

--	--	--	--	--	--	--	--	--	--

Name of the student: Div:

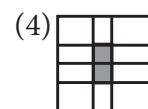
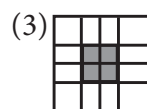
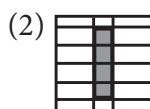
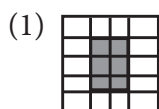
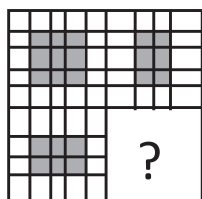
Name of the School:

Each Question carries 2 marks.

1. A is the mother of B. B is the sister of C. D is the son of C. E is the brother of D. F is the mother of E. G is the granddaughter of A. H has only two children B and C. How is F related to H?

- a. Son-in-law
- b. Daughter-in-law
- c. Father-in-law
- d. Cannot be determined

2. Identify the figure that completes the pattern



- a) 1
- b) 2
- c) 3
- d) 4

3. by people's perception it seems that democracy has succeeded in India.

- a. Following
- b. Going
- c. Making
- d. Planned

The following sentence consists of a word or a phrase which is written in *italics* letters. Select the word or the phrase which is closest to the opposite in meaning of the **bold** word or phrase.

4. How dare you **desecrate** an idol of this temple.

- a. defile
- b. pollute
- c. deify
- d. impious

5. Correct the error in the following sentence-

The boy *told his teacher* to explain the passage.

- a. asked his teacher
- b. said to his teacher
- c. invited his teacher
- d. no improvement

6. Choose the correctly spelt word.

- a. Acomodation
- b. Accomodation
- c. Acommodation
- d. Accommodation

7. Fill in the blanks with the appropriate words.

Countries which still undergoing the economic processes
..... known as developing countries.

- a. are, are b. are, is c. is, are d. were, are

8. 583 is related to 293 in the same way as 488 is related to _____

- a. 291 b. 378 c. 487 d. 581

9. In a certain code language,

'134' means 'good and tasty';

'478' means 'see good pictures' and

'729' means 'pictures are faint'.

Which of the following digits stands for 'see'?

- a. 9 b. 2 c. 1 d. 8

10. In a row of boys, if A who is 10th from the left and B who is 9th from the right interchange their positions,

A becomes 15th from the left. How many boys are there in the row?

- a. 23 b. 31
c. 27 d. 28

11. P, Q, R, S, T, U, V and W are sitting round the circle and are facing the centre:

P is second to the right of T who is the neighbour of R and V.

S is not the neighbour of P.

V is the neighbour of U.

Q is not between S and W. W is not between U and S.

Then who is sitting opposite to U ?

- a. Q b. P
c. R d. W

12. The solution of $3(2u + v) = 7uv$ and $3(u + 3v) = 11uv$ is _____

- a. $u = 1, v = 0$ b. $u = 1, v = 3/2$
c. $u = 0, v = 3/4$ d. $u = 0, v = 1$

13. If "-" means "added to", "+" means "divided by", "÷" means "multiplied by", "x" means "subtracted from", then $13 + 12 \times 9 \div 3 - 6 = ?$

- a. $-117/11$ b. $117/11$
c. $-237/12$ d. $-239/12$

14. If $25 + 5 \div 2 = 40$, and $35 + 5 \div 2 = 60$, then $45 + 5 \div 2 = ?$

- a. 90 b. 70
c. 60 d. 80

15. Select the missing number in the question mark given below.

9	8	5
6	6	7
3	?	3
5	7	4

- a) 9 b) 4 c) 8 d) 2

16. Find the number of triangles in the given figure.



- a) 22 b) 24
c) 26 d) 28

17. Who among the following experts recommended steps to preserve and rejuvenate the ecologically sensitive Western Ghats?

- a. Devendra Pandey
b. Dr. Madhav Gadgil
c. Dr. M S Swaminathan
d. Dr. Vinod Rishi

18. Who wrote the book The Algebra of Infinite Justice?

- a. Anita Desai
b. Kiran Desai
c. Arundhati Roy
d. Ashapura Devi

19. When a person turn on your computer, which of the following computer memory is the first to activate?

- a. RAM
b. ROM
c. BIOS
d. All of the above

20. Which of the following defines the meaning of RAM?

- a. It is a memory which only be read.
b. It is a memory which both read and written.
c. It is a memory which is used for permanent storage.
d. It is a memory which can only be written.

21. In which year WhatsApp was acquired by Facebook?

- a. 2012 b. 2013
c. 2014 d. 2015

22. Which country is to play host to the FIFA U-17 Women's World Cup 2022?

- a. US b. France
c. Japan d. India

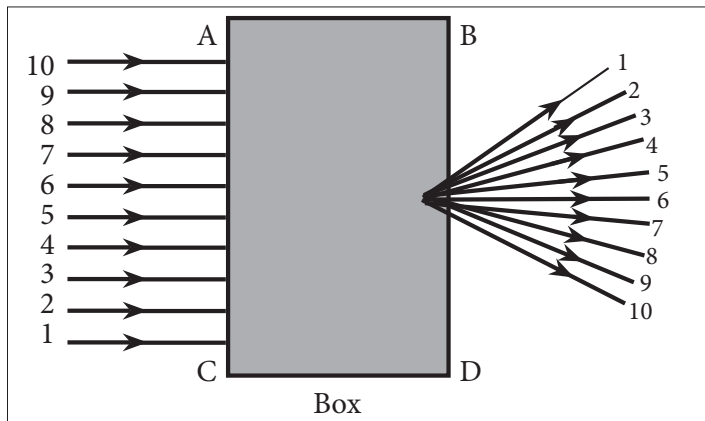
23. A chemical reaction does not involve:

- a. Formation of new substances having entirely different properties than that of the reactants
b. Breaking of old chemical bonds and formation of new chemical bonds
c. Rearrangement of the atoms of reactants to form new products
d. Changing of the atoms of one element into those of another element to form new products

24. A substance 'X' is used in white-washing and is obtained by heating limestone in the absence of air. Identify 'X'.

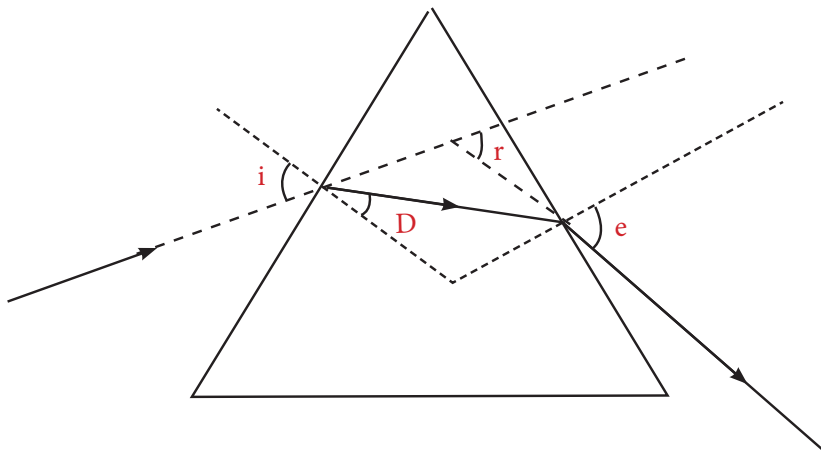
- a. CaOCl_2 b. $\text{Ca}(\text{OH})_2$
c. CaO d. CaCO_3

25. A beam of light is incident through the holes on side A and emerges out of the holes on the other face of the box as show in the figure. Which of the following could be inside the box?



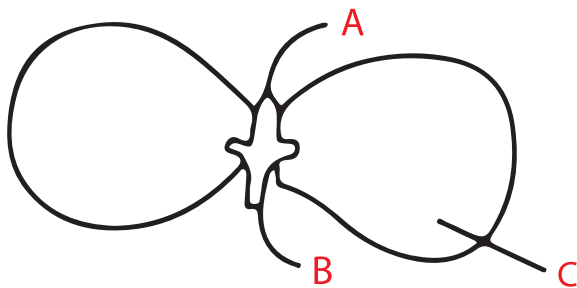
- a) Concave lens
- b) Rectangular glass slab
- c) Prism
- d) Convex lens

26. After tracing the path of a ray of light through a glass prism a student marked the angle of incidence ($\angle i$), angle of refraction ($\angle r$), angle of emergence ($\angle e$) and the angle of deviation ($\angle D$) as shown in the diagram. The correctly marked angles are:



- a) $\angle i$ and $\angle r$
- b) $\angle i$ and $\angle e$
- c) $\angle i$, $\angle e$ and $\angle D$
- d) $\angle i$, $\angle r$ and $\angle e$

27. In the following Figure, the parts A, B and C are sequentially;



- a. cotyledon, plumule and radicle
- b. plumule, radicle and cotyledon
- c. plumule, cotyledon and radicle
- d. radicle, cotyledon and plumule

28. Choose the correct path of urine in our body

- a. kidney → ureter → urethra → urinary bladder
- b. kidney → urinary bladder → urethra → ureter
- c. kidney → ureters → urinary bladder → urethra
- d. urinary bladder → kidney → ureter → urethra

29. A trait in an organism is influenced by

- a. paternal DNA only
- b. maternal DNA only
- c. both maternal and paternal DNA
- d. neither by paternal nor by maternal DNA

30. Anti COVID Drug 2-DG has been developed by

- a. DRDO
- b. ISRO
- c. CDIR
- d. DGCI

31. Which company has partnered with the Indian government to roll out a vaccine finder tool on its mobile app to get vaccinated?

- a. Google
- b. Microsoft
- c. Amazon
- d. Facebook

32. Which Indian hockey player was named as the 2019 Women's Rising Star of the Year, by the International Hockey Federation (FIH)?

- a. Rani Rampal
- b. Lalremsiami
- c. Navneet Kaur
- d. Vandana Katariya

33. Which country has won the maximum number of medals in the all time history of commonwealth games?

- a. Australia
- b. England
- c. India
- d. Canada

34. Which of the following statements about food chain and energy flow through ecosystem is false?

- a. Food webs include two or more food chains.
- b. All organisms that are not producers are consumers.
- c. A single organism can feed at several trophic levels.
- d. Detritivores feed at all trophic levels except the producer level.

35. Assertion (A): The balancing of chemical equations is based on law of conservation of mass.

Reason (R): Total mass of reactants is equal to total mass of products.

- a. Both A and R are true and R is the correct explanation of A.
- b. Both A and R are true but R is not the correct explanation of A.
- c. A is true but R is false.
- d. A is false but R is true

(36-39)-Read the passage given below and answer the questions that follow.

The electric generator is a machine for producing electric current. The electric generator or dynamo converts mechanical energy into electrical energy. The generator is an application of electromagnetic induction. It works on the principle that when a wire is moved in a magnetic field, then the current is induced in the coil. A rectangular coil is made to rotate rapidly in the magnetic field between the poles of a horse shoe type magnet. When the coil rotates, it cuts the lines of magnetic force, due to which a current is produced in the generator coil. This current can be used to run the various electrical appliances.

36. An electric generator actually acts as

- a. source of electric charge
- b. source of heat energy
- c. an electromagnet
- d. a converter of energy

37. Electromagnetic induction is the

- a. charging of a body with a positive charge
- b. production of current by relative motion between a magnet and a coil
- c. rotation of the coil of an electric motor
- d. generation of magnetic field due to a current carrying solenoid

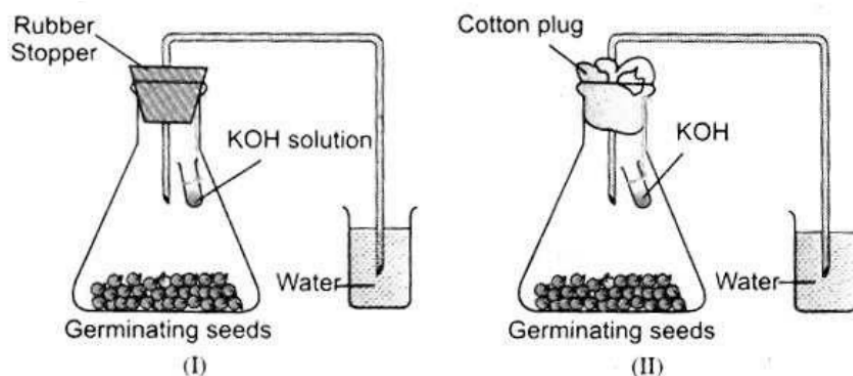
38. The brushes used in electric generator is made of

- a. Carbon
- b. Aluminium
- c. Zinc
- d. Soft iron

39. A commutator changes the direction of current in the coil of

- a. a DC motor
- b. a DC motor and an AC generator
- c. a DC motor and a DC generator
- d. an AC generator

40. The following experimental set ups were kept in the laboratory to show that CO_2 is given out during respiration. After two hours, students observed that water rises in the delivery tube



- a) only in set up (i)
- b) only in set up (ii)
- c) in both (i) and (ii)
- d) neither in set up (i) nor in set up (ii)

41. The organisers of the Khilafat Movement were

- a. Mahatma Gandhi and Bal Gangadhar Tilak
- b. Motilal Nehru and CR Das
- c. Syed Ahmed Khan and Abdul Kalam Azad
- d. Mohammad Ali and Shaukat Ali

42. Who among the following woman writers, writes by Pen name, Mary Ann Evans?

- a. Jane Austen
- b. Charlotte Bronte
- c. G.A. Henty
- d. George Elliot

43. Which of the following statements is false?

- a. Tropical evergreen forests have very little undergrowth.
- b. Tropical monsoon forests have dense undergrowth.
- c. Coniferous forests are mostly deciduous.
- d. Temperate evergreen forests have rainfall throughout the year.

44. As per Global Multidimensional Poverty Index 2022, the largest number of poor people in the world in 2020 lived in

- a. Bangladesh
- b. Sri Lanka
- c. Congo
- d. India

45. Who among the following discovered the radioactive element radium?

- a. Isaac Newton
- b. Marie Curie
- c. Albert Einstein
- d. Benjamin Franklin

Read the following passage carefully and answer the questions that follow.

India is considering inviting expressions of interest to sell Air India Ltd by the end of next month as the government aims to complete the transaction this year, people with knowledge of the matter said.

“The government will conduct roadshows, as well as, be open to meet prospective buyers even before the expressions of interest are sought,” the people said, declining to be identified as the discussions are private. “The process will likely allow the bidders to look at the accounts of the airline except for some portions that are confidential and also see the share purchase agreement,” they said without providing details.

“The potential bidders will have the option to make suggestions for changes in the sale terms during the process of expressing their interest in the deal,” the people said. The government is looking to sell its entire stake in the carrier, they said.

DS Malik, a spokesman of the Ministry of Finance, did not immediately answer two calls made to his mobile phone. Dhananjay Kumar, a spokesman of Air India, declined to comment.

The plan is being prepared after the government’s attempt to partially exit the carrier failed to attract any bidder last year. In her budget presentation for the current financial year, Finance Minister Nirmala Sitharaman said that the government will revive plans to sell Air India and the divestment would be part of the government’s efforts to raise Rs 1,05,000 crore (\$15.3 billion) selling stakes in state-run companies.

Air India, which is surviving on a Rs 30,000 crore taxpayer-funded bailout, has failed to maintain its market dominance as a slew of carriers including Inter Globe Aviation Ltd and Spice Jet Ltd started to offer ultra-cheap, on-time flights more than a decade ago. The state-run airline has total debts of \$8.4 billion and posted losses of more than Rs 7,600 crore last year, according to provisional estimates.

- 46. Which among the following has been shown as the main reason for the present situation of Air India in the passage?**
- Air India does not have enough money to survive in the long run though it is trying to find out.
 - Air India has lost all the deposits it had received from the government last year.
 - Air India is in the process of earning deposits from the depositors and investors so that they are worried about the stake sale.
 - Air India has got competition from other airlines and it has simply failed to live up to the same.
- 47. Which among the following is correct regarding the plan of the government about the disinvestment of Air India?**
- It has decided to sell off its entire stake in the national carrier in the recent round of disinvestment.
 - It has decided to buy the entire stake from all the other investors so that it becomes the only owner.
 - The government is of the opinion that the entire stake of Air India should be in the hands of some foreign carrier only.
 - The government has decided to call off the disinvestment process of Air India for the time being.
- 48. Which among the following is NOT a liberty given to the prospective buyers of Air India, according to the passage?**
- They will not get to understand the financial structure of the company before giving the money to the government.
 - They will not get to see the bank account details of the company before depositing the money.
 - They will not have to share anything with the government regarding their own financial status.
 - They will not get to look at all the finances of the company while making an offer for the airline.
- 49. What is the target set by the government from disinvestment in the state-run companies of the country as per the Union Budget?**
- Rs 105000 Crores
 - Rs 100000 Crores
 - Rs 200000 Crores
 - Rs 205000 Crores
- 50. Which among the following is correct regarding the financial condition of Air India, according to the given passage?**
- Air India has posted loss of Rs 7500 crores in the last couple of financial years put together.
 - Air India has not published the financial results in the last year due to some restriction from the government.
 - Air India has posted losses of more than Rs 7600 crores in the last financial year as published by it.
 - Air India is yet to understand the gravity of the financial situation in the country because of its financial burden.