



ENTRANCE EXAMINATION - XI

DR. B.B. CHAVAN MILITARY SCHOOL & ACADEMY

Khandi Pimpalgaon, Tq.Khultabad. Dist : Chh. Sambhajinagar

ENT : 2025
TIME : 1Hr

Sr.No:
Max Marks : 50

QUESTION BOOKLET

GENERAL GUIDELINES

1. Do not carry any book, paper or any other material with you inside the Examination Hall.
2. Carry only writing material with you in the Examination Hall.
3. Result of this Examination will be conveyed to you on your registered Mobile No.
4. All successful candidates will be called for the personal interview.
5. This Booklet contains FOUR SECTIONS as : General Science, Mathematics, English, General Knowledge (FACTUAL). Each section contains 10 Multiple Choice Question. Total 40 MCQs are there. And the writing/language Skills will be assessed through an ESSAY WRITING of 10M.
6. Each question has four responses (Answers) as A, B, C, & D. You have to select the response which you want to mark on the Answer Sheet . In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, Choose Only One response for each Question.
7. After having selected the correct choice from the test Booklet, you should indicate that choice by completely blackening the respective circle, DO NOT merely cross the circle. You should indicate correct answer by blackening ONLY ONE circle in each answer. Any answer having more than ONE blackened circle will be treated as **WRONG answer**
8. All the answers must be marked on the Answer Sheet only (OMR SHEET) . Do not write anything on this Test Booklet.
9. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU

SHOULD CHECK THAT THIS TEST BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR QUESTION ETC. IF SO, GET IT REPLACED BY A NEW ONE.

10. Ask for a separate paper for rough work.

11. IMPORTANT.

Read the questions carefully, Remember, answers are to be indicated in the Answer Sheet Only. Return the Test Booklet, Rough work papers and the Answer Sheet immediately when asked to do so. You are NOT permitted to take away with you any paper concerning the examination.

12. Before starting the answering ensure that you have filled the complete information at the top of this Answer Sheet. Incomplete Answer Sheet will be regarded as invalid.

THANK YOU & BEST OF LUCK !

Dr. B. B. C. M. S. A.

PART- I – ENGLISH

Read the given passage and answer the following questions:

Necessity, they say, is the mother of invention. And Indian doctors have been quite creative when hamstrung by few or no tools to perform specific surgeries. They simply design it themselves at one-fourth the price they are sold abroad. In fact, some of their innovations are priced at as much as hundreds of dollars abroad.

Take 47-year-old Dr Burjor P Banaji, pioneer of Lasik surgery in India. He's invented over a dozen surgical instruments. When this senior eye surgeon at Max Eye Care started Lasik, there were few surgeons doing it worldwide and no specific instruments were available either. "As I want things super-perfect, I designed a whole slew of instruments that made my surgery more efficient," says Banaji. The most popular instruments are Banaji Lasik Shield and Banaji Lasik Spatula and Cannula. "It was simple. I had the designs in my head. Putting them down on paper was the simplest thing," he says. Instruments manufacturers and large multinationals in the US snapped them up. "They would send me computer generated drawings which I would correct and send back. Their level of execution was astounding. Within two weeks of the designs being finalized, the instruments were in the world market."

His instruments are priced at hundreds of dollars each in the US, and are also sold in Switzerland, South America, Korea, Eastern Europe, Africa and Japan. They're available in India at a fraction of the price.

1. Why have some Indian doctors created their own surgical tools?
 - a) they have no tools to perform specific surgeries
 - b) they have a hamstring problem
 - c) the tools they get from abroad cost four times as much
 - d) they can sell these tools at a very high price.
2. What has Dr Burjor P Banaji created?
 - a) Lasik surgery
 - b) Max Eye Care Centre
 - c) Two surgical instruments called Banaji Lasik Shield and Banaji Lasik Spatula and Cannula
 - d) More than a dozen instruments for operating on the eye.
3. Where does Dr. Banaji get the instruments manufactured?
 - a) India
 - b) The United States of America
 - c) Switzerland
 - d) Japan
4. The term hamstrung refers to
 - a) restricted
 - b) helped
 - c) harmed
 - d) liberated
5. What does the phrase slew of instruments refer to?
 - a) a wide range of instruments
 - b) instruments used for slaying
 - c) tools of a similar nature
 - d) surgical instruments

Choose the correct antonym of the given word

6. Transmit
a) Televisе b) Withhold c) Reply d) Show
7. Choose the correct antonym of the given word : Revealed
a) Naked b) Concealed c) Open d) Bare

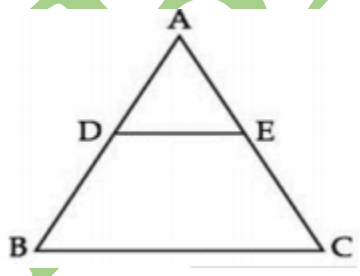
Choose correct word:

8. That good boy always speaks _____.
a) Polite b) Politely c) Impolite d) Politeness
9. Change the noun into verb: Intention
a) intension b) intent c) intensity d) intention
10. 'Shoes' is related to 'Leather' in the same way as Rubber' is related to
a) Plastic b) polythene c) Latex d) chappal

PART- II – SCIENCE

11. Two electric bulbs have resistances in the ratio 1 : 2. If they are joined in series, the energy consumed in them are in the ratio
(a) 1 : 2 (b) 2: 1 (c) 4 :1 (d) 1 : 1
12. The group..... in the modern periodic table contains alkaline earth metals.
(a) one (b) two (c) zero (d) seventeen
13. When two or more substances combine to form a single product, then the reaction is known as
(a) pale yellow (b) grey (c) white (d) red
14. pH scale helps in measuring ionic concentration in solutions.
(a) hydrogen (b) hydroxyl (c) oxygen (d) nitrogen
15.is the only non-metallic element which is not a solid at room Temperature.
(a) bromine (b) Sulphur (c) Carbon (d) Mercury
16. is known as marsh gas
(a) Methane (b) Ethane (c) Propane (d) Ethene
17. Which of the following is a large blood vessel that carries blood away from the heart?
(a) Vein (b) Artery (c) Capillary (d) Nerve
18. Which of the following is not a member of the vitamin B complex?
(a) Thiamine (b) Riboflavin (c) Folic acid (d) Ascorbic acid
19. Fungi are plants that lack:
(a) Oxygen (b) Carbon dioxide (c) Chlorophyll (d) None of these
20. What makes a reptile a reptile?
(a) Cold blooded (b) Warm Blooded (c) Non-Hearing (d) Egg-laying

PART- III - MATHS

21. For an (1)P., if $a = 3$, $d = 5$, what is the value of t_{11} ?
a) 53 b) 58 c) 85 d) 35
22. What is the value of k , if one root of the quadratic equation $kx^2 - 7x + 12 = 0$ is 3 ?
a) 1 b) -1 c) 3 d) -3
23. For drawing the graph of $2x + 5y = 16$, if $x = 3$, what is the value of y ?
a) 2 b) -2 c) $1/2$ d) $-1/2$
24. Three coins are tossed simultaneously. P is the event of getting at least two heads. What is P equal to ?
a) { HHH, HHT, HTH, THH } b) { HHT, HTH, THH }
c) { HHT } d) { HTH, THH } d) { HTH, THH }
25. In ΔABC , $\angle B = 90^\circ$, $\angle A = 60^\circ$. if $AC = 24$ cm, what is the length of side AB ?
a) 12 cm b) $12\sqrt{3}$ cm c) 16 cm d) $16\sqrt{3}$ cm
26. $\Delta ABC \sim \Delta PQR$. $AB = 6$ cm, $BC = 4$ cm, $AC = 8$ cm and $PQ = 9$ cm. What is the perimeter of ΔPQR ?
a) 54 cm b) 27 cm c) 18 cm d) 36 cm
27. What is the point of concurrence of the bisectors of the angles of a triangle known as ?
a) Circumcentre b) Incentre c) Orthocentre d) Centroid
28. What is the curved surface area of a cone having base diameter 14 cm and height 24 cm ?
a) 110 cm^2 b) 220 cm^2 c) 440 cm^2 d) 550 cm^2
29. In given figure, $DE \parallel BC$, if $AB = 7.6$ cm, $AD = 1.9$ cm, then $AE : EC$ is :
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- a) 1 : 4 b) 1 : 3 c) 4 : 1 d) 3 : 1
30. What is the nature of the roots of the quadratic equation $4x^2 - 8x + 9 = 0$?
a) Real b) Not real c) Real & equal d) Real & unequal

PART- IV – GENERAL KNOWLEDGE

31. Which of the following is not true?
(a) Nirbhay is a missile of 1000 km (b) Brahmos missile is developed by DRDO
(c) Astra is an Air to Surface missile. (d) The range of Agni iii is between 3000 to 5000 kms.
32. Druva is a.....
(a) Tank (b) Advanced light helicopter (c) A multi barrel rocket system (d) Missile
33. Which country is the biggest importer of arms and ammunition in the world?
(a) Iran (b) Afghanistan (c) Pakistan (d) India
34. From which country India purchases its maximum defence equipment ?
(a) Russia (b) USA (c) Israel (d) China
35. What is NOT true about Brahmos missile?
(a) It was developed by the DRDO with the help of US
(b) It's a supersonic cruise missile that can be launched from submarines, ships, aircrafts or land
(c) It can hit at the maximum range of 290 kms.
(d) It has the capability to hit the surface targets as low as 10 meters of altitude.
36. Where is the Headquarter of Mazgaon Dockyard Limited?
(a) Vishakhapatnam (b) Kolkata (c) Mumbai (d) Kandla
37. When is army day observed in India?
(a) 4 dec (b) 15 jan. (c) 28 feb (d) 1 dec
38. Which of the following is the oldest paramilitary in the country?
(a) CRPF (b) BSF (c) ITBP (d) Assam rifles
39. Which of the following does not differ from others?
(a) Vijayanta (b) T-55 (c) Arjun (d) Agni
40. Bhabha Atomic Research Centre is situated in.....
(a) Karnataka (b) Maharashtra (c) Uttrakhand (d) Delhi

PART- V – ESSAY WRITING

WRITE AN ESSAY :

The Effect of Pollution on the Environment

OR

The Impact of Technology on Education