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**SOF NATIONAL SCIENCE
OLYMPIAD 2024-25**

DO NOT OPEN THIS BOOKLET UNTIL ASKED TO DO SO

CLASS **3**
SET-B

Total Questions : 35 | Time : 1 hr.

Guidelines for the Candidate

1. You will get additional ten minutes to fill up information about yourself on the OMR Sheet, before the start of the exam.
2. Write your **Name, School Code, Class, Section, Roll No.** and **Mobile Number** clearly on the **OMR Sheet** and do not forget to sign it. We will share your marks / result and other information related to SOF exams on your mobile number.
3. The Question Paper comprises three sections:
Logical Reasoning (5 Questions), **Science** (25 Questions) and **Achievers Section** (5 Questions)
Each question in Achievers Section carries 2 marks, whereas all other questions carry one mark each.
4. All questions are compulsory. There is no negative marking. Use of calculator is not permitted.
5. There is only ONE correct answer. Choose only ONE option for an answer.
6. To mark your choice of answers by darkening the circles on the OMR Sheet, use **HB Pencil** or **Blue / Black ball point pen** only. E.g.
Q. 16: Hard outer covering of the tree trunk is called
A. Bark B. Spine C. Branch D. Bud.
As the correct answer is option A, you must darken the circle corresponding to option A on the OMR Sheet.
7. Rough work should be done in the blank space provided in the booklet.
8. Return the OMR Sheet to the invigilator at the end of the exam.
9. Please fill in your personal details in the space provided before attempting the paper.
10. **Participate in SOF-Techfest IIT Bombay Innovation Challenge. Open for class 8, 9 & 10. For details, please visit : www.sofworld.org**

16. ☒ A ☐ B ☐ C ☐ D

Name:.....

SOF Olympiad Roll No.:..... Contact No.:.....



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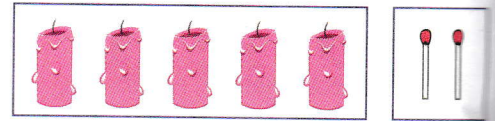
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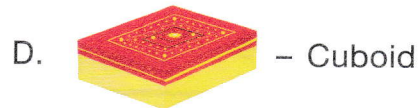
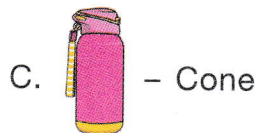
LOGICAL REASONING

- 1** How many different possible combinations of 1 candle and 1 matchstick each can be formed from the given candles and matchsticks?



- A. 12
C. 7
B. 9
D. 10

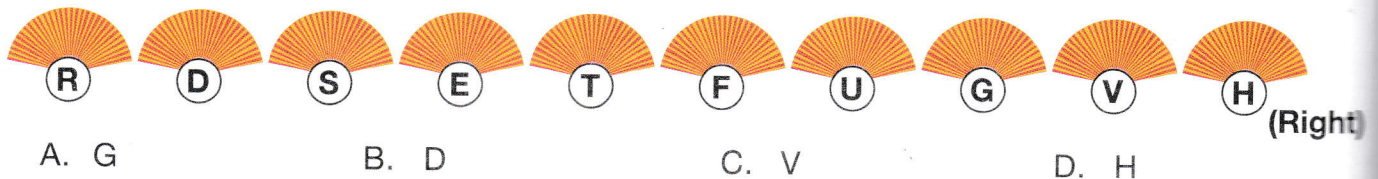
- 2** Select the **INCORRECT** match of an object with its shape.



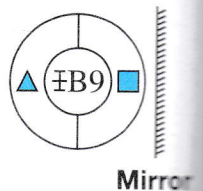
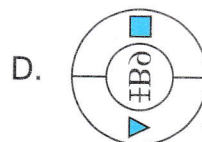
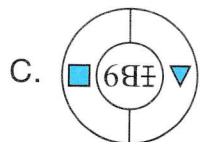
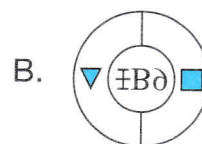
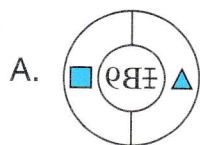
- 3** If 'March' is called 'January', 'January' is called 'August' and 'August' is called 'February', then _____ comes just after July.

- A. August B. February C. March D. January

- 4** Paper fan _____ is sixth to the right of third paper fan from the left end in the given arrangement.



- 5** Select the correct mirror image of the given figure.



SPACE FOR ROUGH WORK

SCIENCE

6 Which of the following is **NOT** a method of cooking?

1. Pickling

2. Grilling

3. Roasting

4. Sieving

A. 1 only

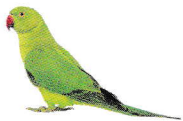
B. 1 and 2 only

C. 3 and 4 only

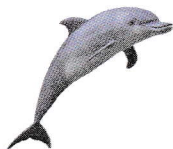
D. 1 and 4 only

7 Select the odd one out on the basis of breathing organs they possess.

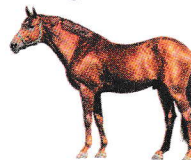
A.



B.



C.



D.



8 Select the **INCORRECT** option regarding the body parts of birds shown in the given figures.



P



Q



R



S

A. Q helps birds to perch on tree branches.

B. S helps birds to swim in water.

C. R helps birds to crack open nuts and seeds.

D. P helps birds to suck nectar from flowers.

9 Which of the following statements is **NOT** correct about birds?

A. Upstroke and downstroke are two types of movements shown by birds while flapping of wings during flying.

B. Body of birds is streamlined to cut through air while flying.

C. Bones of birds are solid and heavy to make flight easier.

D. Tail feathers of birds help them to change direction while flying.

10 Which of the following animals takes its food in the same manner as the animal shown in figure X?

A.



B.



X

C.



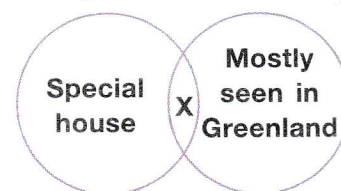
D.



SPACE FOR ROUGH WORK

- 11 Refer to the given Venn diagram and select the option that correctly identifies X.

A. Tent
B. Bungalow
C. Igloo
D. None of these



- 12 Select the correct option to complete the given analogy.

Postal communication : Aerogramme :: Mass communication : _____

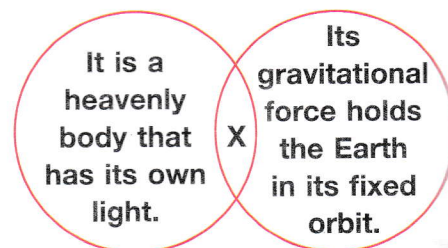
A. Inland letter B. Fax C. Landline phone D. Radio

- 13 Mitali made different groups of three organs each that belong to the same organ system. By mistake, she placed a wrong organ in one of the groups. Identify the wrong group and select the correct option.

A. Kidney, Ureter, Urinary bladder B. Brain, Blood vessels, Spinal cord
C. Stomach, Pancreas, Small intestine D. Skull, Ribcage, Backbone

- 14 Refer to the given Venn diagram and select the INCORRECT statement(s) regarding X.

A. It is the nearest star to our Earth.
B. It is the fifth largest planet of our Solar System.
C. It has only one natural satellite of its own.
D. Both B and C



- 15 Which of the following is an example of sublimation?

A. Drops of water fallen on marble floor disappear after some time.
B. Camphor tablet disappears after few days, when kept in open.
C. Ghee solidifies during winters.
D. None of these

- 16 Sometimes during winter, water vapours condense into tiny water droplets suspended in the air near the ground level. This is called _____.

A. Dew B. Fog C. Snow D. Breeze

- 17 Which of the following objects will cast the darkest shadow if the light shone on them is same?

A. Cardboard B. Frosted glass C. Clear glass D. Butter paper

SPACE FOR ROUGH WORK

- 18 Refer to the given diagram representing the interconversion of different states of matter P, Q and R and identify them.



Now, select the option that correctly identifies the examples of P, Q and R.

- | P | Q | R |
|-----------------|--------------|--------------|
| A. Liquid water | Ice | Water vapour |
| B. Water vapour | Ice | Liquid water |
| C. Ice | Liquid water | Water vapour |
| D. Liquid water | Water vapour | Ice |

- 19 Select the option that on unscrambling gives the name of a hard rock that is used for making floor of houses.

- A. ICUMEP B. IAGEPRTH C. NDAMIOD D. RENGAIT

- 20 Select the odd one out on the basis of luminous and non-luminous objects.

- A.  B.  C.  D. 

- 21 Select the option that correctly identifies X and Y in the given table.

- | X | Y |
|--------------|-----------|
| A. Pea | Muskmelon |
| B. Coriander | Coconut |
| C. Banyan | Grapevine |
| D. Spinach | Cotton |

Herb	Shrub
Grass	Hibiscus
Mint	Y
X	Rose

- 22 Select the correct match of the animal with its young one.

- | | | | | | |
|----------|---|------|----------|---|------|
| A. Sheep | – | Fawn | B. Horse | – | Foal |
| C. Wolf | – | Kid | D. Deer | – | Cub |

- 23 Read the given statement and identify X.

X is a part of our skeleton and it protects our lungs and heart.

- A. Skull B. Ribcage C. Stomach D. Backbone

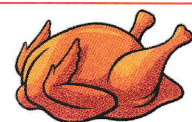
- 24 Rohit's paternal grandfather Vivek has one daughter and two sons. How does Vivek's daughter related to Rohit?

- A. Mother B. Paternal aunt C. Sister D. None of these

SPACE FOR ROUGH WORK

25 What is common among the given food items?

- A. They all are protective foods.
- B. They all are non-vegetarian foods.
- C. They occupy the base of the food pyramid in a balanced diet.
- D. None of these



26 Which of the following houses is built by using the material shown in the given picture?

- A. Bungalow
- B. Igloo
- C. Hut
- D. Tent



27 Which of the following is an **INCORRECT** safety rule?

- A. Never play or hide in dark or isolated places.
- B. Never push or pull someone from a swing or a slide.
- C. Do not fight with other students or bully them.
- D. If any stranger tries to talk to you, give him/her your contact details.

28 Read the given statements about a means of transport X and select the option that correctly identifies it.

- It is a means of water transport.
- It is used by soldiers to travel under water.

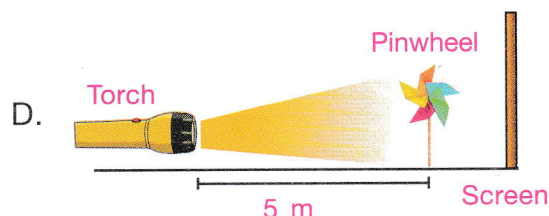
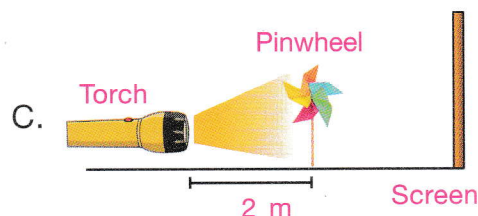
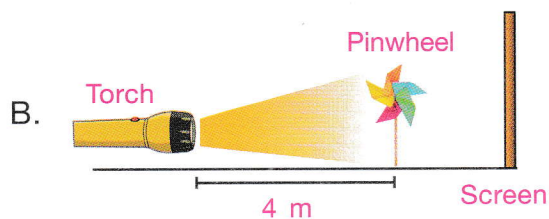
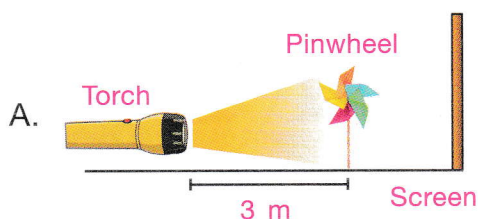
- A. Cruise ship
- B. Steamer
- C. Cargo ship
- D. Submarine

29 Match the columns and select the correct option.

Column I (Rock/Mineral)	Column II (Used for)
(a) Silica	1. Running steam engine
(b) Coal	2. Making jewellery
(c) Diamond	3. Making glass
(d) Chalk	4. Writing on blackboard
A. (a)-2, (b)-1, (c)-3, (d)-4	B. (a)-3, (b)-1, (c)-2, (d)-4
C. (a)-1, (b)-3, (c)-2, (d)-4	D. (a)-4, (b)-2, (c)-3, (d)-1

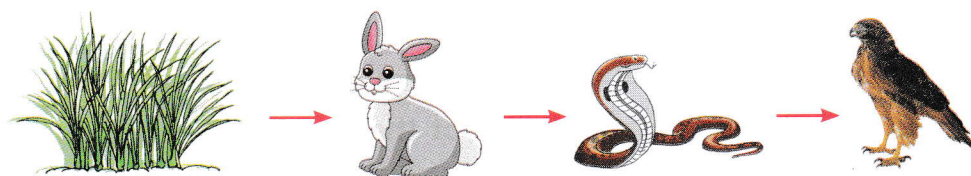
SPACE FOR ROUGH WORK

30 Which of the following setups will form the tallest shadow?



ACHIEVERS SECTION

31 Refer to the given food chain and select the correct option regarding it.



- A. A decrease in population of rabbit will lead to increase in the population of hawk.
- B. An increase in the snake population will lead to increase in the grass population.
- C. If the grass population is completely removed from the given food chain, then only rabbit population will get affected.
- D. In the given food chain, grass and rabbit are herbivores while snake and hawk are carnivores.

32 Which of the following can be found in the given word grid?

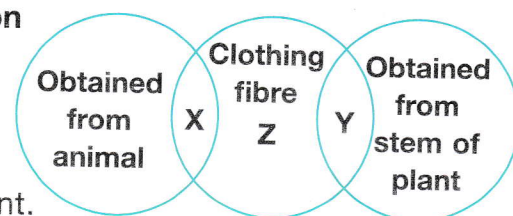
- A. A popular South Indian food item made by steaming
- B. A cooking method traditionally used for making *puri*
- C. A milk product that gives us energy
- D. A mineral that keeps our bones and teeth healthy

B	G	R	V	N	F	T	C
E	H	D	O	I	L	C	I
G	E	S	H	B	U	Q	F
M	E	D	O	A	J	G	B
Q	A	I	R	O	N	M	X
W	Z	E	P	A	K	H	L

SPACE FOR ROUGH WORK

- 33 Refer to the given Venn diagram and select the option that is **INCORRECT** about X, Y and Z.

- A. X can be a fibre that is obtained from cocoon of silkworm.
 B. Y can be a fibre that is obtained from coconut plant.
 C. Fabric made from fibre Z can catch fire easily and is also wrinkle free.
 D. Fibre Y can be obtained from flax plant whereas fibre Z can be a man-made fibre.



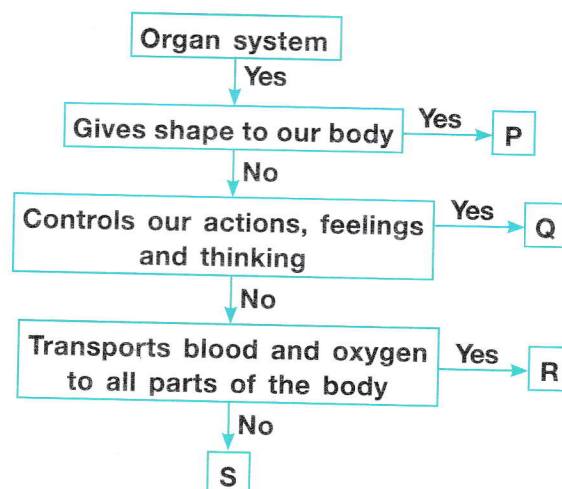
- 34 Refer to the given table and select the correct option regarding W-Z.

- A. X can be a glass bottle whereas Y can be honey.
 B. Y can be hydrogen whereas Z can be a ceramic tile.
 C. W can be a marble block whereas Y can be a pencil.
 D. X can be water whereas Z can be a window pane.

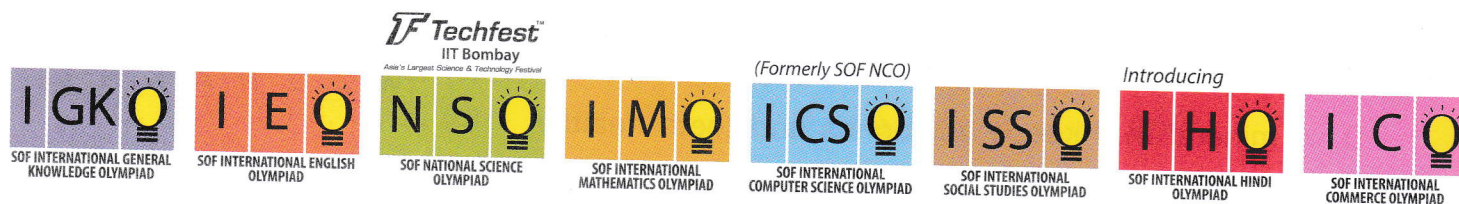
Characteristic	Material			
	W	X	Y	Z
Has fixed shape	✓	x	x	✓
Can flow	x	✓	✓	x
Can be compressed easily	x	x	✓	x
Light can pass through it	x	✓	✓	✓

- 35 Refer to the given flow chart and select the correct option regarding P-S.

- A. P can be an organ system that consists of brain as one of its organs.
 B. Q can be an organ system that consists of lung as one of its organs.
 C. R can be an organ system that consists of liver as one of its organs.
 D. S can be an organ system that is different in males and females.



SPACE FOR ROUGH WORK



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