

**SUMMATIVE ASSESSMENT - 1**  
**GENERAL SCIENCE , Paper – I**  
 (Physical Sciences)  
 (English Version)



Time: 2.45 Hours

**MULTIPLE CHOICE QUESTIONS****Maximum Marks : 40**

01. Force always acts vertically [      ]  
 A. Normal force  
 B. Friction  
 C. Gravitational force  
 D. Tension
02. Using of lubricants or ball bearings causes ..... in friction. [      ]  
 A. Decrease  
 B. Increase  
 C. Increase or decrease  
 D. None of these
03. True statement [      ]  
 A. Friction  $\propto$  Normal force  
 B. Friction  $\propto$  Area of contact  
 C. Friction  $\propto \frac{1}{\text{Normal force}}$   
 D. Friction  $\propto \frac{1}{\text{Area of contact}}$
04. Father of plastic industry [      ]  
 A. Leo Hendrik Baekeland  
 B. Hermann Staudinger  
 C. Alexander Parkes  
 D. Alessandro volta
05. Substances (i) Iron  
                   (ii) Copper  
                   (iii) Iodine  
 Which of the above substances are metals ?  
**Choose the correct answer:**[      ]  
 A. (i) only                      B. (i) and (iii)  
 C. (iii) only                    D. (i) and (ii) only
06. Factors (i) Surface area  
              (ii) Normal force  
              (iii) Nature of surface  
 On which of the above factors that friction depends ? [      ]  
 A. (i) and (iii)  
 B. (i) and (ii)  
 C. (ii), (ii) and (iii)  
 D. (ii) and (iii)
07. 10 Kg brick with dimensions 50x25x20 cm placed horizontally on the floor. The static friction is "f". What happened to the static friction when it placed vertically on the floor? [      ]  
 A. 2f                              B. 4f  
 C. f                                D.  $\frac{f}{2}$
08. **Abhiram**: Force is only pull  
**Jairam** : Force is only push  
 Whose statement is correct ?[      ]  
 A. Abhiram's  
 B. Jairam's  
 C. Both are correct  
 D. Both are wrong
09. Audible frequency range of human beings [      ]  
 A. 20 – 2000 Hz  
 B. 200 – 20000 Hz  
 C. 200 – 2000 Hz  
 D. 20 – 20000 Hz
10. **Sailaja** : Usage of CNG and LPG instead of petroleum products minimize the air pollution.  
**Mohini** : Usage of Solar energy creates no pollution.  
 Whose words are correct ?  
**Choose the correct answer:**[      ]  
 A. Sailaja's words  
 B. Mohini's words  
 C. both are correct  
 D. both are wrong
11. Which can produce high Pitch sound ? (Select from the following) [      ]  
 A. Lion  
 B. adult man  
 C. Infant  
 D. adult woman

12. Substances (i) Water  
(ii) Air  
(iii) Iron pipe

Which of the above can act as medium for sound propagation ?

**Choose the correct answer:** [      ]

- A. (i) only  
B. (i) and (ii)  
C. (ii) only  
D. (i), (ii) and (iii)
13. Length of vocal cords in men [      ]  
A. nearly 10 mm  
B. nearly 20 mm  
C. nearly 30 mm  
D. less than 15 mm

14. Identify the musical instrument with Strings [      ]  
A. Tabala  
B. Flute  
C. Guitar  
D. Mouth organ

15. Liquid metal [      ]  
A. Sodium  
B. Silver  
C. Mercury  
D. Magnesium

16. Which of the following statement is false about "Acrylic" [      ]  
A. Winter wear is made of Acrylic  
B. It is considered as artificial wool  
C. It is generally called fake fur  
D. None of these

17. The material required to perform an activity to observe the effect of contact force on friction are ..... [      ]  
A. Spring balance, thread, trolley.  
B. Spring balance, brick  
C. Brick, thread, trolley.  
D. Spring balance, thread, brick

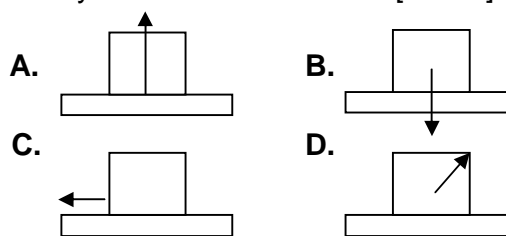
18. In which of the following cases , drag doesn't exist [      ]



C. Both A and B

D. None of these

19. Identify friction force direction [      ]



20. Sounds needs material medium to propagate. Sound can not travel through vacuum.

If a bomb blast on the moon,  
Then ..... [      ]

- A. No sound is produced  
B. We can't hear any sound  
C. both A and B  
D. None of these
21. The metals that are used in jewellery do not react with air. They do not fade. So Silver tarnishes after a long time. Gold and platinum are preferable for making ornaments.

**Jewellery made of** ..... [      ]

- A. Only Gold  
B. either Gold or Platinum  
C. Either Gold or Silver  
D. Only Platinum
22. By the activity of Toy telephone, we came to know that ..... [      ]



- A. Sound produce by vibrations  
B. Sound can travel through air  
C. Sound can travel through solids  
D. Sound is a form of energy
23. Coal : Plants = Petroleum : ..... [      ]

- A. Carbonisation  
B. Plankton  
C. Carbonation  
D. Seas

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24. The main constituent of coal is .....

[ ]

- A. Carbon
- B. Water
- C. Sulphur
- D. Oxygen

25. Substances (i) Face cream  
(ii) Shoe polish  
(iii) Paints

Which of the above substances are manufactured by using Petroleum resources ?

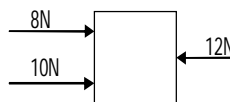
Choose the correct answer:[ ]

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

26. Exhaustible resource [ ]

- A. Wind energy
- B. Solar energy
- C. Petroleum energy
- D. Tidal energy

27.



Find the net force acting on the Body

[ ]

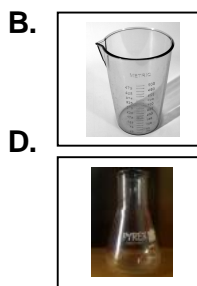
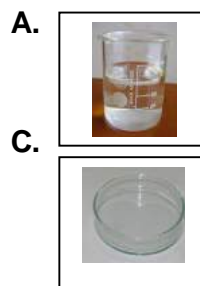
- A. 18N (right)
- B. 12N (left)
- C. 6N (right)
- D. 30N (right)

28. The force applied on an unit area is called .....

[ ]

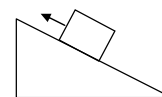
- A. Force
- B. Pressure
- C. Friction
- D. Tension

29. Petri dish [ ]



30. The force shown with arrow in the given figure is .....

- A. Friction force
- B. Tension
- C. Gravitational force
- D. Normal force



31. Sprinkling powder on carom board ..... The friction. [ ]

- A. Increases
- B. Reduces
- C. Doesn't change
- D. None of these

32. Which one of the following is useful for environment ? [ ]

- A. Kerosene
- B. Cow dung
- C. Petrol
- D. Natural gas

33. Remember the burning of Magnesium ribbon. What observations can we make ? [ ]

- A. Burn brightly
- B. Forms white ash
- C. Burn brightly and forms white ash
- D. None of the above

34. This is not the use of Rayon [ ]

- A. Making diapers
- B. Making carpets
- C. Making bandages
- D. Making swim suits

35. This is not an example for "Sonorous metal" [ ]

- A. Mercury
- B. Gold
- C. Aluminium
- D. Magnesium

36. Fibres (i) Polyester

(ii) Rayon

(iii) Wool

Which of the above fibres are artificial ?

Choose the correct answer:[ ]

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

37. Substances

- (i) Handle of cooker
- (ii) Electric switches
- (iii) Old Telephone Box

Which of the above substances are made of Bakelite ?

**Choose the correct answer:**[      ]

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

38. Friction produces ..... [      ]

- A. Electricity
- B. Heat
- C. Sound
- D. Magnetism

39. Force : Newton = Pressure : ..... [      ]

- A. Newton-meter
- B. Newton/meter
- C. Newton-meter<sup>2</sup>
- D. Newton/meter<sup>2</sup>

40. Which material needed to perform the activity that finding the limiting force of a thread ? [      ]

- A. Simple balance, thread, weights, Pan
- B. Spring balance, thread, weights
- C. Spring balance, weights, Pan
- D. Spring balance, thread, weights, Pan

41. We have to look for alternative energy resources like solar energy, wind energy. Because they are Pollution free and renewable energy resources.

**Identify the energy resource which do not cause pollution** [      ]

- A. Solar energy
- B. Wind energy
- C. Both A and B
- D. None of these

42. In winter season, we have to wear ..... clothes. [      ]

- A. Wool
- B. Acrylic
- C. either wool or acrylic
- D. None of the above

43. Unit for measuring the intensity of Sound [      ]

- A. Hertz
- B. centimeter
- C. deciBel
- D. No units

44. Rayon is made of ..... [      ]

- A. Coal
- B. Oxygen
- C. Flax
- D. Cellulose

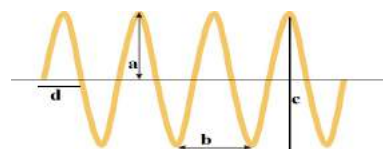
45. Observation from burning test for natural and artificial fibres [      ]

- A. If the fibre smells like burning paper, it may be cotton or rayon
- B. If the fibre smells like burning hair, it may be wool or silk
- C. both A and B
- D. None of these

46. Friction depends upon .....[      ]

- A. Mass of body
- B. Shape of body
- C. Size of body
- D. None of these

47. While a body is vibrating, the maximum displacement of a body from its mean position is called amplitude.



In the above diagram amplitude is indicated by ..... [      ]

- A. d
- B. b
- C. a
- D. c

48. Material required for the activity to prove that sound has energy [      ]

- A. Water glass, Cell phone
- B. Water glass, Sugar crystals
- C. Sugar crystals, Glass, Paper, Cell phone
- D. Cell phone, Paper

49. Petroleum is also called as [      ]  
 A. White gold  
 B. Black gold  
 C. Liquid gold  
 D. Fake gold
50. Property of acids [      ]  
 A. Convert blue litmus in to yellow  
 B. Convert red litmus in to blue  
 C. Convert blue litmus in to red  
 D. Convert red litmus in to yellow
51. This is not a fossil fuel [      ]  
 A. Petroleum  
 B. Coal  
 C. Natural Gas  
 D. Wind energy
52. The direction of friction is .....[      ]  
 A. always opposite to normal force  
 B. always along gravitational force  
 C. always opposite to the motion  
 D. always opposite to the weight
53. Pressure = ..... [      ]  
 A. Force X Area  
 B.  $\frac{\text{Force}}{\text{Area}}$   
 C.  $\frac{\text{Area}}{\text{Force}}$   
 D. Force + Area
54. Remember the activity: Rubbing the balloon with a plastic cover and then bring it towards pepper powder then ..... [      ]  
 A. Pepper attract to the balloon  
 B. Pepper do not respond  
 C. We can't say  
 D. This activity is not given in text book

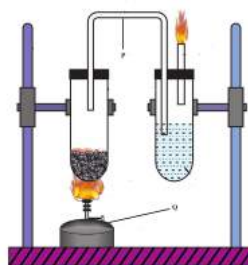
55-56. Read the content in the table.  
 And then answer to the questions 55&56.

Contact force	Field force
Force is which there is a physical contact between two interacting objects is known as contact force.	Force is which there is no physical contact between two interacting objects is known as force at a distance or field force..


**Now answer the questions:**

55. Magnetic force is a ..... [      ]  
 A. Contact force  
 B. Field force  
 C. Can't determine  
 D. Neither contact nor field force
56. If a book kept on a table, then Friction acting between table and book is called ..... [      ]  
 A. Contact force  
 B. Field force  
 C. Can't determine  
 D. Neither contact nor field force
57. Electric switches are not made with PET. Guess the reason. [      ]  
 A. PET is very hard  
 B. PET doesn't conduct electricity  
 C. PET is thermo plastic  
 D. PET is not a bio degradable material
58. Identify true statement [      ]  
 A. All metals are solids  
 B. All metals are hard  
 C. All metals are react with acids  
 D. None of these
59. **Mohan** : The reaction between Zinc and Copper sulphate is possible.  
**Karthik** : The reaction between Copper and Zinc sulphate doesn't possible  
 Whose statement is correct ?[      ]  
 A. Mohan's  
 B. Karthik's  
 C. Both are correct  
 D. Both are wrong

60-61. Observe the given diagram.  
 And then answer to the questions 60&61.



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60. The part "P" indicates .....[      ]  
 A. Jet tube  
 B. Test tube  
 C. U-stand  
 D. Delivery tube
61. The part "Q" indicates .....[      ]  
 A. Coal Box  
 B. Spirit Burner  
 C. Water beaker  
 D. Tripod
62. This is not the use of Sulphur[      ]  
 A. Packing food materials  
 B. Making gun powder  
 C. Making crackers  
 D. In making antiseptic ointments
63.   
 The arrangement of molecules shown in the diagram is called [      ]  
 A. Linear arrangement  
 B. Cross linked arrangement  
 C. Either Linear or cross linked  
 D. neither Linear or cross linked
64. The substances that reduce the friction force are called ..... [      ]  
 A. Lotions  
 B. Cosmetics  
 C. Lubricants  
 D. Fuels
65. If we heat coal powder in a boiling tube, then ..... [      ]  
 A. Yellow colour fumes liberate  
 B. Red colour gases liberate  
 C. Brownish black colour gases release  
 D. White colour gases release

**66-67 Observe the following Table :**

And then answer to the questions 66&67.

	Usage	recycled or not
HDPE	Oil cans Milk packets	Yes
PVC	Electric cables Water pipes	No
LDPE	Dispensing bottles Wash bottles	Yes

**Answer the questions from 66 - 67**

66. Which is recyclable plastic ? [      ]  
 A. HDPE and PVC  
 B. HDPE and LDPE  
 C. PVC only  
 D. HDPE, LDPE and PVC
67. Plastic pipes used in house hold electrical wiring is made with [      ]  
 A. HDPE  
 B. PVC  
 C. LDPE  
 D. either HDPE or PVC
68. **Vamsi** : Vibrations produce sound  
**Madhav** : Sound produce vibrations  
 Whose statement is correct ? [      ]  
 A. Vamsi's  
 B. Madhav's  
 C. Both are correct  
 D. Both are wrong
69. Precautions while doing flame test for identifying thermo plastics [      ]  
 A. Don't inhale fumes  
 B. Wear apron on clothes  
 C. Keep our self away from spirit lamp  
 D. All the above
70. Where can we preserve sodium metal after an experiment ? [      ]  
 A. In a empty glass bottle  
 B. In water  
 C. In Lemon juice  
 D. In Kerosene
71. Which of the following is correct ? [      ]  
 A. Static friction < Sliding friction  
 B. Sliding friction < Rolling friction  
 C. Rolling friction > Static friction  
 D. None of the above
72. Which is not true [      ]  
 A. Friction is friend  
 B. Friction is enemy  
 C. Friction is friend and enemy  
 D. None of these



73.



The resin code indicates [      ]

- A. HDPE
- B. PETE
- C. LDPE
- D. PP

74. Metal oxides act as bases. Non metal oxides act as acids.

Identify the base from the following  
..... [      ]

- A. Sulphur trioxide
- B. Sulphur dioxide
- C. Carbon dioxide
- D. Magnesium oxide

75. Substances :

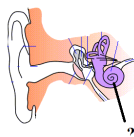
- (i) Zinc
- (ii) Gold
- (iii) Silver

Which of the above appears in white shining ?

Choose the correct answer:[      ]

- A. (i) only
- B. (i) and (iii)
- C. (iii) only
- D. (i) and (ii)

76. Ear structure



In the above diagram the indicated part is ..... [      ]

- A. Ear drum
- B. Middle bone
- C. Auditory canals
- D. Cochlea

77-78. Observe the following Table :

And then answer to the questions 77&78

The total power shortage percentage from 1991- 1997.

Sl. No.	Year	Shortage (%)
1	1991	7.9
2	1992	7.8
3	1993	8.3
4	1994	7.4

Answer the questions from 77 - 78

77. The shortage percentage of power is in ..... order [      ]

- A. Increasing
- B. Decreasing
- C. Unparticular
- D. Constant

78. In which year the shortage percentage of power is maximum [      ]

- A. 1991
- B. 1992
- C. 1993
- D. 1994

79. The most abundant element in Human body [      ]

- A. Nitrogen
- B. Calcium
- C. Oxygen
- D. Phosphorous

80. Which is used as a decolourising agent and also in water purification systems [      ]

- A. Sulphur
- B. Red Phosphorous
- C. Iodine
- D. Activated Carbon

