Vertebrates
c) Sponges
d) None of these

Answer: A
28. Newt is an example of
a) Vertebrates
b) Non-Vertebrates
c) Sponges
d) None of these

Answer: A
29. Snake is an example of
a) Vertebrates
b) Non-Vertebrates
c) Sponges
d) None of these Answer: A
30. Salamander is an example of
a) Vertebrates
b) Non-Vertebrates
c) Amphibians
d) Both a \& c

Answer: D
31. Toad is an example of
a) Vertebrates
b) Non-Vertebrates
c) Amphibians
d) Both a \& c

Answer: D
32. Dinosaurs are examples of
a) Vertebrates
b) Reptiles
c) Amphibians
d) Both a \& b Answer: D
33. Cat is an example of
a) Reptiles
b) Amphibians
c) Mammals
d) Sponges Answer: C
34. Platypus is an example of
a) Reptiles
b) Amphibians
c) Mammals
d) Sponges

Answer: C
35. Wasp is an example of
a) Sponges
b) Worms
c) Insects
d) Molluscs

Answer: C
36. Snail is an example of
a) Sponges
b) Worms
c) Insects
d) Molluscs

Answer: D
37. Which is found in ocean?
a) Fish
b) Insects
c) Amphibians
d) Echinoderms

Answer: D
38. Diarrhea is an
a) Airborne Disease
b) Waterborne Disease
c) Food borne Disease
d) Animal-borne Disease Answer: B
39. Hepatitis is ?
a) Airborne Disease
b) Waterborne Disease
c) Food borne Disease
d) Animal-borne Disease Answer: C
40. Potato is an example of
a) Flower
b) Stem
c) Leaf
d) Tuber

Answer: D
41. Sexual Reproduction is done in?
a) Plants
b) Mammals
c) Animals
d) All of these

Answer: D
42. Gram seed is an example of
a) Monocots
b) Dicots
c) Tricots
d) Both a \& c

Answer: A
43. Best option for papaya is?
a) Self-pollination
b) Cross pollination
c) Mutual pollination
d) Both a \& c

Answer: B
44. Carbon dioxide is produced when we burn?
a) Coal
b) Fossil Fuel
c) Both a \& b
d) None of these

Answer: C
45. Computer components are the example of
a) Biodegradable sources
b) Non-biodegradable sources
c) Semi-biodegradable sources
d) None of these

Answer: B
46. Cucumber is an example of?
a) Biodegradable sources
b) Non-biodegradable sources
c) Semi-biodegradable sources
d) None of these

Answer: A
47. Mango \& Apple is an example of
a) Biodegradable sources
b) Non-biodegradable sources
c) Semi-biodegradable sources
d) None of these

Answer: A
48. Mutton is an example of
a) Biodegradable sources
b) Non-biodegradable sources
c) Semi-biodegradable sources
d) None of these

Answer: A
49. PEPSI bottle is an example of
a) Biodegradable sources
b) Non-biodegradable sources
c) Semi-biodegradable sources
d) None of these

Answer: B
50. Example of condensation is
a) Milk
b) Water
c) Iron
d) Sand

Answer: B
51. Sugar is an example of
a) Solute
b) Solvent
c) Universal Solvent
d) None of these

## Answer: A

52. Eggshell can be removed through
a) Vinegar
b) Sulphuric Acid
c) Citrus Acid
d) None of these

Answer: A
53. Rash is an example of
a) Electrical Charge
b) Chemical Charge
c) Ionic Charge
d) None of these Answer: A
54. Example of Huge Magnet is
a) Earth
b) Bar Magnet
c) Sun
d) Moon

Answer: A
55. Thickness of earth crust beneath the oceans is
a) 5 Km
b) $5-70 \mathrm{Km}$
c) 70 Km
d) None of these

Answer: A
56. What is important in natural manure?
a) Salts
b) Minerals
c) Vitamins
d) Decayed Matte Answer: B

Class $5^{\text {th }}$ Science Paper
57. NASA launched space station named?
a) Sputnik-1
b) Skylab
c) Skylab-Alpha
d) Sputnik-G

Answer: B
58. NASA established?
a) ISA
b) ISG
c) ISS
d) IST

Answer: C
59. Neptune has?
a) No moon
b) 7 Moons
c) 14 Moons
d) 21 Moons

Answer: C
60. Saturn has moons?
a) 0
b) 21
c) 42
d) 82

Answer: D

1. Chewing \& grinding food is done by?
a) Incisors
b) Premolars
c) Molars
d) Canines

Answer: B
2. Polio is an
a) Contagious disease
b) Non-Contagious disease
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d) All of these

Answer: A
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a) Dark Blue
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d) All of these

Answer: D
4. Diesel is a
a) Renewable Source
b) Non- Renewable Source
c) Semi-Renewable source
d) Both a \& c

Answer: C
5. Mineral Coal is
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Answer: B
6. South Pole is covered by
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b) Polar Zone
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Answer: B
7. Saturn has $\qquad$ moon?
a) 0
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d) Both a \& c

Answer: B
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a) Coal
b) Fossil Fuel
c) Both a \& b
d) None of these Answer: C
19. Computer components are the example of
a) Biodegradable sources
b) Non-biodegradable sources
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d) None of these

Answer: B
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d) 21 Moons Answer: C
33. Saturn has moons?
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b) 21
c) 42
d) 82

Answer: D
34. Muscular tissue can be found in?
a) Heart
b) Bone
c) Fats
d) Brain

Answer: A
35. Connective tissue can be found in?
a) Heart
b) Bone
c) Fats
d) Brain

Answer: B
36. Tulips can be reproduced by?
a) Bulbs
b) Tubers
c) Cuttings
d) Runners

Answer: A
37. Lilies can be reproduced by?
a) Bulbs
b) Tubers
c) Cuttings
d) Runners

Answer: A
38. Onions can be reproduced by?
a) Bulbs
b) Tubers
c) Cuttings
d) Runners

Answer: A
39. What is common in fats \& proteins?
a) Carbon
b) Nitrogen
c) Neon
d) Sulphur

Answer: A
40. Fuel of the body is?
a) Vitamin
b) Carbohydrates
c) Fats
d) Fiber

Answer: B
41. Vitamin C deficiency can lead to?
a) Berry Berry
b) Scurvy
c) Night Blindness
d) Anaemia

Answer: B
42. Large molecules are broken down with?
a) Teeth
b) Tongue
c) Muscles
d) Enzymes

Answer: D
43. The undigested food is removed through
a) Ingestion
b) Digestion
c) Absorption
d) Egestion

Answer: D
44. Stomach produces enzymes \& acid for digestion of?
a) Carbohydrates
b) Proteins
c) Fats
d) Oil

Answer: B
45. The food we eat is converted by stomach into?
a) Soupy gel
b) Soupy mixture
c) Solid balls
d) Watery solution

Answer: B
46. Zinc is?
a) Ductile
b) Shiny
c) Both a \& b
d) None of these

Answer: C
47. Aluminum is used in manufacturing of
a) Aircrafts
b) Fertilizers
c) Rocked fuels
d) All of these

Answer: A
48. Example of hydrocarbons is?
a) LPG gas
b) Sodium gas
c) Methanol
d) None of these

Answer: A
49. Which one is not an example of alloy?
a) Brass
b) Steel
c) Iron
d) Bronze

Answer: C
50. Soup powder \& water makes the solution, solute is
a) Soap powder
b) Water
c) Both a \& b
d) Solution Answer: A
51. Energy due to movement is called?
a) KE
b) PE
c) IE
d) GE

Answer: A
52. Bow stretched is an example of
a) KE
b) PE
c) IE
d) GE

Answer: B
53. Light is an example of energy?
a) KE
b) PE
c) $I E$
d) GE Answer: A
54. Rida lit a matchstick, it is
a) Electrical Energy
b) Chemical Energy
c) Sound Energy
d) Air Energy

Answer: B
55. Which of the following has nothing to do with hydropower?
a) Burning
b) Gravity
c) Sun
d) Water cycle

Answer: A
56. Which of the following materials is suitable for construction of permanent magnet?
a) Soft iron
b) Copper
c) Steel
d) Nickel

Answer: B
57. Uranus has hours in a day?
a) 24
b) 22
c) 20
d) 18

Answer: D
58. Neptune completes one rotation around earth in?
a) 687 days
b) 225 days
c) 84 years
d) 165 years Answer: D
59. Mars has?
a) 22 hours
b) 23 hours
c) 24 hours
d) 25 hours

Answer: D
60. Balls of ice, dust, rocks forms?
a) Asteroids
b) Meteorites
c) Comets
d) Meteors

Answer: C

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Answer: A
11. Muscular tissue can be found in?
a) Heart
b) Bone
c) Fats
d) Brain

Answer: A
12. Connective tissue can be found in?
a) Heart
b) Bone
c) Fats
d) Brain

Answer: B
13. What is common in fats \& proteins?
a) Carbon
b) Nitrogen
c) Neon
d) Sulphur

Answer: A
14. Fuel of the body is?
a) Vitamin
b) Carbohydrates
c) Fats
d) Fiber

Answer: B
15. Vitamin C deficiency can lead to?
a) Berry Berry
b) Scurvy
c) Night Blindness
d) Anaemia Answer: B
16. Large molecules are broken down with?
a) Teeth
b) Tongue
c) Muscles
d) Enzymes

Answer: D
17. The undigested food is removed through
a) Ingestion
b) Digestion
c) Absorption
d) Egestion

Answer: D
18. Stomach produces enzymes \& acid for digestion of?
a) Carbohydrates
b) Proteins
c) Fats
d) Oil

Answer: B
19. The food we eat is converted by stomach into?
a) Soupy gel
b) Soupy mixture
c) Solid balls
d) Watery solution

Answer: B
20. Energy due to movement is called?
a) KE
b) PE
c) IE
d) GE

Answer: A
21. Bow stretched is an example of
a) KE
b) PE
c) IE
d) GE

Answer: B
22. Light is an example of energy?
a) KE
b) PE
c) IE
d) GE

Answer: A
23. Rida lit a matchstick, it is
a) Electrical Energy
b) Chemical Energy
c) Sound Energy
d) Air Energy

Answer: B
24. Which of the following has nothing to do with hydropower?
a) Burning
b) Gravity
c) Sun
d) Water cycle

Answer: A
25. Which of the following materials is suitable for construction of permanent magnet?
a) Soft iron
b) Copper
c) Steel
d) Nickel

Answer: B
26. Neptune completes one rotation around earth in?
a) 687 days
b) 225 days
c) 84 years
d) 165 years

Answer: D
27. Mars has?
a) 22 hours
b) 23 hours
c) 24 hours
d) 25 hours

Answer: D
28. Balls of ice, dust, rocks forms?
a) Asteroids
b) Meteorites
c) Comets
d) Meteors

Answer: C
29. Example of herbaceous stems is?
a) Daisies
b) Leaves
c) Flowers
d) Fruits

Answer: A
30. Xylem is?
a) Living tissue
b) Dead tissue
c) Vascular tissue
d) None of these

Answer: B
31. Xylem forms?
a) Leaf
b) Wood
c) Structure
d) Roots

Answer: B
32. The protective layer around plant parts is?
a) Cortex
b) Mesophyll
c) Vascular Bundle
d) Epidermis

Answer: D
33. Enzymes are not involved in?
a) Respiration
b) Breathing
c) Both a \& c
d) None of these

Answer: B
34. Platelets are?
a) Regular shaped
b) Irregular shaped
c) Round shaped
d) None of these

Answer: B
35. Atrium is present in?
a) Liver
b) Stomach
c) Lungs
d) Heart

Answer: D
36. The exchange of gases between blood \& air takes place at?
a) Trachea
b) Bronchi
c) Bronchioles
d) Alveoli

Answer: D
37. Plasma is the component of?
a) Urine
b) Blood
c) Kidney
d) Heart

Answer: B
38. $B \& T$ cells form?
a) Vascular Bundle
b) Memory cells
c) Heart cells
d) Alveolus

Answer: B
39. Nausea is the symptom of?
a) Dengue
b) Covid-19
c) Malaria
d) Fever

Answer: A
40. Nausea is the symptom of?
a) Typhoid
b) Hepatitis-B
c) Hepatitis-C
d) Fever

Answer: B
41. Benish is allergic to dust and pollen. Her health issue is?
a) Viral attack
b) Pathogen disease
c) Infectious disease
d) None of these

Answer: C
42. If rabies infected dog bites a person, the only way to save him is by providing?
a) Innate immunity
b) Adaptive immunity
c) Passive immunity
d) Learned immunity

Answer: C
43. Maximum number of additional defence layers is required for?
a) Medical staff
b) Teachers
c) Students
d) Lawyers

Answer: A
44. Chemical change is?
a) Freezing of water
b) Boiling of water
c) Photosynthesis
d) Filling up balloon with air Answer: C
45. Which change can be reversed?
a) Chemical change
b) Physical change
c) Both a \& b
d) None of these

Answer: B
46. Rusting can be prevented by
a) Scratching
b) Painting
c) Washing
d) Cleaning Answer: B
47. Planetary model of atom was discovered in?
a) 1904
b) 1911
c) 1913
d) 1926

Answer: C
48. Number of electrons in $2^{\text {nd }}$ shell is?
a) 2
b) 4
c) 6
d) 8

Answer: D
49. The mass number of an atom is represented by
a) $A$
b) $B$
c) $Z$
d) M

Answer: A
50. Smoke is an example of solution?
a) Liquid in gas
b) Solid in gas
c) Gas in gas
d) Liquid in liquid

Answer: B
51. Humid air is an example of solution?
a) Liquid in gas
b) Solid in gas
c) Gas in gas
d) Liquid in liquid

Answer: A
52. Which is the most effective factor for increasing solubility in solution?
a) Grinding
b) Stirring
c) Heating
d) Pressuring

Answer: C
53. If a body moves for 30 seconds with speed $30 \mathrm{~m} / \mathrm{s}$, then distance is
a) 150 m
b) 300 m
c) 600 m
d) 900 m

Answer: D
54. If a body covers equal distance in equal intervals of time, then speed is?
a) Increasing
b) Decreasing
c) Uniform
d) Zero

Answer: C
55. If a wave has three crests \& three troughs, then frequency is?
a) 1 Hz
b) 2 Hz
c) 3 Hz
d) 4 Hz

Answer: C
56. Which of the following animal has the lowest pitch of sound?
a) Sparrow
b) Dog
c) Cat
d) Mosquito

Answer: D
57. Product of frequency \& time period of a wave is?
a) 1
b) $1 / T$
c) $1 / \mathrm{F}$
d) 0

Answer: A
58. If your classroom temperature is 27 Celsius, then in kelvin scale?
a) 27 K
b) 373 K
c) 300 K
d) 246 K

Answer: C
59. Which of the following is the worst conductor?
a) Metal
b) Wood
c) Wool
d) Air Answer: D
60. If value of g on a planet is $25 \mathrm{~N} / \mathrm{Kg}$, then weight of 2 Kg body is?
a) 2 N
b) 25 N
c) 50 N
d) 75 N

Answer: C

1. The global temperature has increased by 1 degree Celsius in last?
a) 10 years
b) 100 years
c) 1000 years
d) 50 years

Answer: B
2. One of the causes of global warming?
a) Deforestation
b) Renewable sources
c) Biodegradable sources
d) None of these

Answer: A
3. Urbanization is the cause of?
a) Greenhouse effect
b) Global warming
c) Carbon dioxide
d) None of these

Answer: B
4. Plants compete for?
a) Minerals
b) Animals
c) Lions
d) Zebras

Answer: A
5. In between frog \& bear, frog is?
a) Predator
b) Prey
c) Both a \& b
d) None of these

Answer: B
6. Epiphytes follow the rules of?
a) Parasitism
b) Mutualism
c) Commensalism
d) None of these

Answer: C
7. In between mouse \& snake, snake is?
a) Primary Consumer
b) Secondary Consumer
c) Tertiary Consumer
d) None of these

Answer: B
8. Aquatic life on earth is?
a) $70 \%$
b) $80 \%$
c) $90 \%$
d) $60 \%$

Answer: C
9. Global warming can be reduced by?
a) Hunting
b) Migration
c) Deforestation
d) Reforestation Answer: D
10. Reforestation stops?
a) Soil erosion
b) Water erosion
c) Plants erosion
d) None of these

Answer: A
11. Use of plastics can reduce?
a) Deforestation
b) Soil erosion
c) Carbon dioxide
d) Pollution

Answer: D
12. Pangolin is an?
a) Extinct specie
b) Endangered specie
c) Both a \& b
d) None of these

Answer: B
13. Rhizobium is a group of bacteria which live in the roots of some plants. They fix nitrogen for plant and get food in return. This relationship is?
a) Parasitism
b) Mutualism
c) Commensalism
d) Competition

Answer: B
14. Carnivorous plants feed on insects because these plants grow on marshy places deficient in?
a) Carbon
b) Nitrogen
c) Calcium
d) Sulphur

Answer: B
15. Electrical signals in neurons are called?
a) Dendrites
b) Nerve impulses
c) Axon
d) None of these

Answer: B
16. Grey matter in spinal cord is?
a) Honey bee shaped
b) U-shaped
c) Butterfly shaped
d) Z-Shaped

Answer: C
17. In nervous system, Pons acts as?
a) Cerebellum
b) Bridge
c) Spinal cord
d) Medulla oblongata

Answer: B
18. Withdrawal of hand on touching hot object is an example of
a) Reflex action
b) Reflex arc
c) Voluntary action
d) None of these

Answer: A
19. Brain stem includes all EXCEPT
a) Medulla oblongata
b) Midbrain
c) Cerebellum
d) Pons

Answer: C
20. Which is the largest part of brain?
a) Brain stem
b) Hypothalamus
c) Thalamus
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Answer: D
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c) Cerebrum
d) None of these

Answer: B
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a) Environmental adaptation
b) Structural adaptation
c) Behavioural adaptation
d) None of these

Answer: B
24. Seasonal migration is an example of?
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b) Structural adaptation
c) Behavioural adaptation
d) None of these

Answer: C
25. Genes control?
a) Skin colour
b) Height
c) Traits
d) Blood group

Answer: C
26. Genes are inherited to next generation by?
a) Chromosomes
b) Rhizombous
c) Nucleus
d) DNA

Answer: A
27. DNA contains?
a) Deoxyribose
b) Trioxyribose
c) Pentaoxyribose
d) None of these

Answer: A
28. Thymine is an?
a) Carbonous base
b) Nitrogenous base
c) Hydrogenous base
d) None of these

Answer: B
29. Guanine is a?
a) Carbonous base
b) Nitrogenous base
c) Hydrogenous base
d) Both a \& b

Answer: B
30. How many types of nucleotides?
a) 2
b) 3
c) 4
d) 5

Answer: C
31. Cytokinesis takes place during the division of?
a) Nucleus
b) Chromosomes
c) Chromatid
d) Both a \& b

Answer: A
32. Centromere splits in?
a) Telophase
b) Prophase
c) Anaphase
d) Cytokinesis

Answer: C
33. Nuclear membrane is formed around the chromosomes in?
a) Metaphase-I
b) Anaphase-I
c) Telophase-I
d) Telophase-II

Answer: C
34. Two daughter cells are formed in?
a) Meiosis-I
b) Meiosis-II
c) Meiosis-III
d) None of these

Answer: B
35. For each biological trait, there is a?
a) Nucleotide
b) Chromosome
c) Gene
d) Cell

Answer: C
36. A gamete of guava plant has nine chromosomes. What will be the number of chromosomes in each cell of adult plant if it is diploid organism?
a) 9
b) 14
c) 16
d) 18

Answer: D
37. The process of increasing the density of vitamins \& minerals in a crop is called?
a) Biotechnology
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c) Biosciences
d) None of these

Answer: B
38. NIAB is an institute working on
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b) Food crops
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d) None of these

Answer: B
39. Rice is an
a) Biotech food
b) Staple food
c) Hybrid food
d) Both a \& c

Answer: B
40. GMO cheese is produced by using?
a) Chymosin
b) Chromatin
c) Pepsin
d) Lactic Acid

Answer: A
41. Baking process uses enzymes from?
a) Wheat
b) Rice
c) Corn
d) Yeast

Answer: D
42. In periodic table, Group-VIIA is called
a) Alkali metals
b) Halogens
c) Noble gases
d) None of these Answer: B
43. If you are holding a substance, that is non-ductile, can you identify the substance?
a) Metal
b) Non-metal
c) Metalloid
d) Liquid

Answer: B
44. How many electrons are present in the outermost shell in Group IIIA elements?
a) 1
b) 2
c) 3
d) 4

Answer: C
45. Period number of Neon is?
a) 1
b) 2
c) 3
d) 4

Answer: B
46. A chemical change can be identified by?
a) Odour change
b) Emission of a gas
c) Heat change
d) All of these

Answer: D
47. Can we alter the chemical formula of substances involved in a chemical reaction?
a) Yes
b) No
c) May be
d) None of these

Answer: B
48. NaF is used as ingredient in?
a) Common salt
b) Toothpaste
c) Cleaning agents
d) Soaps

Answer: B
49. Photosynthesis in green plants is?
a) Synthesis
b) Decomposition
c) Exothermic
d) Endothermic Answer: D
50. Frying an egg is a?
a) Physical change
b) Chemical change
c) Shape change
d) Covalent bonding Answer: B
51. HCOOH is the chemical formula of?
a) Acetic acid
b) Carbonic acid
c) Citric acid
d) Formic acid

Answer: D
52. Dolomite is an example of?
a) Acid salts
b) Basic Salts
c) Double salts
d) Triple salts

Answer: C
53. Methyl orange colour in Alkali is?
a) Blue
b) Red
c) Yellow
d) Pink Answer: C
54. When a wasp sting you, it injects in skin an?
a) Acid
b) Alkali
c) HCOOH
d) None of these

Answer: B
55. The unit of buoyant force is?
a) Pascal
b) Newton
c) Buoyancy
d) Meter per cubic second Answer: B
56. With depth, pressure in a liquid
a) Decreases
b) Increases
c) Zero
d) Maximum

Answer: B
57. If a submerged object displaces an amount of liquid with a weight less than its own, when the object is released, it will?
a) Sink
b) Float
c) Both a \& b
d) None of these Answer: A
58. To get an enlarge \& upright image, which mirror we should use?
a) Convex mirror
b) Concave mirror
c) Plane mirror
d) Rough mirror

Answer: B
59. Stereo speakers works on the principle of
a) Electromagnets
b) Electro circuits
c) Electric bell
d) None of these

Answer: A
60. Which substance is used to make milk plastic?
a) Baking soda
b) Glyceride
c) Vinegar
d) Borax

Answer: C

1. The global temperature has increased by 1 degree Celsius in last?
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b) Chromatin
c) Pepsin
d) Lactic Acid

Answer: A
30. Baking process uses enzymes from?
a) Wheat
b) Rice
c) Corn
d) Yeast

Answer: D
31. Night blindness is caused due to the deficiencies of $\qquad$ .
a) Vitamin $A$
b) Vitamin $B$
C) Vitamin C
d) Vitamin E

Answer: A
32. Which of the following diseases is an example of non-communicable diseases?
a) Cancer
b) Diabetes
C) Hypertension
d) All of the above

Answer: D
33. Excessive bleeding during an injury is a deficiency of $\qquad$ .
a) Vitamin $A$
b) Vitamin C
c) Vitamin K
d) Vitamin F

Answer: C
34. Cystic Fibrosis and Haemophilia are examples of $\qquad$ .
a) Hereditary diseases
b) Degenerative diseases
C) Deficiency diseases
d) None of the above

Answer: A
35. Which of the following diseases is caused by protein deficiency?
a) Anaemia
b) Kwashiorkor
c) Hypothyroidism
d) All of the above

Answer: B
36. AIDS, common cold, dengue fever and influenza are examples of $\qquad$ .
a) Deficiency Disease
b) Infectious diseases
c) Physiological Diseases
d) Non-infectious diseases

Answer: D
37. Which of the following vitamins helps in blood clotting?
a) Vitamin $A$
b) Vitamin C
c) Vitamin K
d) Vitamin $F$

Answer: C
38. Where does the ovum receive the sperm?
a) Animal pole
b) Vegetal pole
c) Zona pellucida
d) None of the above

Answer: A
39. $\qquad$ is an organelle that helps the sperm to penetrate the ovum.
a) Acrosome
b) Zona pellucida
c) Megalis
d) Megalis

Answer: A
40. Umbilical cord contains $\qquad$
a) Pluripotent stem cells
b) Cord blood stem cells
c) Blood stem cells
d) None of the above

Answer: B
41. Which one of the following is employed in treatment of cancer
a) Antibiotics and cancer
b) Radiotherapy and chemotherapy
c) Chemotherapy and antibiotics
d) All of the above

Answer: B
42. Which one of the following is a correct sequence in biological methods
a) Observation-hypothesis-deduction-testing of deduction
b) Observation-hypothesis-law-theory
c) Hypothesis-observation-deduction-testing of deduction
d) law-theory-observation-deduction

Answer: A
43. The most recent era is
a) Paleozoic
b) Cenozoic
c) Protozoic
d) Protozoic

Answer: D
44. Which of the following are being used as bio pesticides An aphid that attacks walnut tree is being controlled biologically by
a) House fly
b) Honey bee
c) Mosquito
d) Wasp

Answer: B
45. In deductive reasoning we move from
a) General to specific
b) Specific to general
c) General to general
d) Specific to specific

Answer: A
46. The number and variety of species in a place in called.
a) Community
b) Population
c) Biodiversity
d) Diversity

Answer: C
47. The first ever clone was prepared in 1997 in
a) England
b) Scotland
c) Ireland
d) Mary land

Answer: B
48. AIDS is caused by
a) H -virus
b) TMV
c) HIV
d) D-virus

Answer: C
49. The bio element which accounts $18 \%$ of total mass in human body is
a) Oxygen
b) Hydrogen
c) Carbon
d) Nitrogen

Answer: C
50. A group of similar cells that perform similar function is
a) Tissues
b) Organ
c) Organelles
d) System

Answer: A
51. Which of the following is not an attribute of population
a) Population density
b) Gene frequency
c) Gene structure
d) Gene flow

Answer: C
52. The lowest percentage of bio elements in man among the following is of
a) Chlorine
b) Sulphur
c) Manganese
d) Iron

Answer: C
53. In human gene therapy, the normal genes are inserted into the host through
a) Deductive
b) Inductive
c) Scientific
d) Theocratical

Answer: A
54. The study of microorganisms is called
a) Parasitology
b) Social Biology
c) Microbiology
d) Molecular Biology

Answer: C
55. Lock and key model was proposed by:
a) Emil Fisher
b) Koshland
c) Rudolph Virchow
d) Lorenz Oken

Answer: A
56. Optimum pH for pancreatic lipase is:Karachi
a) 8.00
b) 7.00
c) 9.00
d) 6.00

Answer: C
57. If the non-protein part of Enzyme is covalently bonded then it is called:
a) Co-factor
b) Activator
c) Co-enzyme
d) Prosthetic group

Answer: D
58. Induce fit model was prepared by:
a) Koshland
b) Emil Fischer
c) Sanger
d) Mischer

Answer: A
59. The product of succinic acid by the action of the enzyme is:
a) Fumaric acid
b) Malonic acid
c) Citric acid
d) Pyruvic acid

Answer: A
60. If the non-protien part is loosely attached to the protein part is known as:
a) Coenzyme
b) Prosthetic group
c) Apoenzyme
d) Cofactor

Answer: A

1. Which of the following list contains only elements?
a) Air, water, oxygen
b) Air, water, fire
c) Hydrogen, oxygen, brass
d) Calcium, sulphur, carbon

Answer: D
2. What is the formula mass of caustic soda?
a) 159.5
b) 185.5
c) 249.5
d) 149.5

Answer: C
3. How many moles of molecules are there in 16 g oxygen?
a) 1
b) 0.5
c) 0.1
d) 6

Answer: B
4. What is the mass of 4 moles of hydrogen gas in grams?
a) 8.064
b) 4.032
c) 1
d) 1.008

Answer: A
5. What is the mass of carbon present in 44 g of carbon dioxide?
a) 12 g
b) $6 g$
c) $24 g$
d) 44 g

Answer: A
6. Which term is same for one mole of oxygen and one mole of water?
a) Volume
b) Mass
c) Atoms
d) Molecules

Answer: C
7. If one mole of carbon contains $x$ atoms, what is the number of atoms contained in 12 g of Mg ?
a) $X$
b) $0.5 x$
c) $2 x$
d) $1.5 x$

Answer: B
8. Chlorine has two isotopes, both of which have?
a) Same mass number
b) Same no. of neutrons
c) Different no. of protons
d) Same no. of electrons

Answer: D
9. Which isotope is commonly used to irradiate cancer cells?
a) I-123
b) $\mathrm{C}-14$
c) $\mathrm{Co}-60$
d) 1-131

Answer: C
10. M shell has subshells?
a) $1 \mathrm{~s}, 2 \mathrm{~s}$
b) $2 \mathrm{~s}, 2 \mathrm{p}$
c) $3 s, 3 p, 3 d$
d) $1 \mathrm{~s}, 2 \mathrm{~s}, 3 \mathrm{~s}$

Answer: C
11. A subshell that accommodates 6 electrons is?
a) S
b) $P$
c) $D$
d) $F$

Answer: B
12. Which isotope is used in nuclear reactors?
a) U-234
b) U-238
c) U-235
d) All of these

Answer: C
13. Number of periods in periodic table are?
a) 8
b) 7
c) 14
d) 17

Answer: B
14. Which of the following groups contain alkaline earth metals?
a) 1 A
b) IIA
c) VIIA
d) VIIIA

Answer: B
15. Which of the following elements belong to VIIIA?
a) Na
b) Mg
c) Br
d) Xe

Answer: D
16. Number of groups in periodic table are?
a) 12
b) 14
c) 16
d) 18

Answer: A
17. Main group elements are arranged in $\qquad$ groups?
a) 6
b) 7
c) 8
d) 9

Answer: C
18. Which of the following you expect to have greater shielding effect?
a) Li
b) Na
c) K
d) Rb

Answer: D
19. Silicon has $\qquad$ electrons in the valance shell.
a) 2
b) 4
c) 6
d) 8

Answer: B
20. A liquid boils when its vapour pressure becomes equal to?
a) 760 cmHg
b) 1 Pa
c) 101.325 KPa
d) 0.1atm

Answer: C
21. Acetone melts at -94 Celsius and boils at 56 Celsius. Guess the physical state of acetone at 25 Celsius and 1 atm?
a) Gas
b) Liquid
c) Solid
d) Plasma

Answer: B
22. How many moles of sodium atoms are present in 2.3 g Na ?
a) 1
b) 1.5
c) 0.1
d) 0.15

Answer: C
23. Which of the following solution is more dilute?
a) 1 M
b) 2 M
c) 0.1 M
d) 0.009 M

Answer: D
24. If one mole of $N$ contains $x$ atoms of sodium, what is the number of moles contained in 46 g of sodium?
a) $X$
b) 2
c) $2 x$
d) $1.5 x$

Answer: B
25. Galvanizing is?
a) Coating with Sn
b) Coating with Zn
c) Coating with Cr
d) Coating with Cu

Answer: B
26. Which of the following elements are most metallic?
a) Al
b) Na
c) Mg
d) Li

Answer: B
27. Which of the following metal is not a noble metal?
a) Au
b) Cu
c) Hg
d) Ag

Answer: C
28. Which of the following elements is the least non-metallic?
a) Si
b) S
c) $P$
d) Cl

Answer: A
29. Chlorine cannot oxidize $\qquad$ ion?
a) Iodide
b) Flouride
c) Bromide
d) Astatine

Answer: B
30. Na is more reactive than LI , but less reactive than?
a) Mg
b) Al
c) Rb
d) All of these

Answer: C
31. Which of the following is the strongest acid?
a) HI
b) HCL
c) HF
d) HBr

Answer: A
32. Pitch is produced by
a) Coal
b) Coal Tar
c) Coal Gas
d) Petroleum

Answer: A
33. In which of the following compounds, oxygen is attached to two alkyl carbon atoms?
a) Alcohol
b) Phenol
c) Ether
d) Ester

Answer: C
34. Formic Acid contains functional group?
a) -OH
b) $-\mathrm{CO}-$
c) -COOH
d) -CHO

Answer: C
35. Which process produces an alkane?
a) Combustion
b) Hydration
c) Dehydration
d) Hydrogenation

Answer: D
36. By dehydration we mean, the removal of?
a) Hydrogen
b) Water
c) Halogen
d) Alkane

Answer: B
37. Which molecule contains a carbon-carbon double bond?
a) Ethane
b) Ethyne
c) Ethane
d) Ethyl

Answer: C
38. Which is not a dextrose sugar?
a) Glucose
b) Mannose
c) Galactose
d) Fructose

Answer: D
39. Which is not a source of starch?
a) Wheat
b) Rice
c) Cotton
d) Potato

Answer: C
40. Which is not a protein?
a) Gelatin
b) Antibodies
c) Enzymes
d) Cholesterol

Answer: D
41. Which groups of periodic table are included in p block elements?
a) $6-12$
b) $13-18$
c) $1-18$
d) 1-5

Answer: B
42. The trend of ionization energy in a group from top to bottom is:
a) Decrease
b) Increase
c) Same
d) None of these

Answer: A
43. Long form of periodic table was constructed on the basis of:
a) Mendeleev postulate
b) Atomic number
c) Atomic mass
d) None of these

Answer: B
44. Covalent bond between two different atoms is:
a) Polar
b) Non-polar
c) Ionic
d) None of these

Answer: A
45. How much energy is required to break a chemical bond?
a) 428 KJ
b) 429 KJ
c) 430 KJ
d) 431 KJ

Answer: A
46. Brass is the example of which solution in the following :
a) Liquid in solid
b) Solid in solid
c) Gas in gas
d) Liquid in liquid

Answer: B
47. Which of the following is soluble in corn tetrachloride?
a) Greese
b) Alcohol
c) Sugar
d) Salt

Answer: A
48. Which one of the following will show negligible effect of temperature on its solubility?
a) KCl
b) NaCl
c) PCL
d) AlBr

Answer: B
49. Tyre puncture is an example of.
a) Effusion process
b) Diffusion process
c) Evaporation process
d) Condensation process

Answer: A
50. The constant factor in boyle's law is :
a) Volume
b) Pressure
c) Mole
d) Temperature

Answer: D
51. A man can survive without food for at least
a) 1 Week
b) 1 Month
c) 2 Weeks
d) $1 / 2$ Month

Answer: B
52. Which one of the following is the main culprit in the thinning of Ozone layer in the earth's stratosphere?
a) CO
b) CFCs
c) CFOs
d) HCO

Answer: B
53. Gargling with a solution of table salt is known to provide relief for a sore throat because
$\qquad$ ?
a) It kills bacteria
b) It works as analgesic
C) It dehydrates water from inflammatory tissues by Osmosis
d) None of the above reasons

Answer: C
54. What amount of fats give energy of 93 K Calories?
a) 0.001 Kg
b) 0.002 Kg
c) 0.003 Kg
d) 0.007 Kg

Answer: A
55. When a person enters a dark room from bright light he is not able to see clearly for a little while because the Parasitology
a) Iris is unable to dilate the pupil immediately
b) Iris is able to dilate the pupil immediately
c) Retina is unable to dilate the pupil immediately
d) Retina is unable to dilate the pupil immediately

Answer: A
56. An iceberg is floating in sea. How much of its mass will remain above the surface of water?
a) $1 / 9^{\text {th }}$
b) $1 / 10^{\text {th }}$
c) $1 / 12^{\text {th }}$
d) $1 / 16^{\text {th }}$

Answer: B
57. Detergents dissolved in water help in cleaning clothes by
a) Reducing the vaporization rate of water
b) Reducing the surface tension of water
c) Reducing the density of water
d) Reducing the weight of water

Answer: B
58. The outermost layer of earth atmosphere is?
a) The mesosphere
b) The stratosphere
c) The troposphere
d) The thermosphere

Answer: D
59. Stratosphere extends up to?
a) 12 Km
b) 15 Km
c) 50 Km
d) 80 Km

Answer: C
60. Percentage of sodium chloride in sea water is?
a) 0.02
b) 3.4
c) 97
d) 2

Answer: B

1. Who invented logarithm?
a) Blaise pascal
b) Charles babbage
c) John napier
d) Herman Hollerith Answer: C
2. Which generation of computers used transistor?
a) $1^{\text {st }}$
b) $2^{\text {nd }}$
c) $3^{\text {rd }}$
d) $4^{\text {th }}$

Answer: B
3. In which generation of computer microprocessor was introduced?
a) $1^{\text {st }}$
b) $2^{\text {nd }}$
c) $3^{\text {rd }}$
d) $4^{\text {th }}$

Answer: D
4. Which of the following computer supports thousands of users at the same time?
a) Microcomputer
b) Minicomputer
c) Mainframes
d) Laptops

Answer: D
5. Which of the following is the fastest memory?
a) USB flash drive
b) RAM
c) ROM
d) Cache

Answer: D
6. Which of the following is a volatile memory?
a) RAM
b) ROM
c) USB
d) Hard disk

Answer: A
7. When were IC chips developed?
a) Early 1960s
b) Early 1970 s
c) 1980 s
d) 1990 s

Answer: A
8. Which interface is based on textual input?
a) GUI
b) CLI
c) PLI
d) ALI

Answer: B
9. Which was introduced in 1969?
a) Macintosh
b) Linux
c) Unix
d) Windows

Answer: C
10. Which of the following interface uses window, icon, and menu to interact with computer?
a) GUI
b) CLI
c) MDI
d) DOS

Answer: A
11. Which of the following is open source operating system?
a) UNIX
b) Linux
c) DOS
d) NNA

Answer: B
12. Which of the following user interface is the easiest one to learn \& use?
a) CLI
b) GUI
c) DOS
d) ASS

Answer: B
13. Which of the following software is used for creating professional documents?
a) Spreadsheet
b) Word
c) Typing Master
d) None of these

Answer: B
14. Which of the following tab of word Ribbon contains Clipboard group?
a) Page layout
b) Insert
c) File
d) Home

Answer: D
15. By default how many tabs are there in Word Ribbon?
a) 7
b) 8
c) 9
d) 6

Answer: C
16. What is used for creating decorative effects in Word?
a) Paragraph formatting
b) Text formatting
c) Page formatting
d) Wordart

Answer: D
17. Which of the following tab contains the commands for creating charts in Excel?
a) Home
b) Formulas
c) Insert
d) Data

Answer: C
18. Which of the following shortcut keys are used for pasting selected text?
a) $\mathrm{Ctrl}+\mathrm{C}$
b) $C t r l+X$
c) $\mathrm{Ctrl}+\mathrm{V}$
d) $\mathrm{Ctrl}+\mathrm{P}$

Answer: C
19. Which of the following command is used to apply formatting to one or more cells based on the value of the cell?
a) Data validation
b) Data filtering
c) Conditional formatting
d) Data manipulation

Answer: C
20. Which of the following command in Excel restricts user from entering wrong data in cells of a worksheet?
a) Data validation
b) Data filtering
c) Conditional formatting
d) Data manipulation

Answer: A
21. In which type of data transmission start/stop bits are used?
a) Synchronous Transmission
b) Asynchronous transmission
c) Satellite transmission
d) Microwave transmission

Answer: B
22. In which of the following transmission, the time interval between the characters is always the same?
a) Synchronous Transmission
b) Asynchronous transmission
c) Satellite transmission
d) Microwave transmission

Answer: A
23. Which of the following transmission media used light waves for transmitting information?
a) Coaxial Cable
b) Twisted pair cable
c) Telephone cable
d) Fibre optic cable

Answer: D
24. Which of the following is the used for short distance communication?
a) Radio signals
b) Microwave
c) Infra-red
d) Satellite communication

Answer: C
25. In which of the following impairment, the strength of signal falls off with distance?
a) Distortion
b) Attenuation
c) Cross talk
d) Noise

Answer: B
26. Which of the following impairment refers to undesired signals that enter the path of the transmitted signal due to electromagnetic radiation?
a) Distortion
b) Attenuation
c) Cross talk
d) Noise

Answer: A
27. Which of the following device is used for connecting computers together in wireless local area network?
a) Dial-up Network
b) Router
c) Switch
d) Access point

Answer: C
28. Which of the following device is used for connecting computers together in wired local area network?
a) Dial-up Network
b) Router
c) Switch
d) Access point

Answer: B
29. Which of the following device forwards information from one network to another selecting the best pathway available?
a) Dial-up Network
b) Router
c) Switch
d) Access point

Answer: B
30. What represents the overall data transmission capacity of a computer network?
a) Data rate
b) Bandwidth
c) Signal strength
d) Baud rate

Answer: C
31. Which of the following computer shares resources on a network for others to use?
a) Desktop Computer
b) Client
c) Server
d) Microcomputer

Answer: C
32. Which of the following topology is most expensive to implement?
a) Star
b) Bus
c) Ring
d) Mesh

Answer: D
33. I which of the following network topology, switch is required?
a) Star
b) Bus
c) Ring
d) Mesh

Answer: A
34. Which of the following network is used to provide cable TV \& internet services?
a) LAN
b) WAN
c) MAN
d) PPN

Answer: C
35. Which of the following network topology uses a device called terminator?
a) Ring
b) Mesh
c) Bus
d) Star

Answer: C
36. What is a person who illegally breaks into others computer systems called?
a) Computer Engineer
b) System programmer
c) Hacker
d) Cracker

Answer: C
37. What is a person who uses special tools for breaking into computer systems called?
a) Computer Engineer
b) System programmer
c) Hacker
d) Cracker

Answer: D
38. Which malware spreads automatically in computer networks and replicates itself?
a) Virus
b) Worm
c) Adware
d) Spyware

Answer: B
39. Which of the following malware displays advertisements on the screen?
a) Virus
b) Worm
c) Adware
d) Spyware

Answer: C
40. Which of the following authentication method is used for opening security gates?
a) Username
b) PIN
c) Access Card
d) Biometrics

Answer: C
41. Which of the following authentication method is reliable?
a) Username
b) PIN
c) Access Card
d) Biometrics

Answer: D
42. Which of the following authentication method is based on features of individuals such as face, fingerprint and voice?
a) Username
b) PIN
c) Access Card
d) Biometrics

Answer: D
43. Which of the following authentication method is used to draw cash from ATM?
a) Username
b) PIN
c) Access Card
d) Biometrics

Answer: B
44. What is making illegal copies of copyright software for use on other computers or sale called?
a) Information privacy
b) Intellectual rights
c) Software piracy
d) None of above

Answer: C
45. Which of the following malware gathers information about user activities on computer?
a) Virus
b) Worm
c) Adware
d) Spyware

Answer: D
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b) System programmer
c) Hacker
d) Cracker

Answer: D
51. Which of these parts would interpret a program's instructions to initiate the control operations?
a) Logic unit
b) Control unit
c) Storage unit
d) Input

Answer: D
52. What access method do we use to obtain any record out of a cassette tape?
a) Random
b) Direct
c) Sequential
d) All of the above

Answer: C
53. What is the CPU's section that interprets, selects, and also sees to a program instructions' execution?
a) Register unit
b) Control unit
c) ALU
d) Memory

Answer: B
54. $\qquad$ is a computer that has been designed so that it is as compact as possible.
a) Supercomputer
b) Mini
c) Mainframe
d) Microcomputer

Answer: D
55. Which of these is a general-purpose microcomputer that is single-user and is designed to be operated by just a single person at any given time?
a) M
b) PC
c) KIPS
d) SPC

Answer: B
56. A total of how many bit codes are used for TELEPRINTER machines by Murray code?
a) 25
b) 5
c) 9
d) 4

Answer: B
57. $\qquad$ refers to the datum that would indicate the important state in an input or output content.
a) Sentinel
b) Sequence
c) Sibling
d) SIO

Answer: A
58. Out of the following, which one is still useful if we want to add numbers?
a) UNIVAC
b) Abacus
c) ENIAC
d) EDSAC

Answer: B
59. Which of these is a high-level machine-oriented language for the machines that are of the GEC 4080 series?
a) ALGOL
b) Babbage
c) SNOBOL
d) LOGO

Answer: A
60. Which of these output devices are used for the translation of information from any computer into a pictorial form on the papers?
a) Card punch
b) Touch panel
c) Plotter
d) Mouse

Answer: C

NSO Computer Science

1. Temperature is?
a) Scalar quantity
b) Vector quantity
c) Symbol
d) None of these Answer: A
2. Mole is a
a) Scalar unit
b) Vector unit
c) Scalar quantity
d) Vector quantity

Answer: A
3. Ampere is a
a) Scalar unit
b) Vector unit
c) Scalar quantity
d) Vector quantity

Answer: A
4. Meter per second is a
a) Scalar unit
b) Vector unit
c) Scalar quantity
d) Vector quantity

Answer: B
5. Joule is a
a) Scalar unit
b) Vector unit
c) Scalar quantity
d) Vector quantity

Answer: B
6. Pascal is a
a) Scalar unit
b) Vector unit
c) Scalar quantity
d) Vector quantity

Answer: B
7. Least count of digital stopwatch is?
a) 0.1 s
b) 0.01 s
c) 0.001 s
d) 1 s

Answer: B
8. Least count of mechanical vernier caliper is
a) 0.1 cm
b) 0.01 cm
c) 0.001 cm
d) 0.01 mm

Answer: B
9. Least count of digital screw guage is?
a) 0.1 mm
b) 0.01 mm
c) 0.001 mm
d) 0.1 cm

Answer: C
10. There are $\qquad$ types of values?
a) 1
b) 2
c) 3
d) 4

Answer: B
11. In 15.6 cm , the exact value is?
a) 15
b) 0.6
c) 7.8
d) None of these

Answer: A
12. Number of significant figures in 0.00302 are
a) 2
b) 3
c) 4
d) 5

Answer: B
13. A toy car is moving in a circular track, guess the type of motion?
a) Rotatory motion
b) Circular motion
c) Spinning motion
d) Zig-zag motion

Answer: B
14. Movement of wheel in a car is?
a) Rotatory motion
b) Circular motion
c) Vibratory motion
d) None of these

Answer: A
15. Shanghal's Maglev, the fastest train, travelled a distance of 30 Km in 7 minutes and 30 seconds, can you guess the speed in km/h?
a) 66.7
b) 54.9
c) 34.4
d) 87.6

Answer: A
16. Cheetah can accelerate its speed from zero to $26.8 \mathrm{~m} / \mathrm{s}$ in just three seconds. Suppose the cheetah has started running towards west, guess the acceleration?
a) 9.93
b) 8.93
c) 7.78
d) Zero acceleration

Answer: A
17. Porsche 911 Turbo $S$ (992) can accelerate its speed from 0 to $27.7 \mathrm{~m} / \mathrm{s}$ in just 2.6 s . how much distance will the same car travel in the first 5 seconds of its motion?
a) 133.125 m
b) 166.302 m
c) 99.8 m
d) 106 m

Answer: A
18. A ball is dropped from the top of Burj Khalifa. It took 13 seconds to touch the ground. Guess the height of Burj Khalifa?
a) 126 m
b) 456 m
c) 826 m
d) 1026 m

Answer: C
19. Kinza throws a tennis ball upward in air with a speed of $25 \mathrm{~m} / \mathrm{s}$ to reach the building's top. Guess the height of building?
a) 31.89 m
b) 32 m
c) 45.5 m
d) 90 m

Answer: A
20. Acceleration is a
a) Scalar quantity
b) Vector quantity
c) Scalar unit
d) Vector unit

Answer: B
21. If the same engine is installed in a bus and a car that applies a force of 3000 N . What acceleration will this engine produce in a car of mass 12000 Kg ?
a) 2.5
b) 0.25
c) 25
d) 0.025

Answer: B
22. The mass of Rumaisa Jamshaid is 50 kg . How much will she weight on the surface of earth?
a) 490 N
b) 1240 N
c) 1390 N
d) 560 N

Answer: A
23. The mass of Fatima Adeel is 50 kg . How much will she weight on the surface of Saturn if $\mathrm{g}=24.8$ meter per second square?
a) 490 N
b) 1240 N
c) 1390 N
d) 560 N

Answer: B
24. The direction of Tension is always towards the?
a) Ground
b) Support
c) Force
d) Flat

Answer: B
25. An elevator in Centaurus mall is taking a mass of 1500 Kg and the counterweight is 1300 kg . Guess the acceleration of elevator.
a) 0.5
b) 0.6
c) 0.7
d) 0.8

Answer: C
26. An elevator in Centaurus mall is taking a mass of 1500 Kg and the counterweight is 1300 kg . Guess the tension in the cable.
a) 14000
b) 13650
c) 12450
d) 11990

Answer: B
27. Which quantity is measure of inertia of a body?
a) Mass
b) Force
c) Weight
d) Friction

Answer: A
28. Change in momentum of a body is equal to?
a) FxL
b) Fxt
c) FxI
d) Fxa

Answer: B
29. A block of mass 10 Kg is hanging by a string, how much tension is produced in string?
a) 10 N
b) 100 N
c) 1 N
d) 50 N

Answer: B
30. A force of 90 N is applied at an angle of 60 degree with x -axis for pulling out a dead tree. Guess the horizontal component of this force?
a) 25 N
b) 35 N
c) 45 N
d) 75 N

Answer: C
31. A force of 90 N is applied at an angle of 60 degree with x -axis for pulling out a dead tree. Guess the vertical component of this force?
a) 25 N
b) 35 N
c) 45 N
d) 78 N

Answer: D
32. Torque is the product of
a) $\mathrm{F} \& \mathrm{~d}$
b) $\mathrm{F} \& \mathrm{I}$
c) $\mathrm{F} \& \mathrm{t}$
d) $\mathrm{F} \& \mathrm{a}$

Answer: A
33. Conventionally, anticlockwise torque is taken as?
a) Positive
b) Negative
c) Integer
d) None of these

Answer: A
34. Couple always produce
a) Translational motion
b) Rotational motion
c) Circular motion
d) Vibratory motion Answer: B
35. Couple does not result
a) Translational motion
b) Rotational motion
c) Random motion
d) Vibratory motion

Answer: A
36. A body in equilibrium must not have?
a) Speed
b) Quantity of motion
c) Velocity
d) Acceleration

Answer: D
37. A force of 10 N is acting along y -axis, what is its horizontal component?
a) 10 N
b) 0
c) 5 N
d) 15 N

Answer: B
38. What will be the value of g in centimeter/second square at 3590 Km where communication satellites orbit around the earth above its surface?
a) 20.5
b) 21.4
c) 22.4
d) 25.49

Answer: C
39. A communication satellite orbits the earth at 35900 km above sea level. Guess how fast will the orbiting satellite travel to maintain a circular orbit in $\mathrm{km} / \mathrm{s}$ ?
a) 3.11
b) 3.01
c) 3.07
d) 3.44

Answer: C
40. Guess the amount of energy released according to mass energy equivalence when 1 g of mass is completely converted to energy.
a) 70 TJ
b) 80 TJ
c) 90 TJ
d) 100 TJ

Answer: C
41. Guess the efficiency of petrol engine in-takes 500J of fuel energy and does only 100 J of useful work?
a) $20 \%$
b) $25 \%$
c) $30 \%$
d) $35 \%$

Answer: B
42. Efficiency of wind generator is?
a) $50 \%$
b) $55 \%$
c) $60 \%$
d) $65 \%$

Answer: B
43. Efficiency of hydroelectric power plant is?
a) $80 \%$
b) $85 \%$
c) $90 \%$
d) $95 \%$

Answer: D
44. Efficiency of fluorescent light is?
a) $15 \%$
b) $20 \%$
c) $25 \%$
d) $30 \%$

Answer: B
45. $1 \mathrm{hp}=$ ?
a) 745 W
b) 746 W
c) 749 W
d) 748 W

Answer: B
46. Which of the following is the best conductor?
a) Aluminum
b) Wood
c) Plastic
d) Copper

Answer: D
47. The surface tension of a liquid $\qquad$ due to increase in temperature :
a) Decrease
b) Increase
c) Constant
d) Half

Answer: A
48. Which of following material have largest young's modulus:
a) Wood
b) Rubber
c) Aluminum
d) Steel

Answer: D
49. What should be the approximate length of a glass tube to construct a water barometer?
a) 50 cm
b) 1000 cm
c) 1100 cm
d) 250 cm

Answer: C
50. According to the law of heat exchange the heat absorbed by cold bodies and heat released by hot bodies is?
a) Different
b) Same
c) Large
d) Small

Answer: B
51. The specific heat of iron in joules per kilogram kelvin is:
a) 387
b) 920
c) 470
d) 530

Answer: C
52. The materials which take longer time to cool or heat have specific heat capacity?
a) Less
b) High
c) Equal
d) None of these

Answer: B
53. Land breeze is an example of
a) Conduction
b) Convection Currents
c) Radiation
d) None of these

Answer: B
54. Land breeze blows from:
a) Land to sea during night
b) Sea to land during night
c) Land to sea during day
d) Sea to land during day

Answer: A
55. The mass of a body on surface of earth is 6.4 kg weight of body at the surface of moon is :
a) 64 N
b) 10.24 N
c) 9.8 N
d) 16 N

Answer: B
56. Value of ' $g$ ' increases with the:
a) Increase in the mass of body
b) Increase in altitude
c) Decrease in altitude
d) None of these

Answer: A
57. In Einstein's mass-energy equation, c is the.
a) Speed of sound
b) Speed of earth
c) Speed of light
d) Speed of sun

Answer: C
58. If velocity of a body is halved then its K.E will:
a) Become $1 / 4^{\text {th }}$
b) Remain constant
c) Become 4 times
d) Become half

Answer: A
59. If the velocity of a body become a three times greater, then kinetic energy will be
a) 3 times
b) 6 times
c) 9 times
d) 12 times

Answer: C
60. Electrical power generated in some wind farms of America has value greater than:
a) 1300 MV
b) 18000 MV
c) 1300 GV
d) 800 KV

Answer: A


NATIONAL MATHEMATICS OLYMPIAD PHASE-I

PAST PAPERS

GRADE 4-12 \& BACHELORS

1. The smallest 6 -digit number is?
a) 111111
b) 100000
c) 101010
d) 111000

Answer(b)
2. The comparison of numbers always starts from the?
a) Right
b) Left
c) Last
d) Above

Answer (b)
3. Ayesha has Rs. 23,456 . Her grandmother gave her Rs. 13,131 more. Now she has Rs. ?
a) 34567
b) 36564
c) 34564
d) 38900

Answer (a)
4. If the price of one book is Rs. 250 , then the price of 22 books will be?
a) Rs. 5555
b) Rs. 5550
c) Rs. 5500
d) Rs. 5000 Answer (c)
5. The first common multiple of $5 \& 10$ is?
a) 5
b) 10
c) 20
d) 50

Answer( b)
6. Adeel uses 9.8 ml of oil to bake a cake. How much oil will she use to bake 10 such cakes?
a) 980 ml
b) 98 ml
c) 9.80 ml
d) None of thses

Answer(b)
7. To add the decimals, always $\qquad$ ones in ones, tenths in tenths \& hundredths in hundreths.
a) Add
b) Subtract
c) Multiply
d) Divide

Answer (a)
8. Harini buys 140 cm of ribbon to wrap a gift box. Convert the length into mm .
a) 1200 mm
b) 1300 mm
c) 1400 mm
d) 1500 mm

Answer(c)
9. A shopkeeper sells 49 Kg 208 g of sugar $\& 65 \mathrm{Kg} 750 \mathrm{~g}$ of flour. What is the total quantity of sugar \& flour in grams?
a) 114 Kg 958 g
b) 116 kg 900 g
c) 118 Kg 950 kg
d) None of these

Answer(a)
10. A point is an $\qquad$ location in space.
a) Exact
b) Vertical
c) Horizontal
d) Curved

Answer (a)
11. A flag is always parallel to ground?
a) False
b) True
c) Lateral
d) None of the above Answer (a)
12. The flag post is always $\qquad$ to the ground.
a) Perpendicular
b) Parallel
c) Curved
d) Both a \& c

Answer (a)
13. $12 \mathrm{~min} 12 \mathrm{sec}=$
a) 730 sec
b) 732 sec
c) 832 sec
d) 932 sec

Answer (b)
14. In the 12 hours format, 13:50 can be written as:
a) 1:50am
b) $3: 50 \mathrm{am}$
c) $1: 50 \mathrm{pm}$
d) $3: 50 \mathrm{pm}$

Answer (C)
15. The length of all the radial segments in a circle is?
a) Same
b) Different
c) Opposite
d) Vertical

Answer (a)
16. A bus has a capacity of 75 passengers. How many buses would be needed for carrying 1575 passengers?
a) 20
b) 21
c) 22
d) 23

Answer (b)
17. Ali has 1867 lego blocks. His sister gives him 4 more boxes of lego blocks. There are 1205 lego blocks in one box. How many lego blocks does Ali have in total?
a) 6686
b) 6687
c) 6688
d) 6689

Answer(b)
18. There are 4500 plants in 90 rows. Each row contains an equal number of plants. In one row, there are plants?
a) 30
b) 40
c) 50
d) 60

Answer( C)
19. By dividing 3960 by 88 , wi will get?
a) 41
b) 42
c) 43
d) None of these

Answer (d)
20. Find the next term in the pattern: $6,18,42$ ?
a) 48
b) 54
c) 60
d) 66

Answer (b)
21. The next term in $88,78,68$, is?
a) 48
b) 58
c) 68
d) 98

Answer (b)
22. Find the next term, $2,10,18$, ?
a) 24
b) 26
c) 28
d) 30
Answer (b)
23. Find the next term $95,84,73$ ?
a) 58
b) 62
c) 106
d) 108

Answer (b)
24. $5.9 \times 100=$
a) 59
b) 590
c) 5900
d) .059

Answer (b)
25. $2.700 \times 10=$
a) 27
b) 270
c) 2700
d) 27000

Answer (a)
26. Ali uses 2.5 m of cloth to make a shirt. How much cloth will be used to make 8 such shirts?
a) 15 m
b) 20 m
c) 25 m
d) 16 m

Answer(b)
27. Rumaisa solves 5 questions of math in 8.5 min. How long does he take to solve 2 questions?
a) 1.7 min
b) 2.4 min
c) 3.4 min
d) 4.4 min Answer (c)
28. The mass of 4 boxes is 1.8 Kg . What will be the mass of 3 boxes?
a) 1.25
b) 1.35
c) 1.45
d) 0.45

Answer(b)
29. The length of 08 rods is 72 m . What will be the length of $7^{\text {th }}$ of rod?
a) 5 m
b) 7 m
c) 9 m
d) 11 m

Answer (c)
30. Ali runs 3 Km in one hour having weight 90 Kg . Shafqat runs 3 Km in one hour having weight 50 Kg . Kinza says, Ali runs 30 Km in 10 hours.
a) True
b) False
c) Both a \& b
d) None of these

Answer (a)
31. $13 \mathrm{~m} 48 \mathrm{~cm}=$
a) 1338 cm
b) 1348 cm
c) 1358 cm
d) 1348 mm

Answer (b)
32. Arranging numbers in sequences is called?
a) Pattern
b) Conjugate
c) Whole numbers
d) Both $a \& b$

Answer (a)
33. $56 \mathrm{~cm} 8 \mathrm{~mm}=$
a) 568 m
b) 568 cm
c) 568 mm
d) 568 km

Answer(c)
34. $1 \mathrm{~kg}=$
a) 1000 g
b) 100 g
c) 10 g
d) 100 km Answer ( a)
35. 9/4 of 36=
a) 79
b) 80
c) 81
d) 82 Answer (c)
36. 20/60=
a) $1 / 3$
b) $1 / 4$
c) $1 / 5$
d) $1 / 6$ Answer (a)
37. $1 / 12$ of $48=$
a) 3
b) 4
c) 5
d) 6

Answer (b)
38. $6 / 7$ of $42=$
a) 42
b) 36
c) 38
d) 64

Answer (b)
39. How many 10 s are in 6 of $1 / 10$ ?
a) 41
b) 51
c) 61
d) 71

## Answer (c)

40. $30 / 45=$
a) $1 / 3$
b) $2 / 3$
c) $4 / 3$
d) $4 / 5$

Answer (b)
41. $2 / 4$ of $80 \mathrm{Kg}=$
a) 40
b) 60
c) 80
d) 100

Answer (a)
42. $12 / 13$ of $26=$
a) 24
b) 25
c) 26
d) 28

```
Answer (a)
```

43. How many 9 s are in 7 of $1 / 9$ ?
a) 64
b) 65
c) 66
d) 68

Answer (a)
44. 80/120=
a) $1 / 3$
b) $2 / 3$
c) $1 / 4$
d) $3 / 4$
Answer (b)
45. $6 / 24$ of $24=$
a) 5
b) 6
c) 7
d) 8
Answer (b)
46. 16 of $5 / 9=$
a) 54
b) 55
c) 56
d) 57

```
Answer (b)
```

47. $18 / 60=$
a) $1 / 10$
b) $2 / 10$
c) $3 / 10$
d) $7 / 10$

Answer (c)
48. $6 / 10$ of $60=$
a) 24
b) 36
c) 42
d) 48

Answer (b)
49. Reciprocal of $9 / 46$ is?
a) $46 / 9$
b) $36 / 9$
c) 9
d) 46

Answer (a)
50. $1 / 12$ of $48=$
a) 3
b) 4
c) 5
d) 6

Answer (b)
51. A circle has $\qquad$ lines of symmetry.
a) Finite
b) Infinite
c) Zero
d) None

Answer (b)
52. It is possible all figure fold.
a) No
b) Yes
c) May be
d) None

Answer (a)
53. 15 is the factor of?
a) 224
b) 115
c) 114
d) 225

Answer (d)
54. Every number is a multiple of?
a) 1
b) 2
c) 3
d) 4

Answer (a)
55. 16 is multiple of?
a) 4
b) 6
c) 7
d) 5

Answer(a)
56. H.C.F of 16 \& 36 is?
a) 4
b) 8
c) 12
d) 16

Answer(a)
57. If sum of its digits is divisible by 9. A number is divisible by
a) 7
b) 9
c) 11
d) 13

Answer( b)
58. $4^{\text {th }}$ multiple of $9+6^{\text {th }}$ multiple of 2 is?
a) 46
b) 47
c) 48
d) 49

Answer( c )
59. $10^{\text {th }}$ multiple of $10+5^{\text {th }}$ multiple of 5 is?
a) 125
b) 126
c) 127
d) 128

Answer(a)
60. H.C.F of $10,14,18=$
a) 2
b) 3
c) 4
d) 5

Answer (a)

1. The comparison of numbers always starts from the?
a) Right
b) Left
c) Last
d) Above

Answer (b)
2. Find the next term in the pattern: $6,18,42$ ?
a) 48
b) 54
c) 60
d) 66

```
Answer (b)
```

3. The next term in $88,78,68$, is?
a) 48
b) 58
c) 68
d) 98

Answer (b)
4. Find the next term, $2,10,18$, ?
a) 24
b) 26
c) 28
d) 30 Answer (b)
5. Find the next term $95,84,73$ ?
a) 58
b) 62
c) 106
d) 108 Answer (b)
6. How many 10 s are in 6 of $1 / 10$ ?
a) 41
b) 51
c) 61
d) 71

Answer (c)
7. $30 / 45=$
a) $1 / 3$
b) $2 / 3$
c) $4 / 3$
d) $4 / 5$

Answer (b)
8. $2 / 4$ of $80 \mathrm{Kg}=$
a) 40
b) 60
c) 80
d) 100

Answer ( a)
9. $12 / 13$ of $26=$
a) 24
b) 25
c) 26
d) 28

Answer (a)
10. How many 9 s are in 7 of $1 / 9$ ?
a) 64
b) 65
c) 66
d) 68

## Answer (a)

11. $80 / 120=$
a) $1 / 3$
b) $2 / 3$
c) $1 / 4$
d) $3 / 4$ Answer (b)
12. $6 / 24$ of $24=$
a) 5
b) 6
c) 7
d) 8

Answer (b)
13. 16 of $5 / 9=$
a) 54
b) 55
c) 56
d) 57

Answer (b)
14. $18 / 60=$
a) $1 / 10$
b) $2 / 10$
c) $3 / 10$
d) $7 / 10$

15. $6 / 10$ of $60=$
a) 24
b) 36
c) 42
d) 48

Answer (b)
16. What number must be multiplied by 384 to get 28032 ?
a) 72
b) 73
c) 74
d) 75

Answer (b)
17. Asim wrote 300508 instead of writing 358 . How much is 300508 greater than 358 ?
a) 300150
b) 300151
c) 300152
d) 300153

Answer (a)
18. $(8-3 \times 2)+(5+2-1)-4=$
a) 2
b) 3
c) 4
d) 5 Answer (c)
19. $200+56 /(190-83)-50=$
a) 61
b) 62
c) 63
d) 64

Answer (d)
20. We start addition \& subtraction with?
a) One
b) Two
c) Hundreds
d) Thousands

Answer (a)
21. The number to be subtracted is known as
a) Minuend
b) Difference
c) Addend
d) Subtrahend

Answer(d)
22. H.C.F of $117,234,156$ is?
a) 36
b) 37
c) 38
d) 39

Answer (d)
23. H.C.F of $52,65,91$ is?
a) 12
b) 13
c) 14
d) 15

Answer (b)
24. H.C.F of $126,196,238$ is?
a) 12
b) 13
c) 14
d) 15

Answer(c)
25. The least common multiple of $4,8 \& 12$ is?
a) 4
b) 8
c) 12
d) 24

Answer(d)
26. Fatima travelled 12 Km by road $\& 20 \mathrm{Km}, 50000 \mathrm{~cm}$ by train. Find the total distance?
a) 32.5 Km
b) 33.5 Km
c) 34.5 Km
d) 35.5 Km

Answer (a)
27. To convert seconds into hours, we divide its value by?
a) 1000
b) 100
c) 3600
d) 60

Answer (c)
28. How many millimeters are there in 1 Km
a) 1000000 mm
b) 10000000 mm
c) 100000 mm
d) 1000000 mm

Answer (a)
29. A man leaves his office at 11:10am. He arrives at home after 3.5 hours. At what time he reaches his home.
a) $2: 40 \mathrm{pm}$
b) $3: 40 \mathrm{pm}$
c) $4: 40 \mathrm{pm}$
d) $5: 50 \mathrm{pm}$

Answer (a)
30. Zain solved 15 questions in 75 min . How much time is taken by him to solve $13^{\text {th }}$ question at the same rate?
a) 2 min
b) 3 min
c) 4 min
d) 5 min

Answer (d)
31. 6 pumps fill a water tank in 2 hours. How long it will take to fill the same tank if 2 pumps are out of order?
a) 2 hours
b) 3 hours
c) 4 hours
d) 5 hours

Answer (b)
32. If 12 painters can paint a building in 08 days. In how many days will 16 painters can paint that building?
a) 5
b) 6
c) 7
d) 8

Answer(b)
33. A cyclist travelled 10 Km distance in one hour. Find the distance travelled by him in 2.5 hours?
a) 20 Km
b) 35 Km
c) 30 Km
d) 25 Km

Answer (d)
34. Kinza Batool can solve 10 problems in an hour. How many questions she can solve in 4 hours?
a) 2.5
b) 10
c) 20
d) 40

Answer (d)
35. In which triangle, all sides are different?
a) Scalene
b) Isosceles
c) Equilateral
d) Acute Angled

Answer (a)
36. Length \& width of a rectangular ground are $100 \mathrm{~m} \& 60 \mathrm{~m}$. Calculate the distance covered along the boundary by an athlete in 5 rounds?
a) 1400 m
b) 1500 m
c) 1600 m
d) 1700 m

Answer (c)
37. Perimeter of rectangular garden is 800 m . The length of garden is 300 m . Guess the width of garden?
a) 10 m
b) 25 m
c) 50 m
d) 100 m

Answer (d)
38. The heights of six girls are $120 \mathrm{~cm}, 124 \mathrm{~cm}, ~ ` 123 \mathrm{~cm}, 130 \mathrm{~cm}, 129 \mathrm{~cm} \& 130 \mathrm{~cm}$. Guess their average height?
a) 124 cm
b) 125 cm
c) 126 cm
d) 127 cm

Answer (c)
39. The monthly income of four men is Rs. 20000. What will be total yearly income?
a) Rs 80000
b) Rs 920000
c) Rs 960000
d) Rs 1080000

Answer (c)
40. Average of 10 values is 200 . Sum of nine of them is 1850 . Guess $10^{\text {th }}$ value?
a) 120
b) 130
c) 140
d) 150

Answer (d)
41. The average score made by Inzamam in 20 innings is 55 . The score of his $20^{\text {th }}$ innings is 36 . Find his average score of first 19innings.
a) 56
b) 57
c) 58
d) 59

Answer (a)
42. If average of two values is $4 \&$ one value is 6 , then what is the other value?
a) 8
b) 6
c) 4
d) 2

Answer (d)
43. Ayesha has Rs. 23,456 . Her grandmother gave her Rs. 13,131 more. Now she has Rs. ?
a) 34567
b) 36564
c) 34564
d) 38900

Answer (a)
44. If the price of one book is Rs. 250 , then the price of 22 books will be?
a) Rs. 5555
b) Rs. 5550
c) Rs. 5500
d) Rs. 5000

Answer (c)
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c) 20
d) 50

Answer( b)
46. Adeel uses 9.8 ml of oil to bake a cake. How much oil will she use to bake 10 such cakes?
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b) 98 ml
c) 9.80 ml
d) None of thses

Answer(b)
47. To add the decimals, always $\qquad$ ones in ones, tenths in tenths \& hundredths in hundreths.
a) Add
b) Subtract
c) Multiply
d) Divide

Answer (a)
48. Harini buys 140 cm of ribbon to wrap a gift box. Convert the length into mm .
a) 1200 mm
b) 1300 mm
c) 1400 mm
d) 1500 mm

Answer(c)
49. A shopkeeper sells 49 Kg 208 g of sugar $\& 65 \mathrm{Kg} 750 \mathrm{~g}$ of flour. What is the total quantity of sugar \& flour in grams?
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b) 116 kg 900 g
c) 118 Kg 950 kg
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Answer(a)
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a) Exact
b) Vertical
c) Horizontal
d) Curved

Answer (a)
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b) True
c) Lateral
d) None of the above Answer (a)
52. The flag post is always $\qquad$ to the ground.
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b) Parallel
c) Curved
d) Both a \& c

Answer (a)
53. $12 \mathrm{~min} 12 \mathrm{sec}=$
a) 730 sec
b) 732 sec
c) 832 sec
d) 932 sec

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54. In the 12 hours format, 13:50 can be written as:
a) 1:50am
b) 3:50am
c) $1: 50 \mathrm{pm}$
d) $3: 50 \mathrm{pm}$
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b) 21
c) 22
d) 23

Answer (b)
56. Ali has 1867 lego blocks. His sister gives him 4 more boxes of lego blocks. There are 1205 lego blocks in one box. How many lego blocks does Ali have in total?
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b) 6687
c) 6688
d) 6689

Answer(b)
57. There are 4500 plants in 90 rows. Each row contains an equal number of plants. In one row, there are plants?
a) 30
b) 40
c) 50
d) 60

Answer( C)
58. By dividing 3960 by 88 , wi will get?
a) 41
b) 42
c) 43
d) None of these

Answer (d)
59. Unit of area is?
a) $M^{2}$
b) Cm
c) Mm
d) Km

Answer ( a)
60. A rhombus has $\qquad$ sides?
a) 4
b) 5
c) 8
d) 12

Answer (a)

1. $0+(-10)=$
a) 10
b) -10
c) 0
d) -0

> Answer (b)
2. $(-40)+(-50)+60=$
a) 25
b) -25
c) 30
d) -30

Answer (d)
3. $17+8-3 \times 2=$
a) 13
b) 15
c) 17
d) 19

Answer (d)
4. Rumaisa earns Rs. 2500 in 5 days. What is her pay for 03 days?
a) 1000
b) 1500
c) 2000
d) 2500

Answer (b)
5. A car uses 20 ltr of petrol to travel 170 Km . How far can it travel if it has only 16 liters of petrol?
a) 132 Km
b) 134 Km
c) 136 Km
d) 138 Km

Answer (c)
6. If $A=S t u d e n t s$ in your class of age 5 years is a/an set?
a) Empty
b) Singleton
c) Infinite
d) Universal

Answer( a)
7. Set of natural numbers between $1 \& 3$ is set?
a) Empty
b) Singleton
c) Infinite
d) Universal

Answer (b)
8. The co-efficient of $x y$ in $3 x-9 x y+6 y z$ is?
a) 3
b) 6
c) 9
d) -9

Answer (d)
9. $2,4,7,11, \ldots, 7^{\text {th }}$ term is?
a) 29
b) 28
c) 27
d) 26

Answer (a)
10. If 3 times a number is added to 18 , it becomes 36 . What is number?
a) 4
b) 5
c) 6
d) 7

Answer (c)
11. Kinza is 3 times as old as his son. Their combined age is 40 years. What are their ages?
a) 10,30
b) 12,36
c) 13,39
d) 14,52

Answer (a)
12. In a linear equation, the exponent of the variable is?
a) 1
b) 2
c) 3
d) 0

Answer( a)
13. Can you guess a number, divide it by 6 , then subtract 4 . The result is 0 ?
a) 20
b) 24
c) 28
d) 32

Answer (b)
14. One angle in the supplementary angles is the twice of other. Guess the both angles?
a) 20 degree $\& 40$ degree
b) 40 degree $\& 80$ degree
c) 60 degree $\& 120$ degree
d) 80 degree $\& 160$ degree

Answer (c)
15. If alternate angles are equal then lines are?
a) Parallel
b) Intersecting
c) Perpendicular
d) None of these

Answer (a)
16. Two vertical angles are $3 x-3 \& 36$ degree. What is the value of $x$ ?
a) 12
b) 13
c) 14
d) 15

Answer (b)
17. The number of lines of symmetry for a regular polygon is equal to?
a) Exterior angle
b) Number of sides
c) Number of diagonals
d) Sum of interior angles

Answer (b)
18. How many lines of symmetry can be drawn in a circle?
a) 0
b) 2
c) 3
d) Infinite

Answer (d)
19. $X, 2 x, 3 x$ are angles of a triangle. The value of $x$ ?
a) 30
b) 40
c) 60
d) 90

Answer (a)
20. Perimeter of a rectangular garden is 25 m . Its length is 7.5 m more than its width. Guess the area of garden in $\mathrm{m}^{2}$ ?
a) 20
b) 25
c) 30
d) 35

Answer (b)
21. Area of a parallelogram is $48 \mathrm{~m}^{2}$. Guess the height of the parallelogram in cms if its base is 12 m .
a) 200 cm
b) 400 cm
c) 600 cm
d) 100 cm

## Answer (b)

22. Area of rhombus shaped field is $72 \mathrm{~m}^{2}$. Its height is 6 m . Guess the cost of the barbed wire around it at the rate of Rs. $15 / \mathrm{m}$, if height of rhombus is 6 m .
a) Rs. 720
b) Rs. 820
c) Rs. 920
d) Rs. 1020

Answer( a )
23. Perimeter of an equilateral triangle is 21 cm . Its height is 6 cm . Guess area of traiangle in $\mathrm{cm}^{2}$ ?
a) 20
b) 21
c) 22
d) 23

Answer (b)
24. Volume of a rectangular wooden box is $2500 \mathrm{~m}^{3}$. It is 25 m long $\& 5 \mathrm{~m}$ high. Guess its width?
a) 15 m
b) 20 m
c) 25 m
d) 30 m

Answer (b)
25. How many times do the area of a square increase when the length of its side is doubled?
a) $2 x$
b) $4 x$
c) $8 x$
d) $16 x$

Answer (b)
26. The number of faces in cube?
a) 6
b) 8
c) 12
d) 4

Answer (a)
27. The median of the data $2,3,3,4,5,5,5$, is?
a) 3
b) 4
c) 2
d) 5

Answer (b)
28. Probability of getting a head in flipping a coin is?
a) 1
b) 0
c) $1 / 2$
d) $1 / 6$

Answer (c)
29. The probability of equally likely events is?
a) Equal
b) Unequal
c) Zero
d) One Answer (a)
30. Find the next term in the pattern: $6,18,42$ ?
a) 48
b) 54
c) 60
d) 66

Answer (b)
31. The next term in $88,78,68$, is?
a) 48
b) 58
c) 68
d) 98

Answer (b)
32. Find the next term, $2,10,18$, ?
a) 24
b) 26
c) 28
d) 30

Answer (b)
33. Find the next term $95,84,73$ ?
a) 58
b) 62
c) 106
d) 108

Answer (b)
34. How many 10 s are in 6 of $1 / 10$ ?
a) 41
b) 51
c) 61
d) 71

Answer (c)
35. 30/45=
a) $1 / 3$
b) $2 / 3$
c) $4 / 3$

Class $6{ }^{\text {th }}$ Paper
d) $4 / 5$

Answer (b)
36. $2 / 4$ of $80 \mathrm{Kg}=$
a) 40
b) 60
c) 80
d) 100

Answer ( a)
37. $12 / 13$ of $26=$
a) 24
b) 25
c) 26
d) 28

Answer (a)
38. How many 9 s are in 7 of $1 / 9$ ?
a) 64
b) 65
c) 66
d) 68

Answer (a)
39. $80 / 120=$
a) $1 / 3$
b) $2 / 3$
c) $1 / 4$
d) $3 / 4$

Answer (b)
40. $6 / 24$ of $24=$
a) 5
b) 6
c) 7
d) 8

Answer (b)
41. 16 of $5 / 9=$
a) 54
b) 55
c) 56
d) 57

Answer (b)
42. $18 / 60=$
a) $1 / 10$
b) $2 / 10$
c) $3 / 10$
d) $7 / 10$

Answer (c)
43. $6 / 10$ of $60=$
a) 24
b) 36
c) 42
d) 48

Answer (b)
44. What number must be multiplied by 384 to get 28032 ?
a) 72
b) 73
c) 74
d) 75

Answer (b)
45. Asim wrote 300508 instead of writing 358 . How much is 300508 greater than 358 ?
a) 300150
b) 300151
c) 300152
d) 300153

Answer (a)
46. $(8-3 \times 2)+(5+2-1)-4=$
a) 2
b) 3
c) 4
d) 5

Answer (c)
47. $200+56 /(190-83)-50=$
a) 61
b) 62
c) 63
d) 64

Answer (d)
48. We start addition \& subtraction with?
a) One
b) Two
c) Hundreds
d) Thousands

Answer (a)
49. The number to be subtracted is known as
a) Minuend
b) Difference
c) Addend
d) Subtrahend

Answer(d)
50. H.C.F of $117,234,156$ is?
a) 36
b) 37
c) 38
d) 39

Answer (d)
51. H.C.F of $52,65,91$ is?
a) 12
b) 13
c) 14
d) 15

Answer (b)
52. H.C.F of $126,196,238$ is?
a) 12
b) 13
c) 14
d) 15

Answer(c)
53. The least common multiple of $4,8 \& 12$ is?
a) 4
b) 8
c) 12
d) 24

Answer(d)
54. Fatima travelled 12 Km by road $\& 20 \mathrm{Km}, 50000 \mathrm{~cm}$ by train. Find the total distance?
a) 32.5 Km
b) 33.5 Km
c) 34.5 Km
d) 35.5 Km

Answer (a)
55. To convert seconds into hours, we divide its value by?
a) 1000
b) 100
c) 3600
d) 60

Answer (c)
56. How many millimeters are there in 1 Km
a) 1000000 mm
b) 10000000 mm
c) 100000 mm
d) 1000000 mm

Answer (a)
57. Length $\&$ width of a rectangular ground are $100 \mathrm{~m} \& 60 \mathrm{~m}$. Calculate the distance covered along the boundary by an athlete in 5 rounds?
a) 1400 m
b) 1500 m
c) 1600 m
d) 1700 m

Answer (c)
58. Perimeter of rectangular garden is 800 m . The length of garden is 300 m . Guess the width of garden?
a) 10 m
b) 25 m
c) 50 m
d) 100 m

Answer (d)
59. The heights of six girls are $120 \mathrm{~cm}, 124 \mathrm{~cm}, ~ ` 123 \mathrm{~cm}, 130 \mathrm{~cm}, 129 \mathrm{~cm} \& 130 \mathrm{~cm}$. Guess their average height?
a) 124 cm
b) 125 cm
c) 126 cm
d) 127 cm

Answer (c)
60. The monthly income of four men is Rs. 20000. What will be total yearly income?
a) Rs 80000
b) Rs 920000
c) Rs 960000
d) Rs 1080000 Answer (c)

1. $a+b=b+a$
a) Commutative property
b) Associative property
c) Distributive property
d) Inverse property Answer (a)
2. Multiplicative inverse of $4 / 7$ is?
a) $4 / 6$
b) $2 / 4$
c) $7 / 4$
d) $7 / 7$

Answer (c)
3. Five eight of students at a college live in hostels. If 6000 students live in hostels, how many students are there in college?
a) 9400
b) 9500
c) 9600
d) 9800

Answer (c)
4. $1 / 2(-6)(-3)=$
a) 4.5
b) -9
c) 9
d) -4.5

Answer (c)
5. A prime number when added to 101 gives an odd prime number. Guess the number?
a) 2
b) 3
c) 4
d) 5

Answer (a)
6. Square root of 1089 is?
a) 31
b) 33
c) 35
d) 37

Answer (b)
7. Square root of 9801 is?
a) 99
b) 101
c) 103
d) 95

Answer (a)
8. Square root of 2116 is?
a) 44
b) 46
c) 48
d) 42

Answer (b)
9. Square root of 4356 is?
a) 46
b) 56
c) 66
d) 78

Answer (c)
10. Area of a square field is $2500 \mathrm{~m}^{2}$. Guess the perimeter of square field?
a) 100 m
b) 200 m
c) 300 m
d) 50 m

Answer (b)
11. Let 5 liters of paint will cover $16 \mathrm{~m}^{2} \&$ Rehman is painting a square pattern, what is the length of square the paint will cover?
a) $2 m$
b) $4 m$
c) 6 m
d) 12 m

Answer (b)
12. Length of rectangular region is double of its width. Guess perimeter if its area is $128 \mathrm{~cm}^{2}$.
a) 18 cm
b) 28 cm
c) 38 cm
d) 48 cm

Answer (d)
13. A composite number has?
a) 1 factor
b) 2 factors
c) More than 2 factors
d) None of these

Answer (c)
14. Twin primes differ by?
a) 1
b) 2
c) 3
d) 4

Answer (b)
15. The monthly rent of a stall is decreased in the ratio 5:6. As a result, the stall holder saves Rs. 4000 a month. Guess the original rent?
a) 12000
b) 14000
c) 22000
d) 24000

Answer (d)
16. A picture measuring 8.5 cm by 5.5 cm is enlarged in the ratio $7: 5$. Guess the dimensions of the new picture?
a) $11.9 \mathrm{~cm}, 7.7 \mathrm{~cm}$
b) $12 \mathrm{~cm}, 8 \mathrm{~cm}$
c) $9 \mathrm{~cm}, 6 \mathrm{~cm}$
d) $10 \mathrm{~cm}, 9 \mathrm{~cm}$

Answer (a)
17. Kinza works 5 hours \& earns Rs. 1500 . How much will she get for working 15 hours?
a) 2000
b) 2500
c) 4000
d) 4500

Answer (d)
18. A recipe requires 2 cups of flour to make 12 butter milk biscuits. How much flour is needed to make 30 biscuits?
a) 2 cups
b) 3 cups
c) 4 cups
d) 5 cups

Answer (d)
19. A water tank can be emptied in 50 minutes by 5 pumps. How long will it take if 1 pump is out of order?
a) 62 min
b) 62.5 min
c) 63 min
d) 63.5 min

Answer (b)
20. A man bought a dressing table for Rs. 8500 . He sold it at a loss of $10 \%$. Guess sale price?
a) Rs. 7600
b) Rs. 7650
c) Rs. 7700
d) Rs. 7750

Answer (b)
21. The marked price of a table is Rs. 800 . It is sold at a discount of $16 \%$. Guess the sale price?
a) 671
b) 672
c) 673
d) 674

Answer (b)
22. A bicycle is sold for Rs. 12000 at a discount of $20 \%$. Guess its marked price?
a) 12000
b) 13000
c) 14000
d) 15000

Answer (d)
23. Asghar paid property tax worth Rs. 25800 for two plots @ $2.4 \%$. Guess the value of each plot.
a) 537000
b) 537500
c) 538000
d) 538500

Answer (b)
24. Sale price of 5 Juice packs including GST is Rs. 232 . Guess the factory price of 1 juice pack, if rate of GST is $16 \%$.
a) 20
b) 40
c) 60
d) 80

Answer (b)
25. How much government revenue is collected by different taxes?
a) $50 \%$
b) $70 \%$
c) $90 \%$
d) $30 \%$

Answer (b)
26. Guess Ushr on 850 Kg wheat irrigated by artificial resources $\& 740 \mathrm{Kg}$ wheat irrigated by natural resources.
a) 116 kg
b) 116.5 kg
c) 117 kg
d) 117.5 kg

Answer (b)
27. Output tax - input tax=
a) Property tax
b) GST
c) Income tax
d) VAT

Answer (d)
28. Guess the next term $7,14,21,28, \ldots$ ?
a) 35
b) 42
c) 49
d) 56

## Answer (a)

29. Guess the next term 320000, 3200, 32, ...?
a) 3.2
b) 0.32
c) 0.0032
d) 0.000032
Answer (b)
30. Guess the next term $45,33,60,44,75, \ldots$ ?
a) 90
b) 55
c) 50
d) 45

Answer (b)
31. 8 is a polynomial of degree?
a) 0
b) 1
c) 2
d) 4

Answer (a)
32. All points lying on $x$-axis have $y$-coordinate $\qquad$ if $x \& y$ are positive.
a) 0
b) 1
c) -1
d) 2

Answer (a)
33. $(x, y)$ when lies in third quadrant has coordinates?
a) $(-x, y)$
b) $(-x,-y)$
c) $(x, y)$
d) $(x,-y)$ Answer (b)
34. The coordinates of the points $(x, 0)$ when translated 2 units to left and 1 unit up?
a) $X+2,1$
b) $x-2,-1$
c) $X+2,-1$
d) $X-2,1$

Answer (d)
35. If $4 x-20=2 x+6$, then $x=$ ?
a) 12
b) 13
c) 14
d) 15

Answer (b)
36. Guess three consecutive odd numbers whose sum is 57 ?
a) $17,17,23$
b) $17,19,21$
c) $15,17,25$
d) $17,18,22$

Answer (b)
37. A linear equation in two variables always represents $a$ ?
a) Straight line
b) Triangle
c) Quadrilateral
d) Line segment

Answer (a)
38. A polygon in which at least one of the angles is greater than 180 degree is called ?
a) Concave polygon
b) Convex polygon
c) Concave \& convex polygon
d) None of these

Answer (a)
39. The measure of exterior angle of a regular pentagon at each vertex is?
a) 71 degree
b) 72 degree
c) 75 degree
d) 90 degree

Answer (b)
40. Which type of angle is present in all types of triangle?
a) Acute
b) Right
c) Obtuse
d) Straight

Answer (a)
41. Guess the circumference of a circle having a diameter 4.2 cm ?
a) 13 cm
b) 13.2 cm
c) 15 cm
d) 11.5 cm

Answer (b)
42. $0+(-10)=$
a) 10
b) -10
c) 0
d) -0
Answer (b)
43. $(-40)+(-50)+60=$
a) 25
b) -25
c) 30
d) -30
Answer (d)
44. $17+8-3 \times 2=$
a) 13
b) 15
c) 17
d) 19

Answer (d)
45. If $A=S t u d e n t s ~ i n ~ y o u r ~ c l a s s ~ o f ~ a g e ~ 5 y e a r s ~ i s ~ a / a n ~ s e t ? ~$
a) Empty
b) Singleton
c) Infinite
d) Universal

Answer( a)
46. Set of natural numbers between $1 \& 3$ is set?
a) Empty
b) Singleton
c) Infinite
d) Universal

Answer (b)
47. The co-efficient of $x y$ in $3 x-9 x y+6 y z$ is?
a) 3
b) 6
c) 9
d) -9

Answer (d)
48. $2,4,7,11, \ldots, 7^{\text {th }}$ term is?
a) 29
b) 28
c) 27
d) 26

Answer (a)
49. If 3 times a number is added to 18 , it becomes 36 . What is number?
a) 4
b) 5
c) 6
d) 7

Answer (c)
50. How many times do the area of a square increase when the length of its side is doubled?
a) $2 x$
b) $4 x$
c) $8 x$
d) $16 x$

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Answer ( b)
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51. The number of faces in cube?
a) 6
b) 8
c) 12
d) 4

Answer (a)
52. The median of the data $2,3,3,4,5,5,5$, is?
a) 3
b) 4
c) 2
d) 5

Answer (b)
53. Probability of getting a head in flipping a coin is?
a) 1
b) 0
c) $1 / 2$
d) $1 / 6$

Answer (c)
54. The probability of equally likely events is?
a) Equal
b) Unequal
c) Zero
d) One

Answer (a)
55. Find the next term in the pattern: 6, 18, 42?
a) 48
b) 54
c) 60
d) 66

Answer (b)
56. The next term in $88,78,68$, is?
a) 48
b) 58
c) 68
d) 98

Answer (b)
57. Find the next term, $2,10,18$, ?
a) 24
b) 26
c) 28
d) 30

Answer (b)
58. Find the next term $95,84,73$ ?
a) 58
b) 62
c) 106
d) 108

Answer (b)
59. How many 10 s are in 6 of $1 / 10$ ?
a) 41
b) 51
c) 61
d) 71

Answer (c)
60. 30/45=
a) $1 / 3$
b) $2 / 3$
c) $4 / 3$
d) $4 / 5$

Answer (b)

1. $a+b=b+a$
a) Commutative property
b) Associative property
c) Distributive property
d) Inverse property Answer (A)
2. Multiplicative inverse of $4 / 7$ is?
a) $4 / 6$
b) $2 / 4$
c) $7 / 4$
d) $7 / 7$

Answer (C)
3. Five eight of students at a college live in hostels. If 6000 students live in hostels, how many students are there in college?
a) 9400
b) 9500
c) 9600
d) 9800

Answer (C)
4. $1 / 2(-6)(-3)=$
a) 4.5
b) -9
c) 9
d) -4.5

Answer (C)
5. A prime number when added to 101 gives an odd prime number. Guess the number?
a) 2
b) 3
c) 4
d) 5

Answer (A)
6. Square root of 1089 is?
a) 31
b) 33
c) 35
d) 37

Answer (B)
7. Square root of 9801 is?
a) 99
b) 101
c) 103
d) 95

## Answer (A)

8. Square root of 2116 is?
a) 44
b) 46
c) 48
d) 42

Answer (B)
9. Square root of 4356 is?
a) 46
b) 56
c) 66
d) 78

Answer (C)
10. Area of a square field is $2500 \mathrm{~m}^{2}$. Guess the perimeter of square field?
a) 100 m
b) 200 m
c) 300 m
d) 50 m

Answer (B)
11. Let 5 liters of paint will cover $16 \mathrm{~m}^{2} \&$ Rehman is painting a square pattern, what is the length of square the paint will cover?
a) $2 m$
b) $4 m$
c) 6 m
d) 12 m

Answer (B)
12. Length of rectangular region is double of its width. Guess perimeter if its area is $128 \mathrm{~cm}^{2}$.
a) 18 cm
b) 28 cm
c) 38 cm
d) 48 cm

Answer (D)
13. A composite number has?
a) 1 factor
b) 2 factors
c) More than 2 factors
d) None of these

Answer (C)
14. The monthly rent of a stall is decreased in the ratio 5:6. As a result, the stall holder saves Rs. 4000 a month. Guess the original rent?
a) 12000
b) 14000
c) 22000
d) 24000

Answer (D)
15. A picture measuring 8.5 cm by 5.5 cm is enlarged in the ratio $7: 5$. Guess the dimensions of the new picture?
a) $11.9 \mathrm{~cm}, 7.7 \mathrm{~cm}$
b) $12 \mathrm{~cm}, 8 \mathrm{~cm}$
c) $9 \mathrm{~cm}, 6 \mathrm{~cm}$
d) $10 \mathrm{~cm}, 9 \mathrm{~cm}$

Answer (A)
16. A recipe requires 2 cups of flour to make 12 butter milk biscuits. How much flour is needed to make 30 biscuits?
a) 2 cups
b) 3 cups
c) 4 cups
d) 5 cups

Answer (D)
17. A water tank can be emptied in 50 minutes by 5 pumps. How long will it take if 1 pump is out of order?
a) 62 min
b) 62.5 min
c) 63 min
d) 63.5 min Answer (B)
18. Guess the next term $7,14,21,28, \ldots$ ?
a) 35
b) 42
c) 49
d) 56 Answer (A)
19. Guess the next term $320000,3200,32, \ldots$ ?
a) 3.2
b) 0.32
c) 0.0032
d) 0.000032

Answer (B)
20. Guess the next term $45,33,60,44,75, \ldots$ ?
a) 90
b) 55
c) 50
d) 45

Answer (B)
21. 8 is a polynomial of degree?
a) 0
b) 1
c) 2
d) 4

Answer (A)
22. All points lying on $x$-axis have $y$-coordinate $\qquad$ if $x \& y$ are positive.
a) 0
b) 1
c) -1
d) 2

Answer (A)
23. $(x, y)$ when lies in third quadrant has coordinates?
a) $(-x, y)$
b) $(-x,-y)$
c) $(x, y)$
d) $(x,-y)$

Answer (B)
24. The coordinates of the points $(x, 0)$ when translated 2 units to left and 1 unit up?
a) $x+2,1$
b) $x-2,-1$
c) $x+2,-1$
d) $X-2,1$

Answer (D)
25. If $4 x-20=2 x+6$, then $x=$ ?
a) 12
b) 13
c) 14
d) 15

Answer (B)
26. Guess three consecutive odd numbers whose sum is 57 ?
a) $17,17,23$
b) $17,19,21$
c) $15,17,25$
d) $17,18,22$

Answer (B)
27. A linear equation in two variables always represents a?
a) Straight line
b) Triangle
c) Quadrilateral
d) Line segment

Answer (A)
28. Guess the circumference of a circle having a diameter 4.2 cm ?
a) 13 cm
b) 13.2 cm
c) 15 cm
d) 11.5 cm

Answer (B)
29. $0+(-10)=$
a) 10
b) -10
c) 0
d) -0
Answer (B)
30. $(-40)+(-50)+60=$
a) 25
b) -25
c) 30
d) -30
Answer (D)
31. $17+8-3 \times 2=$
a) 13
b) 15
c) 17
d) 19 Answer (D)
32. Set of natural numbers between $1 \& 3$ is set?
a) Empty
b) Singleton
c) Infinite
d) Universal

Answer (B)
33. The co-efficient of $x y$ in $3 x-9 x y+6 y z$ is?
a) 3
b) 6
c) 9
d) -9

Answer (D)
34. $2,4,7,11, \ldots, 7^{\text {th }}$ term is?
a) 29
b) 28
c) 27
d) 26

Answer (A)
35. If 3 times a number is added to 18 , it becomes 36 . What is number?
a) 4
b) 5
c) 6
d) 7

Answer (C)
36. How many times do the area of a square increase when the length of its side is doubled?
a) $2 x$
b) $4 x$
c) $8 x$
d) $16 x$

Answer (B)
37. The probability of equally likely events is?
a) Equal
b) Unequal
c) Zero
d) One

Answer (A)
38. Find the next term in the pattern: $6,18,42$ ?
a) 48
b) 54
c) 60
d) 66

Answer (B)
39. Find the next term $95,84,73$ ?
a) 58
b) 62
c) 106
d) 108

Answer (B)
40. How many 10 s are in 6 of $1 / 10$ ?
a) 41
b) 51
c) 61
d) 71

Answer (C)
41. Guess the cube root of 729 ?
a) 6
b) 9
c) 13
d) 11

Answer (B)
42. Guess the cube root of 3375 ?
a) 12
b) 15
c) 17
d) 19

Answer (B)
43. 20 men can eat some quantity of food in 12 days. In how many days, 30 men can eat the same food?
a) 2
b) 4
c) 6
d) 8

Answer (D)
44. There is profit of Rs. 2100 @ $8 \%$ for 7 years on some principal amount. Guess the principal amount?
a) 3700
b) 3750
c) 3800
d) 3850

Answer (B)
45. Zoya bought a house for Rs. 2500000. After two years she sold it to her brother Liaqat for Rs. 2600000. Liaqat sold the house at the loss of $10 \%$. Guess the net loss?
a) 120000
b) 140000
c) 160000
d) 180000

Answer (C)
46. Guess the marked price of a bicycle, which a retailer sells to a customer for Rs. 8500 with $15 \%$ discount?
a) 9000
b) 10000
c) 11000
d) 8000

Answer (B)
47. Amount of annual premium paid by a man is Rs. 2850 for 20 years. Policy fee is Rs. 100 \& family income contract fee is Rs. 250 . Guess the total amount of policy if first premium is $5 \%$ of the policy amount.
a) 25000
b) 50000
c) 75000
d) 90000

Answer (B)
48. Time period agreed by both parties in the insurance policy is called?
a) Premium
b) Maturity period
c) Times duration
d) Depreciation Answer (B)
49. Solve using algebraic formula (103) ${ }^{2}$ ?
a) 10609
b) 10906
c) 19600
d) 10103 Answer (A)
50. Common difference in arithmetic sequence $11,14,17,20$ is?
a) 2
b) 3
c) 4
d) 5

Answer (B)
51. There are 75 packets of fruit in first carriage, 85 in $2^{\text {nd }}$ carriage $\& 95$ in $3^{\text {rd }}$ carriage. Guess the number of packets in $7^{\text {th }}$ carriage?
a) 125
b) 135
c) 145
d) 155

Answer (B)
52. The simplified form of $(a+b)-(a-b)$ is ?
a) $4 a b$
b) $2 a+2 b$
c) $2 b$
d) $2 a$

Answer (C)
53. If $(6, c)=(-d,-1)$, then the value of $d$ is?
a) -1
b) 6
c) C
d) -6

Answer (D)
54. Images produced under rigid transformation are?
a) Similar
b) Congruent
c) Different
d) Same

Answer (B)
55. The scale factor $k=1$ of a figure corresponds to a dilation as
a) Enlargement
b) Reduction
c) No change
d) None of these

Answer (C)
56. Can you guess the arc length of a circle with central angle of 60 degree \& radius 6 cm .
a) 6.18 cm
b) 6.28 cm
c) 6.38 cm
d) 6.48 cm

Answer (B)
57. Angle in semicircle is always
a) 100 degree
b) 150 degree
c) 180 degree
d) 90 degree

Answer (D)
58. In a quadrilateral $E F G H, E F=F G=G H=H E \& E$ is not equal to 90 degree, and then $E F G H$ is?
a) Square
b) Rectangle
c) Parallelogram
d) Rhombus Answer (D)
59. Guess the volume of a semi spherical bowl in litres whose diameter is 4.2 m .
a) 19402 litres
b) 19404 litres
c) 19406 litres
d) 19408 litres Answer (B)
60. What type of graph is most suitable to represent data on production of wheat during last five years?
a) Bar graph
b) Line graph
c) Pie graph
d) Multiple bar graph

Answer (D)

1. A square matrix is that having order?
a) 1-by-2
b) 2-by-2
c) $3-b y-2$
d) 4-by-2

Answer: B
2. $i^{50}=$
a) 1
b) -1
c) -2
d) 2

Answer: B
3. Imaginary part of $-3 i+2$ is?
a) 2
b) -2
c) 3 i
d) -3 i

Answer: D
4. $2(5+4 i)-3(7+4 i)=$
a) $-5-4 i$
b) $-11-4 \mathrm{i}$
c) $-13-5 i$
d) $11-4 \mathrm{i}$

Answer: B
5. A non-terminating, non-recurring decimal represents?
a) Natural number
b) Rational number
c) Irrational number
d) Prime number

Answer: C
6. The value of $L$ in $\log _{3} 81=L$ is?
a) 2
b) 3
c) 4
d) 5

Answer: C
7. The value of $x$ in $\log _{x} 64=2$ is?
a) 2
b) 4
c) 6
d) 8

Answer: D
8. If $\log 2=0.3010, \log 3=0.4771, \log 5=0.6990$, then value of $\log 24$ is?
a) 1.5050
b) 1.3801
c) 0.2615
d) 0.4259

Answer: B
9. The logarithm of unity to any base is?
a) 1
b) 10
c) E
d) 0

Answer: D
10. If $a+b+c=7$ and $a b+b c+c a=9$ then, $a^{2}+b^{2}+c^{2}=$ ?
a) 28
b) 30
c) 31
d) 33

Answer: C
11. If $2 x-3 y=10$ and $x y=2$, then $8 x^{3}-27 y^{3}=$ ?
a) 1420
b) 1360
c) 1540
d) 1340

Answer: B
12. If $x+1 / x=8$ then $x^{3}+1 / x^{3}=$ ?
a) 466
b) 488
c) 455
d) 460

Answer: B
13. If $x+y=7$ and $x y=12$, then $x^{3}+y^{3}=$ ?
a) 89
b) 91
c) 93
d) 95

Answer: B
14. If $a+b+c=10$ and $a b+b c+c a=27$ then, $a^{2}+b^{2}+c^{2}=$ ?
a) 42
b) 44
c) 46
d) 48

Answer: C
15. If $5 x-6 y=13$ and $x y=6$, then $125 x^{3}-216 y^{3}=$ ?
a) 4563
b) 8976
c) 9217
d) 7634

Answer: C
16. Waqas wishes to distribute 128 bananas and also 176 apples equally among a certain number of children. Guess the highest number of children who can get the fruits in this way?
a) 12
b) 14
c) 16
d) 56

Answer: C
17. H.C.F of $x^{3} y-y x^{3} \& x^{5} y^{2}-y^{2} x^{5}$ is?
a) $X y(x-y)$
b) $X(x y-y)$
c) $Y(x y-y)$
d) $\mathrm{Xy}-\mathrm{y}$

Answer: A
18. If $9 x-2(x-2)=25$, then $x=$ ?
a) 1
b) 2
c) 3
d) 0

Answer: C
19. Every real number is a?
a) Rational number
b) Positive number
c) Negative number
d) Complex number

Answer: D
20. The value of $i^{52}$ ?
a) 1
b) -1
c) 0
d) None of these

Answer: A
21. The value of $i^{88}$ ?
a) 1
b) -1
c) 0
d) None of these

Answer: A
22. The value of $i^{40}$ ?
a) 1
b) -1
c) 0
d) None of these

Answer: A
23. The value of ${ }^{90}$ ?
a) 1
b) -1
c) 0
d) None of these

Answer: B
24. The value of $i^{78}$ ?
a) 1
b) -1
c) 0
d) None of these

Answer: B
25. The value of $i^{100}$ ?
a) 1
b) -1
c) 0
d) None of these

Answer: A
26. The value of $i^{70}$ ?
a) 1
b) -1
c) 0
d) None of these

Answer: B
27. If $a+b=7 \& a-b=3$, then $a b=$ ?
a) 8
b) 10
c) 34
d) 56

Answer: B
28. If $a+b+c=6$ and $a^{2}+b^{2}+c^{2}=24$ then, $a b+b c+c a=$ ?
a) 2
b) 4
c) 6
d) 8

Answer: C
29. A surd which contains a single term is called?
a) Monomial surd
b) Binomial surd
c) Polynomial surd
d) None of these

Answer: A
30. In $-2<x<3 / 2, x=$ ?
a) -5
b) 3
c) 2
d) 0

Answer: D
31. $X=0$ is a solution of inequality?
a) $X>0$
b) $x<0$
c) $X-2<0$
d) $X+2>5$

Answer: C
32. If $(x-1, y+1)=(0,0)$, then $(x, y)$ is?
a) 0,1
b) $1,-1$
c) $-1,1$
d) $0,-1$

Answer: B
33. Point $(2,-3)$ lies in quadrant
a) 1
b) II
c) III
d) IV

Answer: D
34. If $y=2 x+1, x=2$, then $y=$ ?
a) 2
b) 3
c) 4
d) 5

Answer: D
35. Point ( $-3,-3$ ) lies in?
a) 1
b) II
c) III
d) IV

## Answer: C

36. Which pair satisfies the equation?
a) 1,2
b) 2,1
c) 2,2
d) 0,1 Answer: A
37. Guess the distance between $(9,2) \&(7,2)$ ?
a) 1
b) 2
c) 3
d) 4

Answer: B
38. Guess the distance between $(2,-6) \&(3,-6)$ ?
a) 1
b) 2
c) 3
d) 4

Answer: A
39. Guess the distance between $(-8,1) \&(6,1)$ ?
a) 12
b) 14
c) 16
d) 18

Answer: B
40. Guess the distance between $(0,0) \&(0,-5)$ ?
a) 2
b) 3
c) 4
d) 5

Asnwer: D
41. Guess the distance between $(-8,0) \&(0,6)$ ?
a) 10
b) 20
c) 30
d) 5

Answer: A
42. If transpose of $A=A$, then it is?
a) Square matric
b) Symmetric Matrix
c) Skew-symmetric matrix
d) Diagonal Matrix

Answer: B
43. If diagonal entries of a matrix are same, then it is?
a) Diagonal matrix
b) Scalar matrix
c) Identity matrix
d) Square matrix

Answer: B
44. If all diagonal entries of a matrix are 1 , then it is?
a) Scalar matrix
b) Identity matrix
c) Unit matrix
d) Both b \& c

Answer: D
45. If all entries of a matrix are zero then it is?
a) Scalar matrix
b) Null matrix
c) Unit matrix
d) Square matrix

Answer: B
46. A matrix obtained by changing the rows into column is called?
a) Transpose matrix
b) Symmetric matrix
c) Null matrix
d) Unit matrix

Answer: A
47. If rows and columns of matrix are not same, then it is?
a) Square matrix
b) Polygon matrix
c) Rectangular matrix
d) Unit matrix

Answer: C
48. If a matrix has only one row, then it is?
a) Column matrix
b) Row matrix
c) Row \& column matrix
d) None of these

Answer: A
49. If a matrix has order 3 -by- 3 , then it is?
a) Square matrix
b) Rectangular matrix
c) Symmetric matrix
d) Unit matrix

Answer: A
50. If a matrix has 2 rows $\& 5$ columns, then it is?
a) Row matrix
b) Column matrix
c) Scalar matrix
d) None of these

Answer: D
51. If you put 5 in the equation $x+5=10$, then it is?
a) Equal equation
b) Equivalent equation
c) Polynomial Equation
d) None of these

Answer: A
52. If a matrix has only one entry, then it is called?
a) Unit matrix
b) Singular matric
c) Scalar matric
d) Zero matrix

Answer: B
53. If you changes rows into columns of a matrix, it becomes?
a) Singular matrix
b) Non-singular matrix
c) Unit matrix
d) Transpose matrix

Answer: D
54. If you see a matrix having entries zero is called?
a) Null matrix
b) Scalar matrix
c) Unit matrix
d) Diagonal matrix

Answer: A
55. Equations solved by algebraic formula are called?
a) Algebraic equations
b) Matrix
c) Geometry
d) Binomial theorem

Answer: A
56. If a matrix has one entry only and that is zero, then matrix will be
a) Null matrix
b) Singular matrix
c) Scalar matrix
d) Both a \& b

Answer: D
57. If a matrix has 10 rows \& 01 column, then it is?
a) Singular matrix
b) Column matrix
c) Rectangular matrix
d) Both b \& c

Answer: D
58. If a matrix has order 2-by-2, then it is
a) Square matrix
b) Rectangular matric
c) Unit matrix
d) None of these

Answer: A
59. Conjugate can be obtained by changing the sign of?
a) Real part
b) Imaginary part
c) Both a \& b
d) None of these

Answer: B
60. Can factorization method be used to solve an equation?
a) Yes
b) No
c) May be
d) None of these

Answer: A

1. The number of terms in a standard quadratic equation $a x^{2}+b x+c=0$ is?
a) 1
b) 2
c) 3
d) 4

Answer: C
2. Sum of cube roots of unity is
a) 0
b) 1
c) 2
d) 3

Answer: A
3. If $\alpha, \beta$ are the roots of $3 x^{2}+5 x-2=0$, then $\alpha+\beta$ is
a) $5 / 3$
b) $3 / 5$
c) $-5 / 3$
d) $-2 / 3$

Answer: C
4. If $\alpha, \beta$ are the roots of $7 x^{2}-x+4=0$, then $\alpha \beta$ is
a) $-1 / 7$
b) $4 / 7$
c) $7 / 4$
d) $-4 / 7$

Answer: B
5. Roots of equation $4 x^{2}+5 x+2=0$, are
a) Irrational
b) Imaginary
c) Rational
d) None of these

Answer: B
6. Product of cube roots of unity is?
a) 0
b) 1
c) -1
d) 3

Answer: B
7. If $b^{2}-4 a c<0$, then the roots of $a x^{2}+b x+c=0$ are
a) Irrational
b) Rational
c) Imaginary
d) None of these

Answer: C
8. If $b^{2}-4 a c>0$, but not a perfect square then the roots of $a x^{2}+b x+c=0$ are
a) Irrational
b) Rational
c) Imaginary
d) None of these

Answer: A
9. Two roots of unity are?
a) $1,-1$
b) $2,-2$
c) $3,-3$
d) 0,4

Answer: A
10. If $\alpha, \beta$ are the roots of $p x^{2}+q x+r=0$, then sum of roots $2 \alpha \& 2 \beta$ is
a) $-q / p$
b) $r / p$
c) $-2 q / p$
d) 1

Answer: C
11. If $\alpha, \beta$ are the roots of $x^{2}-x-1=0$, then products of roots $2 \alpha \& 2 \beta$ is
a) -2
b) 2
c) 4
d) -4

Answer: D
12. The sum of five ties a number and the square of the number is 204 . Guess the number?
a) 8
b) 12
c) 16
d) 18

Answer: B
13. The sum of the squares of two digits of a positive integral number is 65 and the number is 9 times the sum of its digits. Guess the number?
a) 61
b) 81
c) 71
d) 78

Answer: B
14. Guess two integers whose difference is 4 and whose squares differ by 72 ?
a) 9,11
b) 11,7
c) 9,8
d) 2,7

Answer: B
15. In an ordered pair $(x, y)$, $x$ always occupies
a) $1^{\text {st }}$ place
b) $2^{\text {nd }}$ place
c) $3^{\text {rd }}$ place
d) $4^{\text {th }}$ place Answer: A
16. A ratio has?
a) 1 unit
b) 2 units
c) No units
d) None of these

Answer: C
17. Guess the value of $a$, if the ratios $a+3: 7+a$ and $4: 5$ are equal?
a) 11
b) 23
c) 13
d) 33

Answer: C
18. If 2 is added in each number of the ratio $3: 4$, we get a new ratio $5: 6$. Guess the numbers?
a) 1,2
b) 2,3
c) 3,4
d) 4,5

Answer: C
19. In a proportion $a: b=c: d, b, c$ is called?
a) Ratio
b) Extremes
c) Means
d) None of these

Answer: C
20. In a proportion $a: b=c: d, a, d$ is called?
a) Ratio
b) Extremes
c) Means
d) None of these

Answer: B
21. Guess the value of $x$, if $60 \mathrm{~m}: 90 \mathrm{~m}:: 20 \mathrm{~kg}: x \mathrm{~kg}$
a) 15
b) 30
c) 45
d) 60

Answer: B
22. Guess the cost of 15 kg sugar, if 7 kg of sugar costs Rs. 560.
a) 1100
b) 1200
c) 1300
d) 1400

Answer: B
23. Guess the cost of 8 kg of mangoes, if 5 kg of mangoes cost Rs 250.
a) 400
b) 600
c) 800
d) 1000

Answer: A
24. If $A$ varies directly as the square of $r$ and $A=1782 / 7 \mathrm{~cm}^{2}$, where $r=9 \mathrm{~cm}$. let $r=14 \mathrm{~cm}$, then value of A will be?
a) $542 \mathrm{~cm}^{2}$
b) $616 \mathrm{~cm}^{2}$
c) $720 \mathrm{~cm}^{2}$
d) None of these

Answer: B
25. If $y$ varies inversely as $x$ and $y=8$, when $x=4$. Find $y$, when $x=16$ ?
a) 1
b) 2
c) 3
d) 4

Answer: B
26. If $y$ varies directly as cube of $x \& y=81$ when $x=3$, so evaluate $y$ when $x=5$.
a) 175
b) 275
c) 375
d) 475

Answer: C
27. In continued proportion $a: b=b: c, c$ is said to $b e$ $\qquad$ proportional to a \& b
a) Third
b) Fourth
c) Means
d) None of these

Answer: A
28. The quotient of two numbers or algebraic expressions is called ?
a) Polynomial
b) Fraction
c) Binomial
d) None of these

Answer: B
29. The different number of ways to describe a set is?
a) 1
b) 2
c) 3
d) 4

Answer: C
30. A set with no element is called
a) Empty set
b) Singleton set
c) Subset
d) Superset

Answer: A
31. The set having only one element is called
a) Singleton set
b) Power set
c) Subset
d) Superset

Answer: A
32. The number of elements in power set $\{1,2,3\}$ is
a) 4
b) 6
c) 8
d) 9

Answer: C
33. If a number of elements in set $A$ is 3 and in set $B$ is 4 , then number of elements $A x B$ is
a) 3
b) 4
c) 12
d) 7

Answer: C
34. Point $(-1,4)$ lies in the quadrant
a) 1
b) 11
c) III
d) IV

Answer: B
35. The relation $\{(1,2),(2,3),(3,3),(3,4)\}$ is
a) Onto function
b) Into function
c) Not a function
d) One-one function

Answer: C
36. On a 5 term tests in mathematics, a student has made marks $82,93,86,92 \& 79$. Guess the median for marks?
a) 82
b) 93
c) 86
d) 79

Answer: C
37. A grouped frequency table is also called
a) Data
b) Frequency distributions
c) Frequency polygons
d) None of these

Answer: A
38. A frequency polygon is many sided
a) Closed figure
b) Rectangle
c) Square
d) None of these

Answer: A
39. A histogram is a set of adjacent
a) Squares
b) Rectangles
c) Circles
d) None of these

Answer: B
40. A deviation is defined as a difference of any value of the variable from a
a) constant
b) histogram
c) sum
d) none of these Answer: A
41. A data in the form of frequency distribution is called
a) Grouped data
b) Ungrouped data
c) Histogram
d) None of these

Answer: A
42. Mean of a variable with similar observations say constant $k$ is
a) Negative
b) $K$ itself
c) Zero
d) None of these

Answer: B
43. Mean is affected by change in
a) Value
b) Ratio
c) Origin
d) None of these Answer: C
44. Sum of deviations of the variable $X$ from its mean is always
a) Zero
b) One
c) Same
d) None of these

Answer: A
45. The most frequent occurring observation in a data set is called?
a) Mode
b) Median
c) Harmonic mean
d) None of these

Answer: A
46. The observations that divide a data set into four equal parts are called
a) Deciles
b) Quartiles
c) Percentiles
d) None of these

Answer: B
47. Bisectors of angles formed with any one side of a parallelogram intersect each other at angle:
a) 90
b) 60
c) 30
d) 15

Answer: A
48. The perpendicular bisectors the sides of a triangle are:
a) Perpendicular
b) Concurrent
c) Equal
d) None of these

Answer: B
49. Right bisectors of sides of an obtuse angled triangle meet?
a) On the base
b) On the hypotenuse
c) Outside the triangle
d) Inside the triangle

Answer: C
50. The distance between a line and a point lying on it is $\qquad$ :
a) Half
b) Equal
c) Zero
d) Double

Answer: C
51. The hypotenuse of a right angle triangle is $\qquad$ than each of the other two sides:
a) Smaller
b) Longer
c) Half
d) Double

Answer: B
52. A point equidistant from the end points of a line-segment is on its
a) Right bisector
b) Left bisector
c) Perpendicular
d) Median

Answer: A
53. For two triangles, if two angles and the included side of one triangle are equal to two angles and the included side of another triangle. Then the congruency rule is:
a) SSS
b) $A S A$
c) SAS
d) None of these

Answer: B
54. If $E$ and $F$ are the midpoints of equal sides $A B$ and $A C$ of a triangle $A B C$. Then:
a) $B F=A C$
b) $B F=A F$
c) $C E=A B$
d) $\mathrm{BF}=\mathrm{CE}$

Answer: D
55. $A B C$ is an isosceles triangle in which altitudes $B E$ and $C F$ are drawn to equal sides $A C$ and $A B$, respectively. Then:
a) $\mathrm{BE}>\mathrm{CF}$
b) $\mathrm{BE}<\mathrm{CF}$
c) $\mathrm{BE}=\mathrm{CF}$
d) None of these

Answer: C
56. Which of the following is not a criterion for congruence of triangles?
a) SAS
b) $A S A$
c) SSS
d) SSA

Answer: D
57. In triangles $A B C$ and $P Q R, A B=A C, \angle C=\angle P$ and $\angle B=\angle Q$. The two triangles are
a) Isosceles and congruent
b) Isosceles but not congruent
c) Congruent but not isosceles
d) Neither congruent nor isosceles

Answer: B
58. In equation, $y=m x+c, m$ is:
a) Intercept
b) Solution
c) Slope
d) None of these

Answer: C
59. The section formed by horizontal and vertical lines determining the position of the point in a Cartesian plane is called:
a) $X$-axis
b) $Y$-axis
c) Z-axis
d) Quadrants

Answer: D
60. If $\triangle A B C \cong \triangle P Q R$, then which of the following is not true?
a) $A C=P R$
b) $B C=P Q$
c) $Q R=B C$
d) $A B=P Q$

Answer: B

1. $R-\{0\}$ is a group w. r. $t$ the binary operation
a) +
b) $x$
c) -
d) $\%$

Answer: B
2. A compound proposition which is always true is called:
a) Tautology
b) Contradiction
c) Absurdity
d) Contingency

Answer: A
3. If order of $A$ is $m \times n$ and order of $B$ is $n \times q$ then order of $A B$ is
a) $m \times n$
b) $n \times m$
c) $n \times q$
d) $m \times q$

Answer: D
4. The direction of an inequality will be reversed if it is multiplied on both sides by a
a) Positive number
b) Negative number
c) Zero
d) Any number

Answer: B
5. Any complex number 'ai ' can be written in order pair form as
a) $\{i, 0\}$
b) $\{0, a\}$
c) $\{a, 0\}$
d) $\{a, 1\}$

Answer: D
6. Modulus of complex number $3-4 i=$
a) 4
b) 5
c) 6
d) 7

Answer: B
7. $2<3 \vee 5<6$ is
a) True
b) False
c) may be true or false
d) both $a$ and $b$

Answer: A
8. In a reciprocal equations, the coefficients of the term equidistant from the beginning and end are
a) Zero
b) Different
c) equal in magnitude
d) reciprocal of each other Answer: C
9. If the difference between the cubes of two consecutive even-number is 296 then numbers are
a) 4,6
b) 5,9
c) 2,8
d) 7,9

Answer: B
10. The two consecutive numbers whose product is 132 are
a) 11,12
b) 5,6
c) 8,4
d) 3,8

Answer: B
11. The domain of an infinite sequence is:
a) N
b) C
c) $R$
d) W

Answer: A
12. If the numbers 1,4 and 3 are subtracted from three consecutive terms of an $A . P$ the resulting numbers are in G.P, if their sum is 21 then the numbers are
a) $2,5,12$
b) $2,7,12$
c) $3,5,12$
d) $3,5,7$

Answer: B
13. The sample space of tossing a coin twice
a) $\{\mathrm{HHH}, \mathrm{TT}, \mathrm{HT}, \mathrm{TH}\}$
b) $\{\mathrm{HH}, \mathrm{TT}, \mathrm{H}, \mathrm{TH}\}$
c) $\{\mathrm{HH}, \mathrm{T}, \mathrm{HT}, \mathrm{TT}\}$
d) $\{\mathrm{HH}, \mathrm{HT}, \mathrm{TH}, \mathrm{TT}\}$

Answer: D
14. How many 5 -digit multiples of 5 can be formed from the digit $2,3,5,7,9$ when no digit is repeated ?
a) 20
b) 24
c) 40
d) 120

Answer: B
15. If is a positive integer and $a$ and $b$ are constants then, $a+(a+d)+(a+2 d)+\ldots[a+(n-1) d]=$
a) $a(n-1) d$
b) $n / 2[a+(n-1) d]$
c) $n / 2[2 a+(n-1) d]$
d) none

Answer: C
16. $1 / 3$ rotation (Clockwise) $=$ $\qquad$ degree.
a) 120
b) -120
c) 180
d) -180

Answer: B
17. A radian is the measures of the central angle of an arc of a circle whose length is equal to the
a) half of the radius
b) diameter of circle
c) radius of the circle
d) none

Answer: C
18. The trigonometric ratios of -2430 is same as of
a) 45
b) 90
c) 180
d) 340

Answer: B
19. The domain of cosx is
a) $R$
b) $R-0.5$
c) $R-1$
d) W

Answer: A
20. To draw the graph of trigonometric function, measures of the angles are taken along
a) $x$-axis
b) $y$-axis
c) origin
d) none

Answer: A
21. Angle below the surface line is called
a) Angle of depression
b) Angle of Elevation
c) acute angle
d) Obtuse angle

Answer: A
22. A Triangle has $\qquad$ important elements.
a) 3
b) 4
c) 5
d) 6

Answer: D
23. Sum of opposite angles of a cyclic quadrilateral is
a) 90
b) 180
c) 270
d) 360

Answer: D
24. The inverse principal Sine function
a) Exists
b) does not exist
c) +ive
d) -ive

Answer: A
25. The horizontal line between $y=-1$ and $y=1$ intersects the graph of $y=\tan x \ldots .$. times
a) One
b) Two
c) Three
d) Infinite

Answer: D
26. The A.M between $x-3$ and $x+5$;
a) $1-x$
b) $1+x$
c) $2 x-1$
d) $3 x-1$

Answer: A
27. The sum of the terms of the series -9-6-3+0+ . . .amount to 66
a) 4
b) 9
c) 11
d) 15

Answer: C
28. The 11 term of the sequences $1+i, 2,2(1-i), \ldots$
a) $32(1+i)$
b) $32(1-i)$
c) $16(1-i)$
d) $16(1+i)$

Answer: C
29. A sequence in which any term minus it's immediate previous term gives a constant is called
a) Geometric sequence
b) Arithmetic sequence
c) Harmonic sequence
d) Complete sequence

Answer: B
30. A single cholera bacterium produces two complete bacteria in $1 / 2$ hours. If we start with a colony of A bacteria ,how many bacteria will we have in ' $n$ ' hour
a) $A 2^{2 n}$
b) $A 2^{-2 n}$
c) $2 n$
d) $-2 n$

Answer: A
31. If diagonal entries of a matrix are same, then it is?
a) Diagonal matrix
b) Scalar matrix
c) Identity matrix
d) Square matrix

Answer: B
32. If all diagonal entries of a matrix are 1 , then it is?
a) Scalar matrix
b) Identity matrix
c) Unit matrix
d) Both b \& c

Answer: D
33. If all entries of a matrix are zero then it is?
a) Scalar matrix
b) Null matrix
c) Unit matrix
d) Square matrix

Answer: B
34. A matrix obtained by changing the rows into column is called?
a) Transpose matrix
b) Symmetric matrix
c) Null matrix
d) Unit matrix

Answer: A
35. If rows and columns of matrix are not same, then it is?
a) Square matrix
b) Polygon matrix
c) Rectangular matrix
d) Unit matrix

Answer: C
36. If a matrix has only one row, then it is?
a) Column matrix
b) Row matrix
c) Row \& column matrix
d) None of these Answer: A
37. If you changes rows into columns of a matrix, it becomes?
a) Singular matrix
b) Non-singular matrix
c) Unit matrix
d) Transpose matrix

Answer: D
38. If you see a matrix having entries zero is called?
a) Null matrix
b) Scalar matrix
c) Unit matrix
d) Diagonal matrix

Answer: A
39. Equations solved by algebraic formula are called?
a) Algebraic equations
b) Matrix
c) Geometry
d) Binomial theorem

Answer: A
40. If a matrix has one entry only and that is zero, then matrix will be
a) Null matrix
b) Singular matrix
c) Scalar matrix
d) Both a \& b

Answer: D
41. If a matrix has 10 rows $\& 01$ column, then it is?
a) Singular matrix
b) Column matrix
c) Rectangular matrix
d) Both b \& c

Answer: D
42. If a matrix has order 2-by-2, then it is
a) Square matrix
b) Rectangular matric
c) Unit matrix
d) None of these

Answer: A
43. Conjugate can be obtained by changing the sign of?
a) Real part
b) Imaginary part
c) Both a \& b
d) None of these

Answer: B
44. Can factorization method be used to solve an equation?
a) Yes
b) No
c) May be
d) None of these

Answer: A
45. The sum of the squares of two digits of a positive integral number is 65 and the number is 9 times the sum of its digits. Guess the number?
a) 61
b) 81
c) 71
d) 78

Answer: B
46. Guess two integers whose difference is 4 and whose squares differ by 72 ?
a) 9,11
b) 11,7
c) 9,8
d) 2,7

Answer: B
47. Point $(-1,4)$ lies in the quadrant
a) 1
b) 11
c) III
d) IV

Answer: B
48. The relation $\{(1,2),(2,3),(3,3),(3,4)\}$ is
a) Onto function
b) Into function
c) Not a function
d) One-one function

Answer: C
49. For two triangles, if two angles and the included side of one triangle are equal to two angles and the included side of another triangle. Then the congruency rule is:
a) SSS
b) ASA
c) SAS
d) None of these

Answer: B
50. If $E$ and $F$ are the midpoints of equal sides $A B$ and $A C$ of a triangle $A B C$. Then:
a) $\mathrm{BF}=\mathrm{AC}$
b) $B F=A F$
c) $C E=A B$
d) $\mathrm{BF}=\mathrm{CE}$

Answer: D
51. $A B C$ is an isosceles triangle in which altitudes $B E$ and $C F$ are drawn to equal sides $A C$ and $A B$, respectively. Then:
a) $\mathrm{BE}>\mathrm{CF}$
b) $\mathrm{BE}<\mathrm{CF}$
c) $B E=C F$
d) None of these

Answer: C
52. Which of the following is not a criterion for congruence of triangles?
a) SAS
b) $A S A$
c) SSS
d) SSA

Answer: D
53. In triangles ABC and $\mathrm{PQR}, \mathrm{AB}=\mathrm{AC}, \angle \mathrm{C}=\angle \mathrm{P}$ and $\angle \mathrm{B}=\angle \mathrm{Q}$. The two triangles are
a) Isosceles and congruent
b) Isosceles but not congruent
c) Congruent but not isosceles
d) Neither congruent nor isosceles

Answer: B
54. In equation, $y=m x+c, m$ is:
a) Intercept
b) Solution
c) Slope
d) None of these

Answer: C
55. The section formed by horizontal and vertical lines determining the position of the point in a Cartesian plane is called:
a) $X$-axis
b) $Y$-axis
c) Z-axis
d) Quadrants

Answer: D
56. If $\triangle A B C \cong \triangle P Q R$, then which of the following is not true?
a) $\mathrm{AC}=\mathrm{PR}$
b) $B C=P Q$
c) $Q R=B C$
d) $A B=P Q$

Answer: B
57. Guess the next term $7,14,21,28, \ldots$ ?
a) 35
b) 42
c) 49
d) 56

Answer (A)
58. Guess the next term $45,33,60,44,75, \ldots$ ?
a) 90
b) 55
c) 50
d) 45

Answer (B)
59. The probability of equally likely events is?
a) Equal
b) Unequal
c) Zero
d) One

Answer (A)
60. Find the next term $95,84,73$ ?
a) 58
b) 62
c) 106
d) 108

Answer (B)

