

# **PHYSICS**

## **BOOKS - ICSE**

#### **MODEL TEST PAPER 2**

Section I

**1.** Name a derived physical quantity with its SI unit.



**2.** Convert 1  $m^3$  to  $cm^3$ .

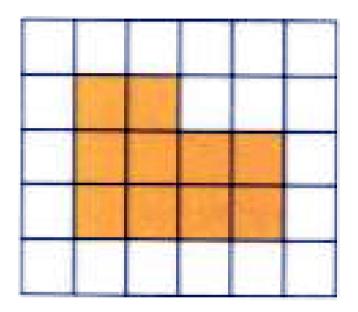


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3. In which units is the area of a country measured?



**4.** Calculate the area of the figure if each square is  $1cm^2$ 





**5.** The density of gold is  $19.32g/cm^3$ . Calculate its density in SI units.



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**6.** What kind of motion does a drilling machine have?



**7.** Distinguish between scalar and vector quantities Give example .



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8. Give an example of mechanical energy



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**9.** What is the name of the quantity which gives information of speed as well as

**Watch Video Solution** 10. Name the energy possessed by moving charged particles inside a substance. **Watch Video Solution** 11. What do you mean by KE? On what factors does it depend and how?

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direction?

**12.** Which surfaces reflect light better-rough or smooth?



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13. Name the following

The angle between the incident ray and the normal



**14.** If the angle of reflection is  $40^{\circ}$ , what is the angle of incidence?



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**15.** The primary colours of light are:



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**16.** If a shirt has a pigment which absorbs blue colour and white light is incident on it, what

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17. Define temperature. What is its SI unit?



would be the colour of the shirt?

**18.** If the temperature of an object rises by 1  $^{\circ}C$ , what is the corresponding rise in the Kelvin scale.



**19.** The temperature of a body rises by  $1^{\circ}C$ . What is the corresponding rise on the Fahrenheit scale



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**20.** What do you mean by liquefaction?



21. Give an example of sublimation.



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**22.** Ventilators are built high up in a room. Give reason.

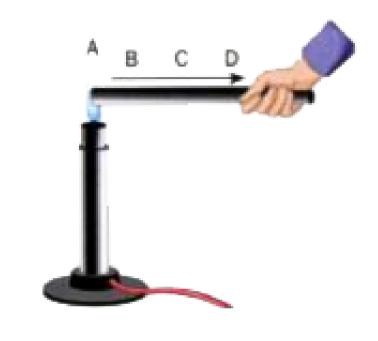


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23. Look at the figure and answer the question.

How does the heat get transferred from A B C

## D point A to the hand?





**24.** Look at the figure and answer the question.

What is the term used for this method of

transfer of heat?



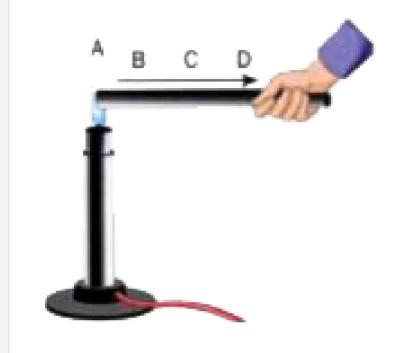


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25. Look at the figure and answer the question.

When does the transfer of heat in the metal

rod stop?





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**26.** Does sound needs a medium to travel? Give reasons .



**27.** Write the audible range of frequency for the normal human ear.



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**28.** In the following figures, which wave has a higher pitch? Give reason for your answer.





**29.** Can sound travel through solids and liquids? In which of these does it travel faster?



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**30.** How do music recording studio cut off unwanted sound?



31. What do the following figures represent?





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# Section li

**1.** How should we take the reading of a liquid level, if the meniscus of the surface is concave



**2.** How should we take the reading of a liquid level, if the meniscus of the surface is convex.



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**3.** If the mass of 10  $cm^3$  of iron is 78 g, what would be its density?



**4.** If the mass of 10  $cm^3$  of iron is 78 g, what would be its density?



**5.** Define speed. What is its S.I. unit?



6. Convert 10 m/s to km/h.



**7.** If an ostrich covers 96.6 km in one hour and a black buck covers 160 km in two hours. which animal is faster?



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**8.** Explain translatory motion. Describe two types of translatory motion with examples.



**9.** Does a body moving around a circular path with constant speed have constant velocity? Give reasons.



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10. Rani starts from home reaches a templewhich is 3 km away and comes back home after2 hours. Calculate her distance anddisplacement.



11. What is the speed of a lion that sprints 80 m in 4 s?



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**12.** State three differences between mass and weight.



**13.** The weight of a person in Jupiter is 2.5 times as that on Earth. Give reasons.



**14.** Name the energy which is released during digestion.



**15.** Define potential energy with an example.



16. Write the energy transformation in Battery

.



**17.** Write the energy transformation in Washing machine.



**18.** Explain the law of conservation of charge with an example.



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**19.** Write the energy conversion that place in a hydropower plant.



**20.** What do you mean by lateral inversion of an image?

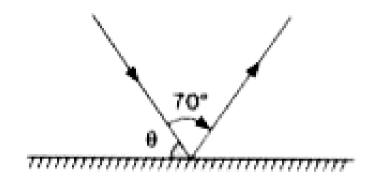


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**21.** State two differences between a real image and a virtual image.



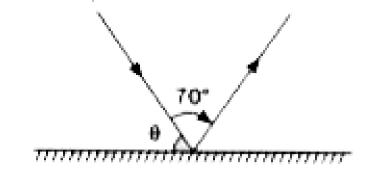
**22.** In the figure given the angle between incident ray and the reflected ray is  $70^{\circ}$ 



Find the angle of incidence.



**23.** In the figure given the angle between incident ray and the reflected ray is  $70\,^\circ$ 

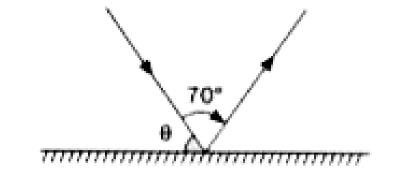


Find the angle of reflection.



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**24.** In the figure given the angle between incident ray and the reflected ray is  $70^{\circ}$ 



Find the angle between the mirror and the incident ray.



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**25.** Fill in the blanks using what you have learnt on addition of colours

Red + Cyan = Red + Blue + ..... =....



**26.** Fill in the blanks using what you have learnt on addition of colours

Green + ..... = Green + Red + Blue = .....



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**27.** What are the two reference points of a thermometer scale?



**28.** What phase change happen when water vapour becomes frost?



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**29.** Mud houses are coller in summer and water in winter because

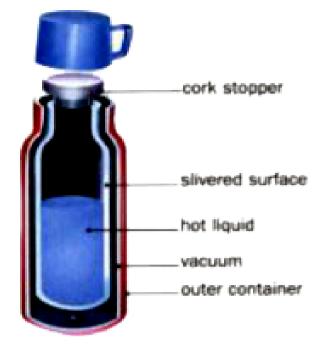


**30.** State difference between boiling and evaporation.



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**31.** Look at the picture of the thermos flask and answer the following question



Which

means of heat transfer are prevented by having a vacuum between the two walls of thermos flasks?



**32.** Look at the picture of the thermos flask and answer the following question



The outer surface of the inner wall of a thermos flask has a very shiny surface. What effect will this have on heat escaping from a hot liquid inside a thermos flask?

**33.** Look at the picture of the thermos flask and answer the following question



What is the role of silver coating on the outer wall in the flask?

**34.** Look at the picture of the thermos flask and answer the following question



Would you expect the cork to be a good or a bad conductor of heat?



**35.** The time period of a vibrating body is 0.020. What is its frequency?



**36.** What is a sonar?



**37.** A boy fires a gun and another boy at a distance of 1360 m hears the sound of firing the gun 4 s after its smoke is seen. Find the speed of sound.



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**38.** How will you test whether a given rod is a magnet or not?



**39.** State two differences between an electromagnet and a permanent magnet.



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**40.** In the following figures, the bulbs in Figure A and D glow, but the bulbs in Figure B and C do not glow. Give reason.

