Time: 2 hours

SOS Hermann Gmeiner School Sanothimi   **Full Marks: 60**
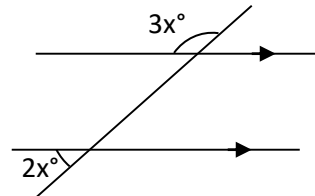
Entrance Exam 2082/Grade VI Model Question

Instructions:

- There are altogether 60 questions. For every correct answer from Question No. 1 to 51, candidates will be awarded with1 full mark except question number 52 to 59 which carry 0.5 marks each and question number 60 that carries 5 marks.
- There won't be any **negative marking in case of wrong answers**.
- Use of **pencil and calculator is prohibited.**
- Read the questions carefully and **Tick (√)** the correct answer under the options a, b, c and d

1. **Choose the invertebrate that has a hard covering called exoskeleton for protection and support?**

    a. Earthworm   b. Jellyfish   c. Beetle   d. Flatworm

2. **Which organ enables amphibians to respire inside water?**

    a. Gills   b. Trachea   c. Lungs   d. Skin

3. **Select the correct stages of complete metamorphosis which involves during the life cycle of some insects.**

    a. Adult-Egg-Nymph-Pupa   b. Egg-Larva-Pupa-Adult

    c. Adult-Nymph-Egg-Pupa   d. Egg-Pupa-Adult-Larva

4. **Porcelain pieces are used in distillation**

    a. To have uniform boiling   b. To hasten the process

    c. To add weight for the substance   d. To absorb excess heat from the flask

5. **Which of the following is considered an example of disturbing the natural environment?**

    a. Planting more trees   b. Sustainable fishing practices

    c. Protecting wildlife habitats   d. Constructing dams and reservoirs

6. **Which of the following increases the air's ability to absorb water vapour?**

    a. Increase in wind speed   b. Decrease in temperature

    c. Increase in temperature   d. Decrease in air pressure

7. **Secondary air pollutant is**

a. Sulphur dioxide b. Nitrogen dioxide

c. Carbon monoxide d. Ozone

8. **Which of the following groups consists entirely of cold-blooded animals?**

a. Reptiles, amphibians b. Reptiles, fish

c. Amphibians, fish d. Fish, birds

9. **Which type of leaf venation is characteristic of monocotyledonous plants like grasses?**

a. Parallel venation b. Reticulate venation

c. Palmate venation d. Pinnate venation

10. **The rate of Sublimation is increased with**

a. Decrease in temperature b. Increase in pressure

c. increase in temperature d. Decrease in pressure

11. **During photosynthesis, what gas do plants primarily release as a byproduct?**

a. Oxygen b. Carbon dioxide c. Nitrogen d. Methane

12. **What is the primary function of the spiracles in insects?**

a. Reproduction b. Respiration c. Excretion d. Sensory perception

13. **The main physiological purpose of transpiration in plants is to**

a. Store excess water b. Absorb water from the air

c. Regulate internal temperature d. Eliminate excess water vapor

14. **Which of the following is a detrimental effect of excessive heat on living systems?**

a. Expansion of substances b. Change in state of matter

c. Decomposition of molecules d. Enhancement of chemical reactions

15. **Which planet floats on water?**

a. Mercury b. Venus c. Jupiter d. Saturn

16. **What effect does heat typically have on biological molecules?**

a. Denaturation b. Polymerization c. Crystallization d. Precipitation

17. **Which of the following statement is correct?**

a. The moon makes one orbit around the earth in a year

b. The moon makes one revolution of the sun in a year

c. The earth makes one orbit around the sun in a year

d. The earth takes one year to rotate on its own axis.

18. Which of the following is equal to one half of a day?

a. 43200 s   b. 42400 s   c. 43600 s   d. 86400 s

19. Nirvana weighed an apple in a shop and found it to be 1800 g. The mass in kilogram is

a. 0.8   b. 18   c. 1.8   d. 180

20. Within a computer system, which component exhibits similarities with the human brain by coordinating complex calculations, managing data flow, and making decisions?

a. CPU   b. GPU   c. RAM   d. HDD

21. If $\dfrac{2}{5}$ of the total population of a village are female, what percentage of the total population is male?

a. 20%   b. 40%   c. 60%   d. 80%

22. What is the sum of the square and cube of the smallest prime number?

a. 10   b. 12   c. 25   d. 5

23. If the volume of a cube is 512 cm^3, what is its perimeter ?

a. 64 cm   b. 32 cm   c. 16 cm   d. 4 cm

24. If $a - 3 = 2$ and $ab = 20$, then the value of $(a + b)^2$ is

a. 81   b. 18   c. 40   d. 25

25. In the figure, the value of x° is

a. 72°   b. 36°   c. 18°   d. 9°

26. The ratio of 2 m and 50 cm

a. 5:2   b. 1:25   c. 25:1   d. 4:1

27. 0.025 km = …………m

a. 2.5   b. 25   c. 250   d. 2500

28. If $2x - 3 > 17$, then the value of x is

a. > 10   b. < 5   c. > 5   d. 10

29. How many edges are there in a cuboid ?

a. 10   b. 12   c. 6   d. 4

30. **The simplified form of 72 ÷(16-4×3)**

a. 18   b. 9   c.2   d.10

31. **Subtract 0.5 from 5**

a. 0   b. 2.5   c. 1   d. 4.5

32. **The L.C.M. of 45, 60 and 180 is**

a. 45   b. 60   c. 180   d. 360

33. **The square root of 676 is**

a. 22   b. 24   c. 25   d. 26

34. **If the cost of 2 dozens of pencils is Rs. 480, what is the cost of 5 such types of pencils?**

a. Rs.20   b. Rs.40   c. Rs.80   d. Rs.100

35. **What must be subtracted from a+3b to make 4b?**

a. 2a – b   b. a – 2b   c. b - a   d. a - b

36. **For what value of x satisfies the equation 4x - 9 = -1?**

a. 1   b. 2   c. 0   d. 5

37. **What is the product of $4x^7y^3$ and $2x^3y^2$?**

a. $6x^{10}y^5$ b. $8x^{10}y^5$ c. $8x^{21}y^6$ d. $2x^{10}y^5$

38. **The H.C.F. of 18 and 30 is**

a. 6   b. 10   c. 18   d. 36

39. **The complementary angle of 71° is**

a. 19°   b. 109°   c. 29°   d.129°

40. **If the angles of a triangle are 2x° , 80° and 50°, then the value of x is**

a. 50°   b. 25°   c. 10°   d. 80°

Read the passage below and answer questions from 41 to 45.

The greatest enemy of mankind, as people have discovered is not science, but war. Science merely reflects the social forces by which it is surrounded. It is found that when there is peace, science is constructive, when there is war science is perverted in destructive ends. The weapons which science gives us do not necessarily create war, these make war increasingly terrible.

Until now, it has brought us at the doorstep of doom. Our main problem, therefore, is not to curb science, but to stop war to substitute law for force and international government for anarchy in the relation of one nation with another.

That is a job in which everybody must participate, including the scientists. But the bomb of Hiroshima suddenly woke us up to the fact that we have very little time. The hour is late and our work has scarcely begun. Now we are face to face with the urgent question: "Can education and tolerance, and understanding and creative intelligence run fast enough to keep us abreast with our own mounting capacity to destroy?"

That is the question which we shall have to answer one way or the other in this generation. Science must help us in the answer, but the main decision lies within ourselves.

41. **According to the author, the real enemy of mankind is not science, but war because:**

    a. science during war is not destructive

    b. science merely invents the weapons with which war is fought.

    c. the weapons that science invents necessarily lead to war.

    d. the weapons invented by science do not cause war, though make it more destructive.

42. **Our mounting capacity to destroy can be kept under control by:**

    a. encouraging social forces   b. education and broadmindedness

    b. insight and constructive thinking   d. both b and c together

43. **Which of the following is opposite in meaning to the word 'anarchy' as used in the passage?**

    a. law and order   b. economic prosperity

    c. political dominance   d. communal harmony

44. **The expression 'keep us abreast' in the passage means :**

    a. prevent from escaping   b. hold out a challenge

    c. keep at a side   d. keep side to side

45. **Which of the following statements is not implied in the passage?**

    a. Science is misused for destructive purposes

    b. Neither science nor the weapons it invents add to the horrors of war

    c. People needlessly blame science for war

    d. The role of science in ensuring world is subsidiary to that of man

46. **You are Dilip, aren't you? Can be reported as ………….**

    a. She asked him whether he was Dilip.   b. She asked him that he was Dilip.

    c. She told him that he was not Dilip.   d. She asked them if he was Dilip.

47. **The police believe that a professional thief stole the statue.**

    a. A professional thief is believed to have stolen the statue.

    b. The police is believed that a professional thief stole the statue.

    c. A professional thief was believed to have stolen the statue.

    d. They believed that a professional thief stole the statue.

48. She has painted the picture *plainly*. ------------------is the opposite of the italicized word in the sentence.

    a. sluggishly   b. brightly   c. strangely   d. awkwardly

49. To put the "cart before the horse" means-------------.

    a. to plan ahead   b. not to be able to do anything

    c. to do things in the wrong order   d. to stop the horse from eating

50. What ------------if a millionaire ----------you to marry him?

    a. would you do/would ask   b. would you do/asked

    c. did you do/would ask   d. did you do/asked

51. Which one of the following conjugations is incorrect?

    a. lie/lay/lain   b. burst/ burst/burst   c. shed/shed/shed   d. tear /tore/tore

(Question No. 52 to 59 carry 0.5 marks each)

52. Which one of the following words is spelt incorrectly?

    a. jewelry   b. maintenance   c. millennium   d. questionnaire

53. Your parents are -----------only people who never deceive you in life.

    a. a   b. they   c. the   d. X (nothing)

54. Listen! Everybody is singing the national anthem, -------------?

    a. is he   b. are they   c. aren't they   d. isn't he

55. I'll agree ------------your recommendation if you lower the price.

    a. at   b. in   c. to   d. by

56. A number of recommendations for abroad studies----------------- by the school last year.

    a. was issued   b. were issued   c. has been issued   d. are issued

57. She would get fat if she ……………. eating so much.

    a. does not stop   b. did not stop   c. will not stop   d. stopped

58. The meeting was abruptly -------------as the chairman fainted.

    a. called out   b. called for   c. called of   d. called off

59. The house wasn't very beautiful. I liked the garden, -------------.

    a. although   b. despite   c. in spite of   d. though

60. Write a paragraph in about 10 sentences on the topic "Obedience to Rules and regulations within Educational Institutions." **(5)**

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