CLASS 06   Time : 120 Minutes

World Genius Search Examination™ - 2016

Your WGSE Roll No ☐☐☐☐☐☐☐☐☐

Student's Name ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Student's Signature _____

INSTRUCTIONS TO THE CANDIDATE

1. **DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO.**
2. Fill and sign the Question Booklet. You can carry this booklet with you after you finish the test at the scheduled time.
3. Fill the information required in the answer sheet. Answer sheets with incomplete information may not be evaluated.
4. Do not seek clarification on any item in the test booklet from anyone including the test invigilator or the center supervisor. Use your best judgement.
5. This booklet consists of three sections as given below :
   SECTION-1: MATHEMATICS – 15 Questions, **SECTION-2: SCIENCE** – 15 Questions, **SECTION-3: ENGLISH** – 15 Questions, **SECTION-4: GENERAL KNOWLEDGE** – 10 Questions**, SECTION-5: LOGIC** – 10 Questions, and **SECTION-6: INFORMATION TECHNOLOGY** – 10 Questions.
6. In case of any problem with your test booklet, inform the invigilator immediately. You will be provided with a replacement.
7. Use of standalone Calculator is allowed. Mobile phones are strictly prohibited.
8. Use **BLACK BALL POINT PEN** only for marking answers on the OMR sheet. Do not use gel pens or pencils.
9. **Each question carries 2 marks. Questions 1 to 75 will have one correct answer or more than one correct answer as per the directions given. Shading wrong bubbles make the answer wrong. There are no negative marks allotted to wrong answers.**
10. Use the margin in the **Question Booklet** for rough work. No other piece of paper is permitted to be used for rough work. Failure to follow instructions and examination norms will lead to disqualification.
11. Your **ADMIT CARD** should be returned to the invigilator with your answer sheet.

PLEASE WAIT FOR THE SIGNAL TO OPEN THE TEST BOOKLET

Open from this side ⟶

MATHEMATICS

**Questions from 1 to 13 will have only one right answer. Shade the correct bubble.**

1. Vidya's mother got a vessel with 4 litres and 500 ml of milk. In how many glasses, each of 25 ml capacity, can it be filled to give to her friends?
   (a) 150   (b) 160   (c) 170   (d) 180

2. Quana would like to know what is the length of the diameter of a circle of radius 8 cm?
   (a) 4cm   (b) 8cm   (c) 16cm   (d) 2cm

3. Wisden has a new question - What fraction of a clockwise revolution does the hour hand of a clock turn through, when it goes from 3 to 9?
   (a) 1/2   (b) 1/3   (c) 1/ 4   (d) 1/5

4. Here is another simple question - Which of the following is the equivalent fraction of 3/5 with numerator 50?
   (a) 20/50   (b) 30/50   (c) 40/50   (d) 50/50

5. The following bar graph shows the marks obtained by one of Wisden's friend in different subjects.
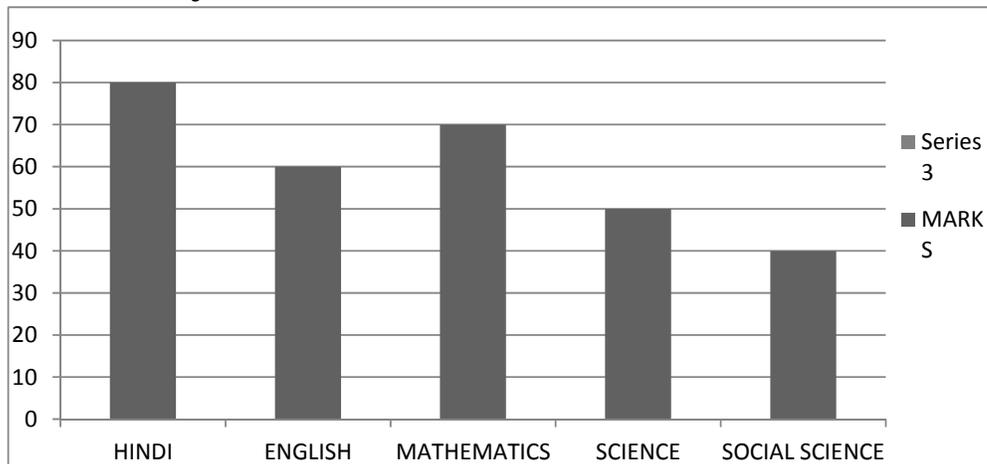
   Which of the following is the difference between the maximum and the minimum marks he scored?
   (a) 30   (b) 40   (c) 20   (d) 10

6. The length of a rectangular hall is 4 metres less than 3 times the breadth of the hall. What is the length, if the breadth is 'b' metres?
   (a) b + 4   (b) b - 4   (c) 3b - 4   (d) 3b + 4

Turn to next page

7. Just before Channai floods, Chennai had 65 cm of rain at constant rate for 5 hours. How much did it rain in 3 hours?

    (a) 26 cm   (b) 39 cm   (c) 42 cm   (d) 53 cm

8. Vidya want you to answer her question - if the sum of two numbers is 55 and the H.C.F. and L.C.M. of these numbers are 5 and 120 respectively, then What is the sum of the reciprocals of the numbers ?

    (a) $\frac{55}{601}$ (b) $\frac{601}{55}$ (c) $\frac{11}{120}$ (d) $\frac{120}{11}$

9. Hypatia has a puzzle for you! If each of the length and breadth of a rectangular room are increased by 1m, its area is increased by 21 sq. m. If the length is increased by 1 m and breadth is decreased by 1m, then the area is decreased by 5 sq. m.; what its perimeter is?

    (a) 30 m   (b) 32 m   (c) 36 m   (d) 40 m

10. One-third of a tank in Afreen's garden holds 80 litres of water. What quantity of water half of this tank can hold?

    (a) $\frac{80}{3}$ litres   (b) 100 litres   (c) 120 litres   (d) 240 litres

11. Which of the following fractions is the smallest?

    (a) $\frac{13}{16}$ (b) $\frac{15}{19}$ (c) $\frac{17}{21}$ (d) $\frac{7}{8}$

12. During Christmas, Wisden decorated his house with a light which blinks at intervals of 13 seconds. It was seen for the first time at 1 hr. 54 min 50 sec. (a.m.) and the last time at 3 hrs. 17 min. 49 sec. (a.m.) by Vidya. How many did Vidya see the light blinking?

    (a) 360   (b) 375   (c) 378   (d) 384

13. How many lines of symmetry does the figure have?
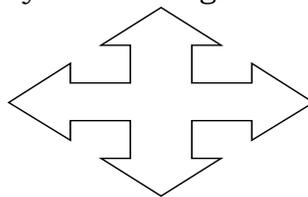
    (a) 1   (b) 2   (c) 3   (d) 4

Questions from 14 to 15 will have more than one right answer. Shade all the correct bubbles.

14. Hypatia was playing on the concepts of numbers with Vidya and Afreen. She has listed the following numbers. Which are whole numbers among them?

    (a) 1   (b) 0   (c) -1   (d) -7

15. Quana made a rhombus with using some sticks and showed her teacher. Teacher asked her to list the properties of a rhombus. She has listed 4 properties as follows. Which among them are right?

(a) rhombus is a parallelogram   (b) Its sides are equal

(c) its diagonals bisect each other   (d) its diagonals bisect the angles of vertices.

SCIENCE

Questions from 16 to 28 will have only one right answer. Shade the correct bubble.

16. Which parts of the mustard plant can be used as food?
    (a) seed and stem   (b) seed and leaf
    (c) stem and root   (d) root and seed

17. Take a small quantity of a food, you have. Put 2-3 drops of dilute iodine solution on it. Observe the change in the colour of food. If it turns blue black; which of the following it contains?
    (a) Starch   (b) Carbohydrates
    (c) Proteins   (d) Vitamins and minerals

18. Some nutrients are lost in the process of cooking. If the vegetables and fruits are washed after cutting or peeling them, which of the following we loose heavily?
    (a) Starch   (b) Carbohydrates   (c) Proteins   (d) Vitamins

19. In which of the following process a single yarn is used to make a piece of fabric?
    (a) Spinning   (b) Knitting   (c) Weaving   (d) looming

20. An oiled paper acts as _____ material.
    (a) Transparent   (b) Translucent   (c) Lustrous   (d) opaque

21. You have made four cups of instant coffee. One has one teaspoon of coffee, the second has two, the third has three, and last four teaspoons of coffee. Which is the least saturated?
    (a) The first cup with one teaspoon of coffee.
    (b) The second cup with two teaspoons of coffee.
    (c) The third cup with three teaspoons of coffee.
    (d) The fourth cup with four teaspoons of coffee.

22. When milk cooled after boiling is poured onto a piece of cloth, the cream is left behind on it. What is the process of separating cream from milk?
    (a) Hand picking   (b) Filtration
    (c) Churning   (d) Sedimentation

23. Lemonade is prepared by mixing lemon juice and sugar in water. You wish to add ice to cool it. Hypatia would like to know, should you add ice to lemonade before or after dissolving sugar? In which case would it be possible to dissolve more sugar?
    (a) Add sugar before cooling.
    (b) Add sugar after cooling
    (c) There will be no difficulty in dissolving sugar either in cold water or in hot water.
    (d) On adding ice the taste of the lemonade will change.

24. Teacher asked Quana : If a plant has fibrous root, what type of venation are its leaves likely to have? Choose the correct option.
    (a) Reticulate   (b) Parallel venation
    (c) No such relation can be observed   (d) Reticulate and parallel

25. Which of the following is included in skeleton?
    (a) Muscles   (b) Cartilages   (c) Skin   (d) Blood

26. A girl uses a worn out ruler to measure the length of a table in her room. She placed the ruler such that the mark 3.0 cm coincides with one end and the other end coincides with the mark 33.5 cm. What is the length of the table in centimeters?
    (a) 33.5   (b) 36.5   (c) 33.8   (d) 30.5

27. When the moon comes in between the sun and the earth in a straight line, solar eclipse is formed. Which of the following is related to solar eclipse?
    (a) formation of a shadow of the earth on the moon
    (b) formation of a shadow of the moon on the earth
    (c) reflection of light by the earth
    (d) reflection of light by the moon

28. Hypatia would like to know what is the correct option to this question - In a completely dark room, what will you see if you hold up a mirror in front of you?
    (a) Your shadow   (b) A sharp shadow   (c) Your image   (d) No image

Questions from 29 to 30 will have more than one right answer. Shade all the correct bubbles.

29. Vidya was in a discussion with Wisden about the solar system and the discovery of gravitational waves. While discussing about our solar system, which of the following statements are correct?
    (a) The earth revolves the sun   (b) The earth rotates
    (c) The earth has a circular orbit   (d) Earth revolves the moon

30. Which of the following are conductors of electricity?
    (a) Wood   (b) Copper   (c) Gold   (d) Graphite

ENGLISH

Questions under this section will have only one right answer. Shade the correct bubble.

31. Find the correct spelling :
    (a) Caterpillar   (b) Catrepillar   (c) Caterpilar   (d) Catirpillar

32. Find the correct spelling :
    (a) Jeopradous   (b) Jeopardoes   (c) Jaopardous   (d) Jeopardous

Choose right option for correcting the underlined part:

33. All criminal attitudes must be <u>nipped at the bud</u>.
    (a) nipped on the bud   (b) nipped for the bud
    (c) nipped in the bud   (d) No correction required

34. Young men and women should get <u>habituated</u> to reading and writing about current affairs.
    (a) prepared   (b) trained   (c) used   (d) No improvement

35. Breeze : Cyclone then Drizzle : ?
    (a) Storm   (b) Flood   (c) Earthquake   (d) Downpour

Choose the meaning of the word given:

36. Hamlet
    (a) a group of houses in a village.   (b) a group of trees in a village.
    (c) a group of animals near river.   (d) a group of fishes in a river.

37. Torrent
    (a) A boat tied with other boat in water.
    (b) A slow moving cascade.
    (c) A very slow stream of water.
    (d) A strong and fast-moving stream of water.

Choose the correct option to fill the blank space:

38. She does not _____tea.
    (a) take   (b) taking   (c) took   (d) taken

39. She _____ speak English fluently.
    (a) has to   (b) can   (c) must   (d) have to

Select the part that contains an error.

40. The captain along with his team / are practicing very hard / for the / forth coming matches.
   (a) The captain along with his team   (b) are practicing very hard
   (c) for the   (d) forth coming matches

41. Everyone of the students / has bought / his / identity card
   (a) Everyone of the students   (b) has bought
   (c) his   (d) identity card

42. A property dealer was /shoot dead by four unidentified jacket clad men /while taking a morning walk /in a park.
   (a) A property dealer was
   (b) shoot dead by four unidentified jacket clad men
   (c) while taking a morning walk
   (d) in a park

43. A man who rarely speaks the truth:
   (a) Crook   (b) Liar   (c) Scoundrel   (d) Hypocrite

44. A remedy for all diseases:
   (a) Narcotics   (b) Antiseptic   (c) Panacea   (d) Lyric

45. What is the study of animal life is called?
   (a) Telepathy   (b) Spelelogy   (c) Zoology   (d) Seismology

GENERAL KNOWLEDGE

Questions under this section will have only one right answer. Shade the correct bubble.

46. What is the heaviest organ in the human body?
   (a) Kidney   (b) Brain   (c) Liver   (d) Heart

47. Who convenes the joint session of the Lok Sabha and Rajya Sabha
   (a) The President of India   (b) The Speaker of Lok Sabha
   (c) The Prime Minister of India   (d) The Vice President of India

48. Brass gets discoloured in air because of the presence of which of the following gases in air?
   (a) Oxygen   (b) Hydrogen Sulphide   (c) Carbon dioxide   (d) Nitrogen

49. Which of the following is Soda water contains
   (a) Carbonic acid   (b) Sulphuric acid   (c) Carbon dioxide   (d) Nitrous acid

50. Potassium Permanganate is used for purifying drinking water, because
    (a) It is a sterilizing agent
    (b) It dissolves the impurities of water
    (c) It is a reducing agent
    (d) It is an oxidizing agent

51. Who invented the ballpoint pen?
    (a) Biro Brothers
    (b) Waterman Brothers
    (c) Bicc Brothers
    (d) Write Brothers

52. '.INI' extension refers usually to what kind of file?
    (a) Image file
    (b) System file
    (c) Hypertext related file
    (d) Image Color Matching Profile file

53. What do we call a collection of two or more computers that are located within a limited distance of each other and that are connected to each other directly or indirectly?
    (a) Inernet   (b) Interanet   (c) Local Area Network   (d) Wide Area Network

54. What Enrico Fermi invented?
    (a) X ray machine   (b) Betatron   (c) Cyclotron   (d) Nuclear reactor

55. The method that cannot be used for removing permanent hardness of water is
    (a) adding sodium carbonate
    (b) distillation
    (c) adding caustic soda
    (d) boiling

LOGIC

Questions under this section will have only one right answer. Shade the correct bubble.

56. 'Dearth' is related to 'Scarcity' in the same way as 'Substitute' is related to
    (a) Replace   (b) Rumour   (c) Destroy   (d) Assume

57. A river flows West to East and on the way turns left and goes in a semicircle round a hillock, and then turns left in a right-angles. In which direction is the river finally flowing?
    (a) North   (b) South   (c) East   (d) West

58. In a row at a bus stop, Vidya is 7th from the left and Quana is 9th from the right. Both of them interchange their positions and thus Vidya becomes 11th from the left. How many people are there in that row?
    (a) 18   (b) 19   (c) 20   (d) 21

59. A woman introduces a man as the son of the brother of her mother. How is the man related to the woman?

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(a) Nephew   (b) Son   (c) Cousin   (d) Uncle

60. In a certain code language, '123' means *'bright little boy'*, '145' means *'tall big boy'* and '637' means *'beautiful little flower'*. Which digit in that language means *'bright'* ?
    (a) 1   (b) 2   (c) 3   (d) 4

Directions (Q.61 to 63): Read the following information carefully and answer the questions given below:

Wisden and Tony are good in Hockey and Volleyball. Sachin and Wisden are good in Hockey and Baseball. Gaurav and Tony are good in Cricket and Volleyball. Sachin, Gaurav and Michael are good in Football and Baseball.

61. Who is good in Hockey, Cricket and Volleyball?
    (a) Sachin   (b) Tony   (c) Wisden   (d) Gaurav

62. Who is good in Baseball, Cricket, Volleyball and Football?
    (a) Sachin   (b) Tony   (c) Gaurav   (d) Wisden

63. Who is good in Baseball, Volleyball, and Hockey?
    (a) Sachin   (b) Tony   (c) Wisden   (d) Gaurav

64. Sam ranked ninth from the top and thirty-eighth from the bottom in a class. How many students are there in the class?
    (a) 45   (b) 46   (c) 47   (d) 48

65. If you write down all the numbers from 1 to 100, then how many times do you write 3?
    (a) 11   (b) 19   (c) 20   (d) 21

INFORMATION TECHNOLOGY

Questions under this section will have only one right answer. Shade the correct bubble.

66. In computing, how many bits are in a byte?
    (a) 4   (b) 8   (c) 1052   (d) 100

67. Someone who writes a program for pleasure and breaks into computer systems for different motives is known as a
    (a) Thief   (b) Criminal   (c) Hacker   (d) File corruptor

68. Which of the following communications lines is best suited to interactive processing applications?
    (a) narrow band channel
    (b) simplex lines
    (c) full duplex lines
    (d) mixed band channels

69. Computers use the number system to store data and perform calculations.
    (a) binary
    (b) octal
    (c) decimal
    (d) hexadecimal

70. Which is the largest unit of storage among the following?
    (a) Terabyte
    (b) Megabyte
    (c) Kilobyte
    (d) Gigabyte

71. Which of the following operating does not implement multitasking truly?
    (a) Windows 98
    (b) Windows NT
    (c) Windows XP
    (d) MS DOS

72. Which of the following is used to create newspaper style columns?
    (a) Format Tabs
    (b) Table Insert Table
    (c) Insert Textbox
    (d) Format Columns

73. Which of the following is not of the merge process?
    (a) Sort the data source records
    (b) Format a main document
    (c) Edit a data source
    (d) Merge the two files to print or create a new document

74. Using a custom animation effect, how do you make text appear on a slide by letter
    (a) Apply the animation scheme fade in one by one.
    (b) Apply an entrance effect, and then set it to by letter in the effect option dialog box
    (c) Apply the fly in entrance to the text, and then set its speed to very slow.
    (d) All of above

75. In BASIC, description comments are put in the source program with the
    (a) PRINT statement
    (b) REMARK statement
    (c) INPUT statement
    (d) DATA statement

END OF DOCUMENT

HOT POT – Do it at home!
Hybrid Open Test – Power of Thought

Hypatia and Vidya were doing many experiments. They went to their science teacher this morning. Vidya was eager to explain an experiment they have performed. Hypatia told her teacher that they are planning to forward their discovery (when it is called invention?) to World Genius Council as a HOTPOT item.

Please bring half a glass of water in a glass, a sheet of paper, a Rs. 5 coin, a plate and a match box. Pour the water into the plate. Then put the coin in the plate. Now, you need to take the coin out of water without touching water, using the principle of pressure in the atmosphere. Her teacher was very happy to see their sparkling eyes. She asked them to explain the process.

Hypatia said that we need burn one end of the paper using the matchbox and keep the burned paper inside the glass. She further said that the glass should be kept immediately on the plate with its upside down! Vidya told her teacher – "The water will be sucked fully into the glass and the plate will get dried up. We can now take the coin without touching water as there is no water in the plate!"

Can you explain the scientific process behind this experiment by Hypatia and Vidya?

Mail us your response to worldgeniuscouncil@gmail.com Please mention your WGC ID (roll number) in the subject line. Right answers will be appreciated.

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