ALIGARH COACHING CENTRE
An Institute of Science & Commerce

DHNN

PARTICULARS TO BE FILLED IN BY THE CANDIDATE		
Name of the Candidate	l	
Roll Number		113 **9**
Application Number		
Name of the Centre	l	Question Booklet Number
Centre Code		
Date of the Test		**63033**
Signature of the Candidate		

Maximum Marks : 85

Test Duration : 02 hours

INSTRUCTIONS

- Complete all entries on the cover page and put your signature in the space provided.
- Use only Ball Point Pen (black / blue) for making entries in the Question Booklet and the OMR Answer Sheet.

1. The Question Booklet consists of <u>24</u> pages (including cover sheet) and contains <u>85</u> questions. Count the number of pages and questions before attempting the questions. Discrepancy, if any, must immediately be brought to the notice of the Invigilator.

2. The Test duration as specified above shall be reckoned from the moment of distribution of the question booklets.

3. Blank space in the Question Booklet may be used for rough work.

4. Each question is followed by four alternative answers. Select only one answer, which you consider as the most appropriate. Shade the relevant circle against the corresponding question number on the OMR Answer Sheet. Selecting more than one answer for a question, even if one of the selected answers is correct, would result in its being treated as an incorrect answer.

5. Answers should ONLY be marked on the OMR Answer Sheet. No answer should be written on the Question Booklet.

6. The candidate is required to separate the original OMR Answer Sheet and its carbonless copy at the perforation carefully after the Admission Test. He / She shall handover the original OMR Answer Sheet and the Admit Card to the Invigilator before leaving his/her seat and take with him/her the carbonless copy of the OMR Answer Sheet and the Question Booklet.

7. Failure to handover the original OMR Answer Sheet and the Admit Card will lead to cancellation of the candidature.

1. 'अति' शब्द का विलोम है—

   (a) अल्प

   (b) विगत

   (c) इति

   (d) बहु

2. "साँच बराबर तप नहीं, झूठ बराबर पाप।
   जाके हृदय साँच है, ताके हृदय आप।।"
   इन पंक्तियों में किस भाषा का प्रयोग हुआ है?

   (a) अपभ्रंश भाषा

   (b) अवधी भाषा

   (c) खड़ी बोली

   (d) सधुक्कड़ी भाषा

3. 'रामचरित्मानस' की रचना किस भाषा में हुई है?

   (a) अवधी

   (b) ब्रज

   (c) छत्तीसगढ़ी

   (d) बघेली

4. 'वसुधा' का पर्यायवाची होगा—

   (a) नम

   (b) अम्बर

   (c) भानु

   (d) उर्वी

5. 'प्रत्यूष' शब्द का अर्थ है—

   (a) आकाश

   (b) अन्धकार

   (c) प्रातःकाल

   (d) प्रकाश

6. 'पिता ने पुत्र को पुकारा' में कारक होगा—

   (a) कर्म

   (b) कर्ता

   (c) संप्रदान

   (d) संबंध

7. 'प्रतिदिन' शब्द में समास है—

   (a) अव्ययीभाव समास

   (b) तत्पुरुष समास

   (c) कर्मधारय समास

   (d) बहुव्रीहि समास

8. مندرجہ ذیل شعر کے شاعر کون ہیں؟

اٹھی ہو گئیں سب تدبیریں کچھ نہ دوانے کام کیا
دیکھا اس بیماریِ دل نے آخر کام تمام کیا

(a) میر تقی میر
(b) غالب
(c) فراق گورکھپوری
(d) فیض احمد فیض

9. قرۃ العین حیدر کا ناول ''میرے بھی صنم خانے'' کس سن میں شائع ہوا؟

(a) 1949
(b) 1947
(c) 1937
(d) 1990

10. علی گڑھ مسلم یونیورسٹی کے پہلے رجسٹرار کون تھے؟

(a) سر سید احمد خاں
(b) شبلی نعمانی
(c) رشید احمد صدیقی
(d) سجاد حیدر یلدرم

11. گاندھی جی جنوبی افریقہ میں کیا کام کرتے تھے:

(a) تجارت
(b) وکالت
(c) خدمتِ خلق
(d) مذہبی کارگزاریاں

12. ساتھ سفر کرنے والے کا مرکب لکھیے:

(a) ساتھی
(b) ہم سفر
(c) مسافر
(d) دوست

13. علامہ اقبال کی پیدائش کب ہوئی تھی؟

(a) 1845
(b) 1855
(c) 1877
(d) 1885

14. لفظ آگ بگولہ ہونا کیا ہے؟

(a) جملہ
(b) متضاد
(c) مترادف
(d) محاورہ

15. مندرجہ ذیل میں سے ایک اضافت کی تعریف ہے۔

(a) اس زیر کو کہتے جو دو جملوں کے درمیان استعمال ہو۔
(b) اس زیر کو کہتے ہیں جو دو لفظوں میں آخر میں لگا ہوتا ہے۔
(c) ایسا زیر جو دو لفظ کے درمیان پہلے لفظ کے آخر میں ہو۔
(d) ایسا زیر جو لفظ کے درمیان پہلے لفظ کے شروع میں ہو۔
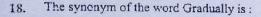
16. .... shall I fear but the ones who hurt me?

    (a) Whose

    (b) Whom

    (c) Who

    (d) Which

17. I saw him .... the baker's.

    (a) at

    (b) by

    (c) to

    (d) in

18. The synonym of the word Gradually is :

    (a) Slowly

    (b) Forcefully

    (c) Speedily

    (d) Scarcely

19. She has been waiting for you ...... three hours.

    (a) fror .

    (b) for

    (c) since

    (d) by

20. The 'Antonym' of the word 'Amateur' is :

    (a) Noble

    (b) Brave

    (c) Friendly

    (d) Professional

21. Last Saturday our school .... for the summer vacation.

    (a) closes

    (b) closed

    (c) will close

    (d) is closing

22. The plural of "Father-in-Law" is

    (a) Father-in-laws

    (b) Fathers-in-laws

    (c) Fathers-in-law

    (d) Father's-in-law

23. Select the correct verb –
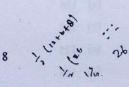
    The horse and carriage ....at the door.

    (a) are
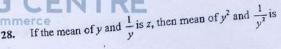
    (b) have

    (c) am

    (d) is

24. Choose the correct sentence.

   (a) Four years passed since my uncle has died.

   (b) Four years have passed since my uncle died.

   (c) Four years before my uncle had died.

   (d) Four years had passed since my uncle had died.

25. Rahul thought a lot about .... his brother told him

   (a) which

   (b) that

   (c) what

   (d) how

26. Factorization of $m^5 - 16m^3$ would be

   (a) $m^3 (m-4)(m+4)$

   (b) $m^3 (m^2 + 4^2)$

   (c) $m^3 (4-m)(4+m)$

   (d) $m^3 (m^2 - 4m^3)$

27. In the given figure, if AC = 12 cm, BC = 6 cm and AD = 8 cm, then area of ΔABC and the value of 'h' are.

   (a) 22 sq cm and 6 cm

   (b) 23 sq cm and 4 cm

   (c) 24 sq cm and 4 cm
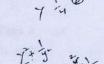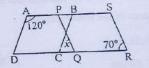
   (d) 24 sq cm and 6 cm

28. If the mean of y and $\frac{1}{y}$ is z, then mean of y^2 and $\frac{1}{y^2}$ is

   (a) $z^2 - 2$

   (b) $z^2 + 2$

   (c) $2z^2 - 1$

   (d) $4z^2 - 2$

29. If a number is 42 more than the average of its half, one-third and one-fifteenth, then the number is

   (a) 50

   (b) 60

   (c) 70

   (d) 80

30. If in the given figure ABCD and PQRS are parallelograms, then the value of x is

   (a) 60°

   (b) 50°

   (c) 40°

   (d) 30°

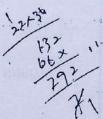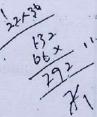DHNN   9   [P.T.O.

31. A can do a piece of work in 30 days while B can do the same work in 24 days. If they work together then number of days taken to complete the work are

(a) $12\frac{1}{2}$

(b) $13\frac{1}{3}$

(c) $14\frac{1}{4}$

(d) $15\frac{1}{5}$

32. ABCD is a diameter of a circle of radius 6 cm such that AB = BC = CD. Semicircle are drawn on AB and BD as diameters as shown in given figure. Find the area of the shaded region.

(a) 37.55 cm

(b) 37.60 cm

(c) 37.70 cm

(d) 37.2 cm

33. Seeta and Geeta go for a swim after a gap of every two days and every three days, respectively. If on 1 January both of them went for swim together. When will they go together next?

(a) 7th January

(b) 8th January

(c) 12th January

(d) 13th January

34. How many natural numbers lie between 52^2 and 53^2?

(a) 101

(b) 104

(c) 107

(d) 110

35. Which of the following numbers is not a perfect square?

(a) 3600

(b) 6400

(c) 8900

(d) 2500

36. The co-ordinates of a point lying on x-axis is

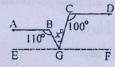(a) $(0, y)$

(b) (x, y)

(c) $(x, 0)$

(d) None of these

37. Roopa gets 98 marks in her examinations. This amounts to 56% to the total marks. What are the maximum marks?
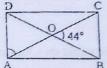
(a) 156

(b) 165

(c) 175

(d) 185

10

38. Which rational number is the additive inverse of itself -

(a) -1

(b) 1

(c) 0

(d) $\frac{1}{2}$

39. If 24% of x is 48 then find the value of x.

(a) 250

(b) 300

(c) 240

(d) 200

40. If the area of square PQRS is 36 sq cm then area of square joining the mid-points of sides PQRS is

(a) 14 sq cm

(b) 16 sq cm

(c) 18 sq cm

(d) 20 sq cm

41. In the given figure AB ∥ CD ∥ EF, $\angle ABG = 110°$, $\angle GCD = 100°$ and $\angle BGC = x°$, then $x = ?$

(a) 35°

(b) 30°

(c) 50°

(d) 40°

42. $x = 3^a, y = 9^b, z = 27^c$ and $x^{bc} y^{ca} z^{ab} = 1$, then abc is equal to

(a) 1

(b) 27

(c) $\frac{1}{27}$

(d) 0

43. In given fig., the diagonals of a rectangle ABCD meet at O. If $\angle BOC = 44°$, then $\angle OAD$ will be-

(a) 72°

(b) 44°

(c) 68°

(d) 78°

44. The probability of getting a number greater than 6 in a throw of dice is

(a) $\frac{1}{2}$

(b) 1

(c) 2

(d) 0

45. Cube root of $(-1.\overline{728}) \times (0.\overline{125}) \times (-\overline{8})$ is

(a) 1.20

(b) -1.20

(c) -1.40

(d) 1.40

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46. The multiplicative inverse of $(3^{-1} - 5^{-1})^{-1}$ is

   (a) $-\dfrac{2}{15}$

   (b) $\dfrac{2}{15}$

   (c) $\dfrac{15}{2}$

   (d) $-\dfrac{15}{2}$

47. What amount is to be repaid on a loan of Rs. 12000 for 1½ years at 10% per annum compounded half yearly?

   (a) Rs. 1389.15

   (b) Rs. 138.915

   (c) Rs. 13891.50

   (d) Rs. 138915

48. A rectangular sheet of iron 22 cm × 8 cm is folded without overlapping to make a cylinder of height 8 cm, then the ratio of volume and curved surface area of the cylinder is:
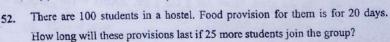
   (a) 4:7

   (b) 7:2

   (c) 7:4

   (d) 11:4

49. If $\sqrt[3]{(2x)^3 + 26} = -1$, then the value of x is

   (a) $-\dfrac{3}{2}$

   (b) $\dfrac{3}{2}$

   (c) $\dfrac{2}{3}$

   (d) $-\dfrac{2}{3}$

50. Which one of the following is not true?

   (a) The numbers that can be expressed as sum of two cubes in two different ways are known as Hardy-Ramanujan Numbers

   (b) If in the prime factorization of any number each factor appears three times, then the number is a perfect cube

   (c) A perfect cube does not end with two zeros

   (d) The cube of a two digit number may be a three digit number

51. A polygon has 44 diagonals, then the number of sides are

   (a) 9

   (b) 10

   (c) 11

   (d) 13

52. There are 100 students in a hostel. Food provision for them is for 20 days. How long will these provisions last if 25 more students join the group?

   (a) 12 days

   (b) 18 days

   (c) 14 days

   (d) 16 days

14

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53. A machinery worth Rs. 10,500 depreciated by 5%. Find its value after one year?

   (a) 9975

   (b) 11025

   (c) 9976

   (d) 8975

54. What should be subtracted from the product of $(x-3)$ $(x^2 + 3x + 9)$ to get $x^3 - 3x + 9$.

   (a) -36

   (b) -27

   (c) $-36 + 3x$

   (d) $3x - 27$

55. Two successive discount of 20% and 10% are equal to a single discount of

   (a) 13%

   (b) 30%

   (c) 25%

   (d) 28%

56. A family consumes 20 kg of LPG in 25 days. Calculate the average energy consumption of the family per day, if calorific value of L.P.G. is 50 kJ/kg.

   (a) 40 J/day

   (b) 400 kJ per day

   (c) 40 kJ per day

   (d) 400 J per day

57. Sulphuric acid is

   (a) Mild acid

   (b) Mineral acid

   (c) Weak acid

   (d) Edible acid

58. Valency of Carbon is

   (a) One

   (b) Two

   (c) Four

   (d) Three

59. The atomic number is

   (a) Number of protons

   (b) Number of electrons

   (c) Number of neutrons

   (d) Sum of protons and neutrons

60. The plastic which gets deformed easily on heating and can be bent easily is known as

   (a) Thermosetting plastic

   (b) Thermoplastics

   (c) Plastics

   (d) None of these

61. Non-stick coating on cookwares is made from

   (a) Acrylic

   (b) Teflon

   (c) PVC

   (d) Rayon

DHNN

17

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16

62. Cellulose is made up of a large number of

    (a)   ester groups

    (b)   sugar units

    (c)   glucose units

    (d)   ethene units

63. Burning of LPG is an example of ……….. combustion.

    (a)   rapid

    (b)   spontaneous

    (c)   slow

    (d)   explosive

64. Metals reacts with acids to produce

    (a)   Hydrogen gas

    (b)   Oxygen gas

    (c)   Silver gas

    (d)   Carbon gas

65. Name the unit in which the calorific value of a fuel is expressed

    (a)   Newton

    (b)   Kilo Joules per kg

    (c)   Pascals

    (d)   m/s

66. Fossil fuels are

    (a)   Coal, oxygen and nitrogen gas

    (b)   Coal, petroleum and natural gas

    (c)   Hydrogen, natural gas and coal

    (d)   All of these

67. PVC (Polyvinyl chloride) and polythene are example of

    (a)   Thermoplastic

    (b)   Thermosetting plastic

    (c)   Natural substance

    (d)   Bakelite

68. Fuel may be

    (a)   Solid

    (b)   Liquid

    (c)   Gases

    (d)   All of these

69. During the process of cloning dolly, a cell was collected from the mainmary gland of

    (a)   Female Wild Sheep

    (b)   Female Scottish Blackface Sheep

    (c)   Female Finn Dorsett Sheep

    (d)   Female Irish Sheep

70. The percentage of nitrogen in the atmosphere is

    (a)   71%

    (b)   76%

    (c)   78%

    (d)   79%

71. The scientific name of the organism commonly called 'pond silk' is

(a) Chlamydomonas

(b) Penicillium

(c) Spirogyra

(d) Aspergillus

72. Which of the following is an example viviparous animal?

(a) Fish

(b) Dog

(c) Pigeon

(d) Frog

73. Which one of the following is a special plastic on which oil and water do not stick?

(a) Teflon

(b) Rayon

(c) Terylene

(d) Thermosetting plastic

74. Longest cell found in the body of animals is

(a) Muscle cell

(b) Nerve cell

(c) Bone cell

(d) Egg cell

75. The device used to test whether an object is carrying charge or not is called

(a) Osmoscope

(b) Electroscope

(c) Stetinoscope

(d) Kaleidoscope

76. The Jelly like substance present between the cell membrane and the nucleus is called

(a) Mitochondria

(b) Cytoplasm

(c) Golgi body

(d) Ribosome

77. Splitting of white light into seven colours is known as

(a) Reflection

(b) Dispersion

(c) Multiple Reflection

(d) None of the above

78. What is the 'to and fro' motion of objects called?

(a) Linear motion

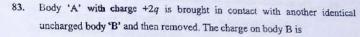(b) Uniform motion

(c) Non-uniform motion

(d) Oscillatory motion

79. If the amplitude of sound becomes thrice then loudness increases by factor of

    (a) 4

    (b) 8

    (c) 9

    (d) 16

80. What causes a match stick to catch fire, when rubbed on rough surface?

    (a) Direction

    (b) Shape

    (c) Friction

    (d) Height

81. What would be the path of the reflected ray if the incident ray falls normally on plane mirror?

    (a) Reflected ray follows the same path as the incident ray

    (b) Making angle 45° with the normal to the mirror

    (c) Making angle 30° with the normal to the mirror

    (d) Making angle 60° with the normal to the mirror

82. A boy is standing at 20 m away from a plane mirror. He starts running towards the mirror with the speed of 5 m/s. The image of the boy appears to be running towards him with the speed of

    (a) 4 m/s

    (b) 10 m/s

    (c) 2.5 m/s

    (d) 100 m/s

83. Body 'A' with charge $+2q$ is brought in contact with another identical uncharged body 'B' and then removed. The charge on body B is

    (a) $+q$

    (b) $-2q$

    (c) $+2q$

    (d) $-q$

84. The S.I. unit of pressure is

    (a) Pascal

    (b) Newton

    (c) Joule

    (d) Watt

85. Rolling friction is smaller than

    (a) Sliding friction

    (b) Static friction

    (c) Both (a) & (b)

    (d) None of these

ALIGARH MUSLIM UNIVERSITY, ALIGARH
Admission Test — Answer Sheet

213960

ALIGARH MUSLIM UNIVERSITY

ALIGARH COACHING CENTRE

ALIGARH COACHING CENTRE

1. NAME OF THE CANDIDATE

2. FOR CANDIDATE ONLY

Answer Key
For Class IXth Admission Test 2020-2021

FOR INVIGILATOR ONLY

CANDIDATE'S ROLL NUMBER

3. ROLL NUMBER

4. APPLICATION NO.

5. GENDER (Male / Female) — Male (M)   Female (F)

6. CENTRE CODE

7. QUESTION BOOKLET NUMBER

8. QUESTION PAPER SERIES
A (A)
B (B)
C (C)
D (D)

9. STATUS (Internal / External)
Internal (I)
External (E)

2139603

ANSWER SECTION