

16P/224/1

(To be filled up by the candidate by blue/black ball-point pen)

Roll No.

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Roll No. (Write the digits in words)

code no (452)

Serial No. of OMR Answer Sheet

(2016)

Day and Date

(Signature of Invigilator)

INSTRUCTIONS TO CANDIDATES

(Use only **blue/black ball-point pen** in the space above and on both sides of the **Answer Sheet**)

1. Within 10 minutes of the issue of the Question Booklet, check the Question Booklet to ensure that it contains all the pages in correct sequence and that no page/question is missing. In case of faulty Question Booklet bring it to the notice of the Superintendent/Invigilators immediately to obtain a fresh Question Booklet.
2. Do not bring any loose paper, written or blank, inside the Examination Hall **except the Admit Card without its envelope**.
3. **A separate Answer Sheet is given. It should not be folded or mutilated. A second Answer Sheet shall not be provided. Only the Answer Sheet will be evaluated.**
4. Write your Roll Number and Serial Number of the Answer Sheet by pen in the space provided above.
5. **On the front page of the Answer Sheet, write by pen your Roll Number in the space provided at the top and by darkening the circles at the bottom. Also, wherever applicable, write the Question Booklet Number and the Set Number in appropriate places.**
6. **No overwriting is allowed in the entries of Roll No., Question Booklet no. and Set no. (if any) on OMR sheet and Roll No. and OMR sheet no. on the Question Booklet.**
7. **Any change in the aforesaid entries is to be verified by the invigilator, otherwise it will be taken as unfair means.**
8. **Each question in this Booklet is followed by four alternative answers. For each question, you are to record the correct option on the Answer Sheet by darkening the appropriate circle in the corresponding row of the Answer Sheet, by pen as mentioned in the guidelines given on the first page of the Answer Sheet.**
9. For each question, darken only one circle on the Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.
10. **Note that the answer once filled in ink cannot be changed. If you do not wish to attempt a question, leave all the circles in the corresponding row blank (such question will be awarded zero marks).**
11. For rough work, use the inner back page of the title cover and the blank page at the end of this Booklet.
12. Deposit only **OMR Answer Sheet** at the end of the Test.
13. You are not permitted to leave the Examination Hall until the end of the Test.
14. If a candidate attempts to use any form of unfair means, he/she shall be liable to such punishment as the University may determine and impose on him/her.

Total No. of Printed Pages : 32

[उपर्युक्त निर्देश हिन्दी में अन्तिम आवरण पृष्ठ पर दिये गए हैं।]

16P/224/1

ROUGH WORK
रफ़ कार्य

16P/224/1

No. of Questions : 150

Time : $2\frac{1}{2}$ Hours

Full Marks : 450

Note : (1) Attempt as many questions as you can. Each question carries **3 (Three)** marks. **One mark will be deducted for each incorrect answer. Zero** mark will be awarded for each unattempted question.

(2) If more than one alternative answers seem to be approximate to the correct answer, choose the closest one.

01. Who among the following has been made the Chairman of "Banks Boards Bureau" ?

- | | |
|----------------------|----------------------------|
| (1) Naina Lal Kidwai | (2) Vinod Rai |
| (3) Shikha Sharma | (4) Arundhati Bhattacharya |

02. Bullet train is being proposed between which of the following two cities ?

- | | |
|--------------------------|------------------------|
| (1) Badodara - Ahmedabad | (2) Mumbai - Ahmedabad |
| (3) Mumbai - Surat | (4) Mumbai - Goa |

03. Who among the following was awarded Dada Saheb Phalke in the year 2016 ?

- | | |
|--------------------|----------------------|
| (1) Dileep Kumar | (2) Amitabh Bachchan |
| (3) Rajendra Kumar | (4) Manoj Kumar |

04. The States involved in Dandakaranya project are :

- (1) Uttar Pradesh, Karnataka and Maharashtra
- (2) Tamil Nadu, Andhra Pradesh and Karnataka
- (3) Andhra Pradesh, Chhattisgarh and Odisha
- (4) Andhra Pradesh, Kerala and Tamil Nadu

05. Time magazine named ----- its Person of the Year 2015.
- | | |
|-------------------|----------------------|
| (1) Angela Merkel | (2) Malala Yousafzai |
| (3) Barack Obama | (4) Vladimir Putin |
06. North Korea on 6 January, 2016 claimed that it had successfully tested a/an :
- | |
|------------------------------------|
| (1) atomic bomb |
| (2) hydrogen bomb |
| (3) biogas bomb |
| (4) bomb based on fission reaction |
07. Who is the 158th member of WTO ?
- | | |
|------------|---------------|
| (1) Russia | (2) Vanuatu |
| (3) Laos | (4) Australia |
08. What is the 'Peace Clause' under the provisions of World Trade Organisation ?
- | |
|--|
| (1) It protects the interests of least developed countries |
| (2) It allows developing countries, such as India, legal protection, against action by other countries for breaching food subsidy limits prescribed under the agreement on agriculture |
| (3) It gives time to developed countries to adopt cleaner technology of the production |
| (4) None of the above |
09. The World Bank has set a new goal of reducing extreme poverty to :
- | | |
|------------------------|------------------------|
| (1) 6 per cent by 2018 | (2) 3 per cent by 2025 |
| (3) 0 per cent by 2030 | (4) 9 per cent by 2020 |
10. The Rohingya are the minorities of :
- | | |
|------------------|------------|
| (1) South Africa | (2) Canada |
| (3) Myanmar | (4) Bhutan |

11. In the Gupta age, Varahamihira wrote the famous book, Brihat Samhita. It was treatise on :

- (1) Astronomy
- (2) Statecraft
- (3) Ayurvedic system of medicine
- (4) Economics

12. British colonialism in India saw the emergence of new cities. Calcutta, now Kolkata, was one of the first cities. Which of the mated to form the city of Calcutta ?

- (1) Midnapur, Chittagong, Burdwan
- (2) 24-Parganas, Kalikata, Thakurgaon
- (3) Sutanuti, Kalikata, Gobindapur
- (4) Midnapur, Thakutgaon, Gobindapur

13. The Government of India Act, 1919 :

- (1) Established a bicameral legislature at the centre
- (2) Introduced diarchy in the provincial executive
- (3) Introduction a federal system of government in India

Select the correct answer using the codes given below :

- (1) 1 and 3 only
- (2) 1, 2 and 3
- (2) 2 and 3 only
- (d) 1 and 2 only

14. Which saint propounded 'Advaitvad' ?

- (1) Shankaracharya
- (2) Ramanad
- (3) Kabir
- (4) Chaitnya

15. Consider the following statement :

"No Indian could have started the Indian National Congress.. if the founder of the Congress had not been a great Englishman and a distinguished ex-official, such was the distrust of political agitation in those days that the found would have at once suppress the movement." Who among the following gave the statement on the establishment of Indian National Congress ?

- | | |
|-------------------|-------------------------|
| (1) W. Wedderburn | (2) G. K. Gokhale |
| (3) R. Palme Dutt | (4) Allan Octavian Hume |

16. Cyclone Helen affected :

- | | |
|----------------------------|--------------------|
| (1) Coastal Andhra Pradesh | (2) Coastal Odisha |
| (3) Coastal Karnataka | (4) Coastal Kerala |

17. Which of the followings is **not** notified biosphere reserve in India ?

- (1) Keola deo sanctuary in Bharatpur
- (2) Agasthyamalai Kerala
- (3) Cold Desert in Hlmachal Pradesh
- (4) Panna in Madhya Pradesh

18. Which one among the following Indian rivers originates in Maharashtra and flows through Karnataka and Andhra Pradesh to meet the Bay of Bengal in Andhra coast ?

- | | |
|--------------|--------------|
| (1) Mahanadi | (2) Cauvery |
| (3) Krishna | (4) Godavari |

19. The planetary winds that blow from the subtropical high-pressure belts to the Equator are known as :

- | | |
|-----------------|-----------------|
| (1) Westerlies | (2) Doldrums |
| (3) Polar winds | (4) Trade winds |

20. Bitcoins are :
- (1) Virtual currency earned by solving a complex set of logarithms (computer-based)
 - (2) A portal of capital market
 - (3) Genetically grown crops
 - (4) Genetically grown buffalos
21. 'Global Damming' means :
- (1) Gradual increase of the temperature of ionosphere
 - (2) Gradual loss of biodiversity hot spots
 - (3) Gradual reduction in the amount of global direct irradiance at the earth surface
 - (4) Gradual increase in the melting of ice in polar regions
22. Why hard water does not give lather with soap ?
- (1) Hard water contains Ca and Mg ions which form precipitate with soap
 - (2) Hard water contains sulphate and chloride ions which forms precipitate
 - (3) pH of hard water is high
 - (4) pH of hard water is less
23. Which one among the following metals is used in fireworks to make a brilliant white light ?
- | | |
|---------------|---------------|
| (1) Sodium | (2) Magnesium |
| (3) Aluminium | (4) Silver |
24. Which of the following gases in the atmosphere is/are responsible for acid rains ?
- | | |
|-----------------------|------------------------|
| (1) Oxides of sulphur | (2) Oxides of nitrogen |
| (3) Oxides of carbon | |
- Select the **correct** answer using the code given below.
- | | |
|------------------|------------------|
| (1) 1 and 2 only | (2) 1 and 3 only |
| (3) 2 only | (4) 1,2 and 3 |

25. Which one among the following gases readily combines with the haemoglobin of the blood ?

- | | |
|---------------------|----------------------|
| (1) Methane | (2) Nitrogen dioxide |
| (3) Carbon monoxide | (4) Sulphur dioxide |

26. Dual-Energy X-ray Absorptiometry (DEXA) is used to measure :

- (1) Spread of solid tumour
- (2) Bone density
- (3) Ulcerous growth in stomach
- (4) Extent of brain haemorrhage

27. Human blood is a viscous fluid.

This viscosity is due to :

- | | |
|-----------------------|--------------------------|
| (1) Proteins in blood | (2) Platelets in plasma |
| (3) Sodium in serum | (4) RBC and WBC in blood |

28. In terms of magnetic properties, oxygen belongs to :

- | | |
|----------------------------|-----------------------------|
| (1) Magnetic materials | (2) Ferromagnetic materials |
| (3) Paramagnetic materials | (4) Diamagnetic materials |

29. Light - Emitting Diode (LED) converts :

- (1) Light - energy into electrical energy
- (2) Electrical energy into light energy
- (3) Thermal energy into light energy
- (4) Mechanical energy into electrical energy

30. The pH of fresh milk is 6. When it turns sour, the pH :

- | | |
|-------------------|-------------------------------|
| (1) Becomes < 6 | (2) Remains the same, i.e., 6 |
| (3) Become > 6 | (4) Become neutral, i.e., 7 |

31. Whose decision is final regarding the nature of money Bill ?
 (1) President of India (2) Prime Minister of India
 (3) Speaker of Lok Sabha (4) Union Cabinet
32. Which one among the following is a Fundamental Duty of citizens under the Constitution of India ?
 (1) To provide friendly cooperation to the people of the neighbouring countries
 (2) To visit the monuments of national importance
 (3) To defend the country and render national service when called upon to do so
 (4) To know more and more about the religions of India
33. Which one among the following Committees of the Parliament of India has no members of the Rajaya Sabha ?
 (1) Public Accounts Committee
 (2) Estimates Committee
 (3) Public Undertaking Committee
 (4) Departmentally Related Standing Committee on Finance
34. Which one among the following is **not** a constitutional body in India ?
 (1) Comptroller and Auditor General
 (2) National Commissioner Linguistic Minorities
 (3) National Commission for Scheduled Castes
 (4) National Human Rights Commission
35. To whom does the President of India submit his resignation ?
 (1) Vice-President (2) Chief- Justice
 (3) Speaker of Lok Sabha (4) Prime Minister

36. On 2nd October, 1959, Panchayati Raj was introduced in India at which of the following places ?
- (1) Nagore- Rajasthan
 - (2) Rajmundari - Andhra Pradesh
 - (3) Sitamarhi - Bihar
 - (4) Aligrah - Uttar Pradesh
37. Which of the following is **not** a team in India Badminton League ?
- (1) Krrish Delhi Smashers
 - (2) Pune Pistons
 - (3) Banga Beats
 - (4) Chandigarh Hotshots
38. Who among the following has been appointed as tournament director of the fourth edition of Hockey India League ?
- (1) Craig Gribble
 - (2) Bjorn Isberg
 - (3) Andy Meyer
 - (4) Milind Narwekar
39. Who won 2015 Wimbledon men's single championship ?
- (1) Novak Djokovic
 - (2) Roger Federer
 - (3) Rafael Nadal
 - (4) Andy Murray
40. Who of the following was the winner of men's single world badminton championship ?
- (1) Kento Momota
 - (2) Jan Jorgensen
 - (3) Lee Chong Wei
 - (4) Chen Long
41. The FIFA Ballon d'or 2015 award for the world's best player was won by :
- (1) Cristiano Ronaldo
 - (2) Lionel Messi
 - (3) Neymar
 - (4) Ronaldinho

42. A book 'Fault Lines' is written by :
 (1) Raghuram Rajan (2) D. Subba Rao
 (3) Vimal Jalan (4) Montek Singh Ahluwalia
43. For multiproduct SEZs, the minimum land requirement is :
 (1) 500 hectare (2) 1000 hectare
 (3) 1500 hectare (4) 2000 hectare
44. Rashtriya Ispat Nigam Ltd's Steel Plant is located at :
 (1) Jamsedpur (2) Bhilai
 (3) Vishakhapatnam (4) Durgapur
45. Global glut has been noticed in :
 (1) Tea (2) Coffee
 (3) Rubber (4) Sugar
46. A much acclaimed book "The Immortals of Meluha" has been authored by :
 (1) Amish Tripathi (2) Karan Johar
 (3) Mahesh Bhatt (4) Karan Thapar
47. What was Ziyarat in the language of the Sufis ?
 (1) Pilgrimage to the tops of sufi saints of seeking barkat (spiritual grace)
 (2) Reciting divine name
 (3) Offering free kitchens run on faith (unasked for charity)
 (4) Setting up of auqaf (charitable trusts)
48. With which of the following dance forms is Madhvi Mudgal associated ?
 (1) Kathakali (2) Kathak
 (3) Odissi (4) Bharatnatyam

49. Angus Deaton, the British - American economist, won Nobel Prize in Economics 2015 for his analysis of :

- (1) Supply and Demand
- (2) Consumption and Poverty
- (3) Consumption, Poverty and Welfare
- (4) Investment, Poverty and Welfare

50. 'Laisses fare' is associated with :

- (1) Market based capitalistic economy
- (2) Socialistic economy
- (3) Mixed economy
- (4) Parallel economy

51. Which of the following figures is different from others ?

- | | |
|---|---|
| (1)  | (2)  |
| (3)  | (4)  |

52. Which of the following pairs has the same relationship as it is between JL and WZ ?

- | | |
|---------------|---------------|
| (1) AC and RU | (2) AB and PW |
| (3) PR and LM | (4) TU and WX |

53. Which of the following is the proper order ?

- (1) To listen, to think, to trust, to work
- (2) To trust, to listen, to think, to work
- (3) To think, to trust, to listen, to work
- (4) To trust, to work, to think, to listen

54. Which of the following pairs has the same relationship as is found between Australia : Continent ?
- (1) Engine : Train (2) River : Coast
(3) Vikrant : Ship (4) Yuri Gagarin : Space
55. Examine the following three statements :
- (1) Shyam is not the father of Hari.
(2) Hari is the son of Suresh.
(3) Suresh has three sons.
- Which of the following conclusions can be drawn from the above statements ?
- (1) Shyam is son of Suresh
(2) Hari is brother of Shyam
(3) Suresh is father of Hari
(4) Shyam has no children
56. If Monday falls on the first of October which day will fall three days after the 20th in that month ?
- (1) Monday (2) Tuesday
(3) Wednesday (4) Sunday
57. Select the correct alternative out of the given four to complete the sequence :
- A — A -- B A B - B - B A B A
- (1) BBABAA (2) BBBAAA
(3) ABABBA (4) BBAABB
58. In a row of children Bali is seventh from the left and Moti is fourth from the right. When Bali and Moti exchange their positions, Bali will be fifteenth from the left. Moti's position from the right will be :
- (1) Eighth (2) Fourth (3) Eleventh (4) Twelfth

59. There are four roads. I have come from the south and want to go to the temple. The road to right leads me away from the coffee house while straight road leads only to a college. In which direction is the temple ?
 (1) North (2) East (3) South (4) West
60. Five persons A, B,C, D and E are either guards or thieves. The guards always tell the truth whereas thieves always tell a lie. A claims that B is a guard. B claims that C is thief. C claims that D is a thief. E claims that A is a guard. D claims that B and E are different kinds. The number of thieves is :
 (1) 1 (2) 2 (3) 3 (4) 4
61. Among five friends A is heavier than B, C is lighter than D, B is lighter than D but heavier than E. Who among them is the heaviest ?
 (1) B (2) C (3) D (4) A
62. Seven children A,B,C,D,E,F and G are standing in a row. G is to the right of D and to the left of B. A is not the right of C. A and D have one child between them. E and B have two children between them. D and F have also children between them. Who is exactly in the middle ?
 (1) A (2) C (3) D (4) G
63. A cube has six faces each of different colour. The Red face is opposite to black. The green face is adjacent to white and brown face is adjacent to blue. The colours adjacent to green are :
 (1) Red, black, brown and white
 (2) Red, black brown and blue
 (3) Red, black blue and white
 (4) Red, brown, blue and white

64. The time in a clock is quarter past twelve. If the four hand points to the East, which is the direction opposite to the minute hand ?

- | | |
|------------------|-----------|
| (1) South - West | (2) South |
| (3) West | (4) North |

65. Examine the following statements :

- (1) Either Ram and Shyam are of the same age or Ram is older than Shyam.
- (2) Either Ali and John are of the same age or John is older than Ali.
- (3) Shyam is older than Ali.

Which one of the following conclusions can be drawn from the above statements ?

- (1) Ram is older than Shyam
- (2) John is older than Ali
- (3) Shyam and John are of the same age
- (4) Ram is older than Ali

66. Mr. Vasu, the managing director of X,Y, Z company aksed five persons - Asit, Varun, Chandra interest in a new project. Ten replies, he got, were :

- Asit : None of us is interested
- Varun : One of us is interested
- Chandra : Two of us are interested
- Danny : Three of us are interested.
- Eshita : Four of us are interested.

From his experience, Mr. Vasu knows that those who are interested only tell the truth and others lie. How many of them are interested in the new project ?

- | | | | |
|-------|-------|-------|-------|
| (1) 4 | (2) 3 | (3) 2 | (4) 1 |
|-------|-------|-------|-------|

Directions : (Q. 67 and 68) Consider the following statements and answer Q.Nos. 67 and 68 on the basis of these statements.

- (i) A guest house has six rooms. A, B, C, D, E and F. Among these A and C can accommodate two persons each, the rest can accommodate only one each.
- (ii) Eight guests P, Q, R, S, T, U, W and X are to be kept in rooms. Q, T, and X are females while the other are males. The two sexes cannot be put together in the same room. No man is willing to stay in room C. or F.
- (iii) P wants to be alone but does not want to stay in room B or D. S needs a partner but is not ready to stay with U or W. X does not want to share her room.

67. Who among the following will stay in room E ?

- (1) U (2) W (3) P (4) Q

68. 'X' will stay in which of the room ?

- (1) C (2) E (3) B (4) F

69. Find out the median of the following frequency distribution :

Variable	Frequency
11	5
12	7
13	11
14	9
15	8
16	7
17	3
18	5

- (1) 16 (2) 15 (3) 14 (4) 13

70. Find out the mean height of plants form the following frequency distribution :

Height in Cm.	No. of plants
61	5
64	18
67	42
70	27
73	8

- (1) 67.00 cm. (2) 66.50 cm. (3) 68.00 cm. (4) 67.45 cm.

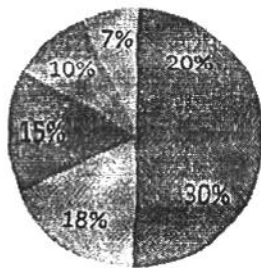
71. The mode of the following data is :

Class Interval	Frequency
10-25	2
25-40	3
40-55	7
55-70	6
70-85	6
85-100	6

- (1) 47.5 (2) 52.0 (3) 54.0 (4) 50.5

Directions : (Q. 72 and 73) In the following pie chart percentage expense on various items during the production of a book are given. Based upon the information given in the pie chart, answer the question.

Sales



- Cost of printing 20%
- Cost of paper 30%
- Royalty 18%
- Binding 15%
- Miscellaneous 10%
- Advertisement 7%

72. If the 'cost of paper' is Rs. 1,50,000 then the expense on advertisement, is :

- (1) Rs. 35,000 (2) Rs. 3,500
(3) Rs. 40,000 (4) Rs. 25,000

73. The central angle corresponding to the cost of printing, is :

- (1) 60° (2) 72° (3) 45° (4) 102°

74. Which one of the following will come in place of the question mark (?)

CD, HI, MN, ?

- (1) QS (2) OP (3) PQ (4) RS

75. Which word should be in place of '?' in the following ?

XVWU : TRSQ = LJKI : ?

(1) HFGE

(2) EFGH

(3) FGHE

(4) GHEF

76. The day on 18.9.1977 was Sunday. A couple was married on this date. How many marriage anniversaries would fall in Sunday in the next 15 years ?

(1) 1

(2) 2

(3) 5

(4) 9

77. If KAMAL is written as 21413, then MAHAL can be written as :

(1) 48113

(2) 41813

(3) 41831

(4) 38141

78. Find out the missing letter in the table :

A	Z	B
Y	C	X
-	W	E

(1) B

(2) D

(3) K

(4) V

79. If the cost price of 16 tables be equal to the selling price of 12 tables, the gain percent is :

(1) 30%

(2) 15%

(3) 33%

(4) 20%

80. If 378 coins consist of one rupee, 50 paise and 25 paise whose values are proportional to 13 : 11 : 7, the number of 50 paise coins will be :

(1) 136

(2) 133

(3) 132

(4) 128

81. If the volumes of two right circular cones are in the ratio 1 : 3 and their diameters are in the ratio 3 : 5, then the ratio of their heights is :
 (1) 3 : 5 (2) 5 : 27 (3) 25 : 27 (4) 1 : 5
82. In a mixture of 60 liters the ratio of acid and water is 2 : 1. If the ratio of acid and water is to be 1 : 2, then the amount of water (in liter) to be added to the mixture is :
 (1) 50 (2) 45 (3) 55 (4) 60
83. The average weight of the students in four sections A, B, C and D is 60 kg. The average weight of the students of A, B, C and D kg. and 80 kg. respectively. If the average weight of the students of section A and B together is 48 kg. and that of B and C together is 60 kg. what is the ratio of the number of students in sections A and D ?
 (1) 3 : 2 (2) 8 : 5 (3) 12 : 7 (4) 4 : 3
84. On selling 144 bicycles, John lost the selling price of 6 bicycles. His percentage loss is :
 (1) 4% (2) 6% (3) 8% (4) 10%
85. What is the percentage increase in the production of rice in the state B in the year 2009 in comparison with 2007 ?
 (1) 70% (2) 40% (3) 55% (4) 25%
86. The centre of the circle $2x^2 + 2y^2 - 3x - 5y - 7$ will be :
 (1) $\left(\frac{3}{4}, -\frac{5}{4}\right)$ (2) $\left(\frac{5}{4}, -\frac{3}{4}\right)$ (3) $\left(-\frac{3}{4}, -\frac{5}{4}\right)$ (4) $\left(\frac{3}{4}, \frac{5}{4}\right)$
87. The rational number in the following is :
 (1) 1.010010001 (2) 2.37137
 (3) $\sqrt{2} - 1 / \sqrt{2} + 1$ (4) π

88. If the zeroes of the polynomial $x^3 - 3x^2 + x + 1 = 0$ are $a - b$, a , $a + b$, then b is equal to :
 (1) $\sqrt{2}$ (2) 1 (3) -1 (4) $\sqrt{2} - 1$
89. If the zeroes of the polynomial $x^3 - 3x^2 + x + 1 = 0$ are $a - b$, a , $a + b$, then b is equal to :
 (1) $\sqrt{2}$ (2) 1 (3) -1 (4) $\sqrt{2} - 1$
90. What is the least positive integer which leaves remainder 3 when divided by 4, 5, 6 and 8 but leaves no remainder when divided by 9 ?
 (1) 729 (2) 363 (3) 123 (4) 243
91. The single discount equivalent to three successive discounts of 20%, 15%, 10% is :
 (1) 40.32% (2) 45% (3) 50.3% (4) 38.8%
92. The greatest number which can divide 1356, 1868, 2764 leaving the same remainder in each case is :
 (1) 124 (2) 128 (3) 260 (4) 64
93. A train travels at an average speed of 50 km./hour for $2\frac{1}{2}$ hours and then travels at a speed of 70 km./hour for $1\frac{1}{2}$ hours. The average speed of the train in km./hour for the entire journey is :
 (1) 62.5 (2) 57.5 (3) 59.5 (4) 60
94. Working 8 hours a day, 120 persons can dig a canal 162 m. long 12 m. wide and 2 m. deep in 8 days. Working 6 hours a day, the number of persons that will be required to dig a canal 729 m. long, 10 m. wide and 3 m. deep in 32 days, is :
 (1) 200 (2) 225 (3) 250 (4) 175

95. A jogger desires to run a certain course in $\frac{1}{4}$ less time than he usually takes. By what percent must he increase his average running speeds to accomplish the goal ?
 (1) 25% (2) $33\frac{1}{3}\%$ (3) 50% (4) 20%
96. The value of $\sqrt{400} + \sqrt{0.04} - \sqrt{0.000004}$ is :
 (1) 20.188 (2) 20.022 (3) 20.22 (4) 20.198
97. Out of two sections A and B, 10 students of section B shift to A, as a result strength of A becomes 3 times the strength of B. But if 10 students shift over from A to B, both A and B become equal in strength. Ratio of number of student in section A to that of section B is :
 (1) 3 : 1 (2) 9 : 4 (3) 2 : 1 (4) 5 : 3
98. On a journey across Kolkata, a taxi averages 50 km. per hour for 50% of the distance, 40 km. per hour for 40% of it and 20 per hour for the remaining. The average speed, in km./hour for the whole journey is :
 (1) 40 (2) 35 (3) 45 (4) 42
99. if $a^2 + b^2 = 5ab$, then the value of $(a^2/b^2 + b^2/a^2)$ is :
 (1) 16 (2) 23 (3) -23 (4) 32
100. If the square of the sum of two numbers is equal to 4 times of their product, then the ratio of these numbers is :
 (1) 1 : 3 (2) 1 : 1 (3) 1 : 2 (4) 2 : 1

Directions : (Question No. **101 to 105**) : Read the following passage carefully and answer the questions that follow by choosing the most appropriate option from the four alternatives.

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 to destructive ends. The weapons which science gives us do not necessarily create war, these make 'war increasingly more terrible'. It was brought us to 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 relations of one nation with another. That is a job in which every-body must participate including the scientists. But the bomb of Hiroshima suddenly woke us 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 this urgent question " Can education and tolerance, understanding and creative intelligence run fast enough to keep us abreast with our mounting capacity to destroy ? That is the question which we still 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.

101. An appropriate title for the passage would be :

- (1) Science and New Generation
- (2) Science and Social forces
- (3) Science and the Horrors of war
- (4) Science and world peace

102. According to the passage, the real enemy of mankind is not science, but war because :

- (1) Science during wars is highly destructive
- (2) Science merely invents weapons with which war is fought
- (3) Powerful weapons invented by science do not cause war
- (4) The weapons that science invents necessarily lead to war

103. War can be avoided if :

- (1) Weapons invented by science are not used to launch a war
- (2) Science is not allowed to lead us to utter destruction
- (3) We replace force and lawlessness by law and international government
- (4) Science is restricted to be utilised only during war time

104. According to the writer, the main problem we are faced with is to :

- (1) Prevent scientists from participating in destructive activities
- (2) Abolish war
- (3) Stop scientific activities everywhere.
- (4) Stop science from reflecting social forces.

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

- (1) encouraging social forces
- (2) education and broadmindedness
- (3) insight and constructive thinking
- (4) both (2) and (3) together

Directions (Question No. 106-110): Select from the four alternatives nearest in meaning of the word given in italic :

106. *Lithography*

- | | |
|------------------------|-----------------------|
| (1) staining technique | (2) printing method |
| (3) colour transfer | (4) etching procedure |

107. *Verisimilitude*

- | | | | |
|--------------|-------------|----------------|----------------|
| (1) artifice | (2) realism | (3) difference | (4) similarity |
|--------------|-------------|----------------|----------------|

108. *Diatribes*

- | | |
|-------------------|--------------------|
| (1) criticism | (2) lengthy letter |
| (3) exclusive dub | (4) ancient |

109. *Colossal*

- | | |
|--------------|---------------|
| (1) evil | (2) colourful |
| (3) gigantic | (4) athletic |

110. *Sombre*

- | | |
|------------|--------------|
| (1) gloomy | (2) luminous |
| (3) placid | (4) opaque |

Directions (Question No. **111-115**) : Select from the four alternatives the opposite in meaning to the word given in italic :

111. *Tarnish*

- | | |
|--------------------|--------------|
| (1) dull in lustre | (2) silly |
| (3) brighten | (4) abnormal |

112. *Uncouth*

- | | |
|---------------|------------------|
| (1) courteous | (2) discourteous |
| (3) awkward | (4) crude |

113. *Knave*

- | | |
|---------------|-------------|
| (1) villain | (2) hero |
| (3) dishonest | (4) trivial |

114. *Jocund*

- | | |
|----------------|----------------|
| (1) blithesome | (2) indecisive |
| (3) depressed | (4) pleasant |

115. *Carnal*

- | | |
|---------------|----------------|
| (1) spiritual | (2) atheist |
| (3) lecherous | (4) ornamental |

Directions (Question No. **116-120**) : From the given options choose the one which has the correct spelling :

116. (1) Convertable

(3) Convertible

(2) Convertible

(4) Convarteble

117. (1) february (2) february
(3) febrory (4) febroery
118. (1) adress (2) address
(3) addres (4) addrass
119. (1) suppression (2) supression
(3) suppresion (4) sepression
120. (1) negligeble (2) negligible
(3) neglegeble (4) negligble

Directions (Question No. 121-125) : From the given options choose the one which can be substituted for the given group of words :

121. One who cannot be corrected ?
(1) Incurable (2) Incorrigible
(3) Hardened (4) Invulnerable
122. One who is in charge of a museum ?
(1) curator (2) supervisor
(3) caretaker (4) warden
123. One who is honourably discharged from service ?
(1) Retired (2) Emeritus
(3) Relieved (4) Emancipated
124. The study of ancient societies :
(1) Anthropology (2) Archaeology
(3) History (4) Ethnology

125. A small shop that sells fashionable clothes, cosmetics etc :

- | | |
|--------------|-----------|
| (1) store | (2) stall |
| (3) Boutique | (4) Booth |

Directions (Question No. 126-130) : Choose the best option to fill in the blanks :

126. The manager tried hard to – his men to return to work before declaring a lockout :

- | | |
|---------------|--------------|
| (1) encourage | (2) motivate |
| (3) permit | (4) persuade |

127. The of nuclear power feel that it is one of the most dangerous developments in modern civilisation.

- | | |
|-----------------|---------------|
| (1) antagonists | (2) victims |
| (3) activists | (4) opponents |

128. If someone deliberately damages your property, he is to pay for the cost of repairs :

- | | |
|---------------|---------------|
| (1) liable | (2) forced |
| (3) requested | (4) compelled |

129. As we were walking along the pavement, my little child – on to the road :

- | | |
|-------------|-------------|
| (1) went | (2) crept |
| (3) crawled | (4) strayed |

130. It was difficult to see through the of the headlights at the cars :

- | | |
|----------------|------------|
| (1) brilliance | (2) dazzle |
| (3) glare | (4) shine |

Directions (Question No. 131-135): From the given options, choose the most appropriate preposition to fill in the blanks :

131. I am ready to say this her face.

- | | |
|----------|--------|
| (1) at | (2) on |
| (3) upon | (4) in |

132. Such remarks are certainly derogatory your reputation.

- | | |
|----------|---------|
| (1) of | (2) for |
| (3) with | (4) to |

133. A good judge never Jumps The conclusion.

- | | |
|--------|---------|
| (1) at | (2) to |
| (3) on | (4) for |

134. The peasant refused to bow his master.

- | | |
|----------|-----------|
| (1) on | (2) about |
| (3) upon | (4) to |

135. No body in our group has a genius winning friends and in convincing people.

- | | |
|---------|--------|
| (1) for | (2) in |
| (3) of | (4) at |

Directions (Question No. 136-140) : Choose the option for the underlined expression in the given sentences to make the sentence grammatically correct.

136. He enjoys to tell stories to children.

- | | |
|----------------|-----------------|
| (1) telling | (2) how to tell |
| (3) to narrate | (4) none |

137. The short essay should not exceed more than two hundred word.

- | | |
|-----------------|-----------------|
| (1) exceed | (2) exceed than |
| (3) more exceed | (4) None |

138. I prefer to ride than to walk.

- | | |
|-----------------------|-------------------------|
| (1) ride to walk | (2) riding than walking |
| (3) riding to walking | (4) No improvement |

139. It is one and quarter hours since Harish went away.

- | | |
|---------------------------|----------------------------|
| (1) One and quarter | (2) One and quarter hour |
| (3) One hours and quarter | (4) One hour and a quarter |

140. Unless he does not leave this house, I will not say anything.

- | | |
|-------------------|------------|
| (1) had left | (2) left |
| (3) did not leave | (4) leaves |

Directions (Question No. 141-145) : Choose the option that best expresses the meaning of idioms given below.

141. **A bird's eye view**

- | | |
|---------------------|-----------------------------|
| (1) A personal view | (2) A general view |
| (3) A biased view | (4) A detailed presentation |

142. **Lynch law**

- | | |
|-----------------------------|---------------------------|
| (1) law of the mob | (2) law of the underworld |
| (3) law of the constitution | (4) law of the parliament |

143. **Within a stone's throw**

- | |
|--|
| (1) very far off |
| (2) Within a certain radius |
| (3) at a short distance |
| (4) within a definite circumference |

144. Sang froid

- | | |
|---------------|----------------|
| (1) temper | (2) irritation |
| (3) composure | (4) anger |

145. Panacea

- (1) remedy for all diseases
- (2) remedy for loss of appetite
- (3) remedy for heart ailments
- (4) remedy for disorder of pancreas

Directions (Question No. **146-150**): Identify the part having an error.

146. (1) It was not desirable for him (2) to prevent his wife
(3) to attend (4) anti-dowry demonstrations.

147. (1) Hemant as well as his friends
(2) Is going
(3) To participate in a political debate
(4) No error

148. (1) It is one of those books
(2) Which has been recommended
(3) For specialists
(4) In skin diseases

149. (1) he charged ye (2) one hundred rupees
(3) for six dozens oranges (4) of average quality

150. (1) He told me that (2) He has completed the task
(3) I had given him the (4) Previous day.

ROUGH WORK

रफ़ कार्य

अभ्यर्थियों के लिए निर्देश

(इस पुस्तिका के प्रथम आवरण पृष्ठ पर तथा उत्तर-पत्र के दोनों पृष्ठों पर केवल नीली-काली बाल-प्वाइंट पेन से ही लिखें)

1. प्रश्न पुस्तिका मिलने के 10 मिनट के अन्दर ही देख लें कि प्रश्नपत्र में सभी पृष्ठ मौजूद हैं और कोई प्रश्न छूटा नहीं है। पुस्तिका दोषयुक्त पाये जाने पर इसकी सूचना तत्काल कक्ष-निरीक्षक को देकर सम्पूर्ण प्रश्नपत्र की दूसरी पुस्तिका प्राप्त कर लें।
2. परीक्षा भवन में लिफाफा रहित प्रवेश-पत्र के अतिरिक्त, लिखा या सादा कोई भी खुला कागज साथ में न लायें।
3. उत्तर-पत्र अलग से दिया गया है। इसे न तो मोड़ें और न ही विकृत करें। दूसरा उत्तर-पत्र नहीं दिया जायेगा। केवल उत्तर-पत्र का ही मूल्यांकन किया जायेगा।
4. अपना अनुक्रमांक तथा उत्तर-पत्र का क्रमांक प्रथम आवरण-पृष्ठ पर पेन से निर्धारित स्थान पर लिखें।
5. उत्तर-पत्र के प्रथम पृष्ठ पर पेन से अपना अनुक्रमांक निर्धारित स्थान पर लिखें तथा नीचे दिये वृत्तों को गाढ़ा कर दें। जहाँ-जहाँ आवश्यक हो वहाँ प्रश्न-पुस्तिका का क्रमांक तथा सेट का नम्बर उचित स्थानों पर लिखें।
6. ओ० एम० आर० पत्र पर अनुक्रमांक संख्या, प्रश्नपुस्तिका संख्या व सेट संख्या (यदि कोई हो) तथा प्रश्नपुस्तिका पर अनुक्रमांक और ओ० एम० आर० पत्र संख्या की प्रविष्टियों में उपरिलेखन की अनुमति नहीं है।
7. उपर्युक्त प्रविष्टियों में कोई भी परिवर्तन कक्ष निरीक्षक द्वारा प्रमाणित होना चाहिये अन्यथा यह एक अनुचित साधन का प्रयोग माना जायेगा।
8. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं। प्रत्येक प्रश्न के वैकल्पिक उत्तर के लिए आपको उत्तर-पत्र की सम्बन्धित पंक्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार पेन से गाढ़ा करना है।
9. प्रत्येक प्रश्न के उत्तर के लिए केवल एक ही वृत्त को गाढ़ा करें। एक से अधिक वृत्तों को गाढ़ा करने पर अथवा एक वृत्त को अपूर्ण भरने पर वह उत्तर गलत माना जायेगा।
10. ध्यान दें कि एक बार स्याही द्वारा अंकित उत्तर बदला नहीं जा सकता है। यदि आप किसी प्रश्न का उत्तर नहीं देना चाहते हैं, तो संबंधित पंक्ति के सामने दिये गये सभी वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शून्य अंक दिये जायेंगे।
11. रफ कार्य के लिए प्रश्न-पुस्तिका के मुखपृष्ठ के अंदर वाला पृष्ठ तथा उत्तर-पुस्तिका के अंतिम पृष्ठ का प्रयोग करें।
12. परीक्षा के उपरान्त केवल ओ एम आर उत्तर-पत्र परीक्षा भवन में जमा कर दें।
13. परीक्षा समाप्त होने से पहले परीक्षा भवन से बाहर जाने की अनुमति नहीं होगी।
14. यदि कोई अभ्यर्थी परीक्षा में अनुचित साधनों का प्रयोग करता है, तो वह विश्वविद्यालय द्वारा निर्धारित दंड का/की, भागी होगा/होगी।