

SUMMATIVE ASSESSMENT - I (2017 - 2018)**OBJECTIVE MODEL
PHYSICAL SCIENCE****(English Medium)**

Class : VIII]

(Max. Marks : 40)

[Time : 2.45 Hrs.

INSTRUCTIONS :

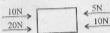
1. The question paper is given as Booklet
2. All the questions are multiple choice questions.
3. Use blue / Black ink ball point pen to answer all the questions in OMR sheet.
4. Identify the correct answer and bubble relevant circle given against the question number in OMR sheet.

Ex : If the answer is 3 to the question bubble ,as shown ① ② ● ④

5. The answer paper will **not** be valued if ✕, ✓ symbols are used as answers.
6. The answer paper will **not** be valued for over writing and bubbling more answers than one.
7. Answer **all** the questions in the given time and hand over the OMR sheet to the invigilator

1. You observe that there is direct physical contact between your hand and the tube when you press the toothpaste tube. This is known as contact force. Now which of the following is not a contact force.
 - 1) Writing on paper with Pen
 - 2) Cleaning the board with duster
 - 3) Needle attracted by the magnet
 - 4) Pulling of water from well.
2. Suresh placed a book on the table. Suresh asked his friend Mahesh, Why is the book in rest even though two forces are acting on the book.
Then Mahesh replied that
 - 1) Normal force and gravitational forces are equal and acting in opposite directions.
 - 2) Normal force and gravitational forces are equal and acting in same directions.
 - 3) Normal force and gravitational forces are unequal and acting in opposite directions.
 - 4) Normal force and gravitational forces are unequal and acting in same directions.
3. P : Force has magnitude as well as direction.
Q : State of motion of a body can't be changed by net force.
 - 1) P True, Q False
 - 2) P False, Q True
 - 3) P and Q are True
 - 4) P and Q are False

4. Why do tools meant for cutting always have sharp edges ?
- 1) Sharp edges have least area and high pressure
 - 2) Sharp edges have more surface area and low pressure
 - 3) Sharp edges have more surface area and high pressure
 - 4) Sharp edges have least surface area and low pressure
5. Find the magnitude of net force from the following diagram



- 1) 0 N
 - 2) 30 N
 - 3) 45 N
 - 4) 15 N
6. Frictional force on an object in a fluid depends on
- 1) Speed with respect to fluid
 - 2) Shape of the object
 - 3) Nature of the fluid
 - 4) All of the above
7. "Aravind observed that heat is produced when he rubbed his palms. The type of friction acting here is
- 1) Sliding friction
 - 2) Static friction
 - 3) Rolling friction
 - 4) Fluid friction
8. Which of the following is incorrect in the case of friction ?
- 1) Friction opposes the motion of a body.
 - 2) Frictional force is dependent of the area of contact.
 - 3) Friction is proportional to the normal force.
 - 4) Friction opposes the relative motion between two surfaces in contact.
9. "To reduce the friction we use solid, liquid and Gaseous state lubricants". Which lubricant is used in Electric motor to reduce friction ?
- 1) Grease
 - 2) Ball - bearing
 - 3) Powder
 - 4) All of the above
10. Match the fibres given in Set I with their properties in Set II
- | Set I | Set II |
|-----------------------------------|------------------------------------|
| i) Nylon | a) Fake fur |
| ii) Rayon | b) Natural fibre |
| iii) Acrylic | c) Artificial silk |
| iv) Wool | d) First processed synthetic fibre |
| 1) i - a, ii - d, iii - b, iv - c | 2) i - c, ii - a, iii - d, iv - b |
| 3) i - d, ii - c, iii - a, iv - b | 4) i - b, ii - a, iii - c, iv - d |

11. "Yaswanth tested the yarn of different fibres. He observed that the yarn melts in the flame." Predict which fibre melts in flame.
- 1) Wool or silk
 - 2) Cotton or Rayon
 - 3) Nylon (or) Acrylic
 - 4) None
12. Your father brings water pipe from market. You observed symbol on it. Which type of plastic is used to make it ?



- 1) HDPE
 - 2) PET
 - 3) PS
 - 4) PVC
13. Identify the characteristics of Nylon
- i) Nylon fibre is strong
 - ii) Elastic
 - iii) Light weight
 - iv) absorb water
- 1) i and ii only true
 - 2) i, ii and iii only true
 - 3) ii and iii only true
 - 4) iii and iv only true
14. P : Thermoplastic which will soften when heated
Q : Thermosetting plastics are not re-mouldable
- 1) P and Q are True
 - 2) P is True and Q is False
 - 3) P & Q are False
 - 4) P is False & Q is True
15. Which of the following is the closest reason for preserving acids in plastic bottles ?
- 1) plastics are cheaper than metals
 - 2) plastic is very light
 - 3) plastics are non reactive
 - 4) plastic is strong
16. Which of the following is a Thermosetting plastic ?
- i) Bakelite
 - ii) Melamine
 - iii) Polythene
 - iv) PVC
- 1) i and iv only true
 - 2) ii and iii only true
 - 3) i and iii only true
 - 4) i and ii only true

17. Silver foils are used to decorate sweets based on the following property.
- 1) Ductility
 - 2) Malleability
 - 3) Sonarity
 - 4) Appearance
18. Which of the following compounds are formed when non - metals react with water ?
- 1) Acids are formed
 - 2) Bases are formed
 - 3) Non metallic oxides are formed
 - 4) Metallic oxides are formed
19. Identify the correct indicators to observe the properties of metals
- 1) Sonarity, Appearance
 - 2) Appearance, Ductility
 - 3) Sonarity, Appearance, ductility, Malleability
 - 4) Chemical properties
20. i) Copper does not displace Zinc from Zinc Sulphate
ii) Zinc can displace Copper from Copper Sulphate
What do you notice from the above two sentences ?
- 1) Less reactive metals can displace high reactive metals from its compound
 - 2) High reactive metals can displace less reactive metals from its compound
 - 3) High reactive metals cannot displace less reactive metals from its compound
 - 4) Displacement takes place when reactivity of both the metals is equal.
21. Observe Set - A, Set - B and choose correct matching.
- | Set - A | Set - B |
|--------------|-------------------------|
| a) Sulphur | i) packing covers |
| b) Carbon | ii) match boxes |
| c) Aluminium | iii) ornaments |
| d) Silver | iv) decolourising agent |
- 1) a - i, b - ii, c - iii, d - iv
 - 2) a - ii, b - iv, c - i, d - iii
 - 3) a - iv, b - iii, c - ii, d - i
 - 4) a - iii, b - ii, c - i, d - iv

22. Generally metals get rusted. Which of following cases does iron get rusted ?
- 1) In the presence of moisture
 - 2) In the presence of Oxygen
 - 3) In the presence of moist oxygen
 - 4) In the presence of moist free oxygen
23. Adult women, adult men, lion, infants are having different pitch in their voices. The right order of their pitch
- 1) Adult women > Adult Men > Lion > infant
 - 2) Lion > Adult men > Adult women > infant
 - 3) Lion < Adult men < Adult women < infant
 - 4) Adult women > Infant > Lion > Adult men
24. Which of the statement is incorrect ?
- 1) Sound produce vibrations.
 - 2) Sound has energy.
 - 3) Sound requires a medium to travel.
 - 4) Vibrations produce sound.
25. P : Infrasonics does not produce sound pollution
Q : Ultrasonics produce sound pollution
- 1) P is true, Q is false
 - 2) P is false, Q is true
 - 3) P, Q both are true
 - 4) P, Q both are false
26. P : Intensity of sound depends on amplitude
Q : Pitch of the sound depends on Frequency
- 1) P, Q both are true
 - 2) P, Q both are false
 - 3) P is true, Q is false
 - 4) P is false, Q is true
27. Match the following
- | Instrument | Process of producing sound |
|--------------|--|
| a) Tabala | i) Vibrating air column |
| b) Harmonium | ii) Vibrating upper layer and air column |
| c) Guitar | iii) Vibrating string |
- 1) a - i, b - ii, c - iii
 - 2) a - ii, b - iii, c - i
 - 3) a - iii, b - i, c - ii
 - 4) a - ii, b - i, c - iii

28. If the energy sources are consumed, they will be exhausted.
Which of the following is an inexhaustible resource ?

- 1) Coal
- 2) CNG gas
- 3) Petroleum
- 4) Wind power

29. a) Using drier in washing machine to dry the clothes even when sunlight is present.
b) Using petrol bikes for a shorter distance without walking

The above two sentences indicate

- 1) Using petrochemicals
- 2) Using Alternate energy sources
- 3) Using energy sources
- 4) Misusing energy sources.

30. Compounds obtained from petrochemical coal are

- 1) Diesel, Coke, Coal gas
- 2) Coke, Coal tar, Coal gas
- 3) Coal tar, Kerosene, Coke
- 4) Coke, Coal gas, Petrol

31. Generally petrochemicals are harmful to environment.
Name the petrochemical which is not harmful

- 1) Coal
- 2) Petroleum
- 3) Natural gas
- 4) Wood

32. **Set - A**

- a) Coal
- b) Petroleum
- c) Petrol

Establish a relation between the compounds in Set - A and the formation process in Set - B.

- 1) a - iii, b - ii, c - i
- 2) a - iii, b - i, c - ii
- 3) a - i, b - ii, c - iii
- 4) a - ii, b - iii, c - i

Set - B

- i) Plankton
- ii) Fractional distillation
- iii) Carbonisation

33. Ganesh is cycling. After moving some distance he suddenly stopped cycling. Then bicycle gradually slowed down and finally come to rest. Now predict the reason behind that
- Frictional force between earth and wheels of the bicycle
 - Frictional force between Air and bicycle
 - Frictional force between bicycle and Ganesh
- i and ii only True
 - ii and iii only True
 - i and iii only True
 - i, ii and iii are True
34. Assertion (A) : A ball is moving fast on smooth surface than rough surface even you apply same force on it.
Reason (R) : Force of friction is greater on a rough surface
- Both assertion and reason are correct and "R" is correct explanation for Assertion.
 - Both Assertion and reason are correct and "R" is wrong explanation for "A".
 - Assertion is correct and reason is incorrect.
 - Both Assertion and reason are wrong.
35. Assertion (A) : Rollers are fitted to suitcase to pull easily.
Reason (R) : It is always difficult to roll a body than to slide it over a surface
- Both assertion and reason are correct and reason is correct explanation
 - Both Assertion and reason are correct and reason is wrong explanation
 - Assertion is correct, reason is incorrect.
 - Both Assertion and reasons are incorrect.
36. Which of the following is correct question arising in Laxmi's mind when she observed vessel on Gas stove with plastic covered handle ?
- Why plastics by used for metallic vessel Grips ?
 - Why plastics are used to cover electric wires ?
 - Why plastics are used to manufacture water bottles ?
 - Why plastics are strong ?
37. Assertion (A) : Iron can be drawn into wires and used for fencing.
Reason (R) : Iron has the property of ductility.
- Both A and R are correct and R is correct reason for A
 - Both A and R are correct but R is not correct reason for A
 - A is correct and R is not correct
 - Both A and R are not correct

38. Assertion (A) : Humans cannot hear the sound produced by Bats
Reason (R) : Humans can not hear the sounds with frequency greater than 20000 vibrations / sec.
- 1) Both "A" and "R" are correct and "R" is the correct reason for A
 - 2) Both "A" and "R" are correct but "R" is not correct reason for A
 - 3) A is correct and R is not correct
 - 4) Both A and R are not correct
39. Predict why Deepak has closed his ears after hearing the sound of crickets
- 1) Because of high intensity sound.
 - 2) Because of high wave length sound.
 - 3) Because of high pitch sound.
 - 4) Because of high amplitude sound
40. Petroleum is a fossil fuel and is a non renewable source. Which among the following indicates the proper utilisation of fuels ?
- a) Minimising the mis-use of fuels.
 - b) Stop using the utilisation of non - renewable sources.
 - c) developing alternate resources of fuels
- 1) a only
 - 2) a and b
 - 3) a and c
 - 4) a, b and c
41. Which of the following materials are required to perform an experiment to find the limiting force that can be form by a string ?
- 1) Spring balance, Weights, Weight hanger, Stopwatch
 - 2) Spring balance, Light strings, Weights, Weight hanger
 - 3) Spring balance, Hanger, Stopwatch, Graph paper
 - 4) Spring balance, Graph paper, Strings, Pins
42. "Rajesh inflated a balloon and tied up the open end. Now cut a paper into small pieces and place them on the floor. Rub the balloon with a paper and bring the balloon near the pieces of a paper". What would you conclude from this experiment ?
- i) No need of physical contact for contact forces
 - ii) Balloon acquires an electrostatic charge on its surface
 - iii) In field force there is no physical contact
- 1) i only correct
 - 2) ii only correct
 - 3) i and ii only correct
 - 4) ii and iii only correct

43. Which experiment do you perform on friction from the following equipments ?
Trolley, Weights, Weight hangers, Pulley, inextensible string and table.
- 1) Frictional force is independent of the area of contact
 - 2) Friction is proportional to the normal force
 - 3) To understand nature of friction and the concept of static friction
 - 4) Effect of roughness on frictional force
44. Abhishek wanted to know what are thermoplastics and Thermosetting plastics, materials in his home. He was testing small pieces of plastic materials by heating on spirit lamp. Which precaution will he take during the experiment ?
- 1) Sample plastic holds with hands
 - 2) Wears Nylon cloths
 - 3) Covers his nose and mouth with mask
 - 4) Keeps close to spirit lamp
45. You wanted to know effect of roughness on frictional force. Which of the following material is not needed for your experiment ?
- 1) Ball
 - 2) Inclined plane
 - 3) Rough cloth
 - 4) Stop watch
46. Suneetha tested tensional strength of wool, cotton, silk and Nylon, whose having same measurements. Which of the following fibre more strength ?
- 1) Silk
 - 2) Cotton
 - 3) Nylon
 - 4) Wool
47. Jaya has taken an iron rod and fixed pins with the help of wax on one side. On the other side, she heated the iron rod. By observing the phenomena that she came to know
- a) Wax is melted on heating
 - b) Iron is a good conductor of heat
 - c) Iron is an insulator
- 1) a only
 - 2) a and b only
 - 3) a and c only
 - 4) a, b and c

48. When magnesium is burnt in Oxygen, the formed product dissolves in water which is tested with red litmus. Assume the final result in the above experiment
- 1) Magnesium oxide is acidic in nature
 - 2) Magnesium oxide is basic in nature
 - 3) Magnesium oxide is neutral in nature
 - 4) Magnesium is a non metal
49. Apparatus required in an experiment to find the relation between intensity of sound and amplitude.
- 1) Wooden table, stick, brick
 - 2) Wooden table, brick, hack - saw blade
 - 3) Wooden table, blade, brick
 - 4) Stand, Simple pendulum, hack - saw blade
50. Laahi is asked to conduct an experiment by giving bucket, water and two stones. After doing the experiment what is her observation?
- 1) Sound is produced by touching two stones
 - 2) Water is needed for the production of sound
 - 3) Sound travels through water.
 - 4) Sound travels through air.
51. P) Take a hard boiling tube and fill it with coal. Arrange a rubber cork and pass delivery tube through rubber cork
Q) Brownish black colour gas released from test tube
R) Take a boiling tube and fill it with water
S) We can observe the white flame at the mouth of jet tube
The correct sequence of arranging the apparatus.
- 1) P - Q - R - S
 - 2) Q - R - S - P
 - 3) P - R - Q - S
 - 4) P - S - Q - R
52. Write the precautions to be taken in conducting an experiment showing the burning of gas released by heating a high quality coal.
- a) test tubes must be very hard
 - b) maintain distance from bunsen burner
 - c) heat the test tube by keeping in hand
- 1) a only
 - 2) a and b only
 - 3) a and c only
 - 4) a, b and c only

(53-54) Irregularities on the surfaces lock in to one another when we attempt to move on any surface. We have to apply a force to overcome interlocking. On rough surfaces in which a large number of irregularities exist. So the force of friction is greater if a rough surface is involved.

53. Above information tells us about ?

- 1) Mass
- 2) Pressure
- 3) Friction
- 4) Time

54. What would you generalise from the above information ?

- 1) Friction increases with increasing roughness
- 2) Friction decreases with increasing roughness
- 3) Friction is independent of Roughness
- 4) All surfaces have same friction.

(55-56)

| Type of Fibres | Character |
|----------------|-------------------------------|
| Nylon | Strong & Doesn't absorb water |
| Cotton | absorbs water |
| Wool | Heat Resistant |

From above information answer these

55. Which cloths do you wear in summer ?

- 1) Nylon made
- 2) Cotton made
- 3) Wool made
- 4) Polyester clothes

56. Why nylon is used to make parachute ?

- 1) Nylon creates static electricity
- 2) Nylon is attractive fiber
- 3) Nylon is strong
- 4) Nylon is soft

(57-58) Arrange the materials, spring balance, weights, light springs and weight hangers shown as figure. Put some small weights on the weight hanger and note the readings of spring balance. Now add some more weights until spring is broken. So do the same for all springs and note the spring balance readings.



57. Which of the following table do you choose to make data interpretation ?

- 1)

| | | |
|--------|------------------|--------------------|
| S. No. | Length of string | Max limiting force |
|--------|------------------|--------------------|
- 2)

| | | | |
|--------|----------------|----------------------|--------------------|
| S. No. | Type of string | length of the string | Max limiting force |
|--------|----------------|----------------------|--------------------|
- 3)

| | | | |
|--------|----------------|----------------------|--------------------|
| S. No. | Type of string | colour of the string | Max limiting force |
|--------|----------------|----------------------|--------------------|
- 4)

| | | | |
|----------------|------------------|----------------------|----------------------|
| Type of string | colour of string | length of the string | Weight of the string |
|----------------|------------------|----------------------|----------------------|

58. What do you generalise from above information ?

- 1) All type of strings have same limiting force.
- 2) Limiting force depends on colour of the threads.
- 3) Different strings have different limiting forces.
- 4) Natural fibers are strong.

(59-60)

| | |
|---------------------|--------|
| Near total silence | 0 db |
| A whisper | 15 db |
| Normal conversation | 60 db |
| A lawn mover | 90 db |
| a car horn | 110 db |
| Jet engine | 120 db |
| Fire cracker | 140 db |

The above table indicates the sounds and their intensities.

Answer the following by observing the above table.

59. Intensity of sound produced by a lawn mover

- 1) 15 db
- 2) 60 db
- 3) 90 db
- 4) 110 db

60. The intensity of sound produced by Jet engine is more than the intensity of car horn. How many times is more ?

- 1) 10 db
- 2) 100 db
- 3) 1000 db
- 4) 20 db

| (61-62) | Year | 1992 | 1993 | 1994 | 1996 | 1997 | 1998 |
|---------|------------------------------|------|------|------|------|------|------|
| | Energy deficiency Percentage | 7.8 | 8.0 | 8.3 | 9.1 | 9.3 | 11.5 |

Identify the correct answers

61. The above table indicates

- 1) the increasing energy needs year by year
- 2) the increasing the energy consumption year by year
- 3) the increase in energy deficiency percentage
- 4) the decrease in energy deficiency percentage

62. Write the difference in energy deficiency percentage from 1993 to 1996

- 1) 11
- 2) 0.3
- 3) 0.8
- 4) 1.1

(63-64) Read the following paragraph and answer (63, 64)

Petro chemicals are obtained by the fractional distillation of petroleum. Different compounds are formed at different temperatures. The first product obtained from petroleum is kerosene. Asphalt is the residue formed in fractional distillation. We also can get petrol, diesel etc from petroleum.

63. Name the first compound formed from petroleum

- 1) Petrol
- 2) Diesel
- 3) Kerosene
- 4) Asphalt

64. Name the residue formed from petroleum

- 1) Kerosene
- 2) Diesel
- 3) Petrol
- 4) Asphalt

65. Objects at rest when there is no net force acting on them. Now which of the following diagram indicates body in a rest.



66. Dileep placed a stick on steps as shown in figure.

Draw normal forces on the stick



- 1)
- 2)
- 3)
- 4)

67. Why are Aeroplanes constructed as shown in figure ?

- 1) To overcome sliding friction
- 2) To overcome fluid friction
- 3) To overcome rolling friction
- 4) To overcome static friction



68. Symbol below indicates

- 1) Reduce of plastic
- 2) Reuse of plastic
- 3) Recover of plastic
- 4) Recycle of plastic



69. i)
- ii)
- iii)

In the above diagrams indicates bulb, indicates battery.

Then which of the following is correct ?




- 1) i only
- 2) ii only
- 3) i and ii only
- 4) ii and iii only


70. What do you know from the picture below ?



- 1) Medium is required for the sound to travel
- 2) Sound can travel through vacuum
- 3) Sound has energy
- 4) Sound produces vibrations

71. Which among the following is not a petrochemical ?

- 1) Tyre 
- 2) Vaseline 
- 3)  Ointment

- 4)  Conical flask

72. In the given picture X - indicates

- 1) water
- 2) Coal powder
- 3) Wax
- 4) Petroleum



73. Which effect of force do you appreciate when your mother turns dough into CHAPATI ?

- 1) Force can change direction
- 2) Force can change speed
- 3) Force can change shape
- 4) Force can displace a body

74. Why are you appreciating Heat shield ?

- 1) Heat shield reduces heat produced by friction
- 2) Heat shield can turn space craft attractively
- 3) Heat shield can make space craft light weight.
- 4) Heat shield reduces speed of the space craft.

75. What are the steps taken by you by knowing the impacts of improper use of plastics on environment ?
- I will reduce the utilization of plastic
 - Plastic wastage is sent to waste management industries
 - I suggest only recyclable plastic
 - I will nature the people aware on impact of plastic on environment
- i and ii only true
 - ii and iii only true
 - iii and iv only true
 - i, ii, iii and iv true
76. What is the suggestion made by you to your mother while she is cooking by knowing differences between natural and synthetic fibars ?
- I suggest her to wear Nylon made clothes.
 - I suggest her to wear polyester made cloths.
 - I suggest her to wear Arilence made cloths.
 - I suggest her to wear cotton made cloths.
77. High intensity sound causes sound pollution. Suggest the precautions to avoid sound pollution
- Ask the people to decrease the usage of loud speakers
 - to arrange silencers to motor vehicles
 - encourage them to burn crackers
 - encourage them to increase plantation
- a, b and c
 - a, c and d
 - a, b and d
 - b, c and d
78. You know metals conduct heat energy. What are precaution to be taken while preparing dosa pan ?
- cover the handle of pan with heat resistant material
 - Pan must be big in size
 - Pan must be small in size
 - Pans must be prepared with heat resistant material
79. Metals used in the preparation of ornaments and resistant to rust
- Mercury
 - gold
 - silver
 - platinum
- i only
 - ii and iv
 - ii and iii
 - ii, iii and iv
80. Petrochemical which is used in our daily life and which is not very harmful ?
- Coaltar
 - LPG
 - Kerosene
 - Diesel