

## QUESTION PAPER

Subject:

Code: **4.01 / 127**

Sr. No.: .....

Roll No.: .....

Signature of the Invigilator .....

Date: 11.04.2005

Duration: 2 Hours

Time: 09:00 Hrs. to 11:00 Hrs.

Max. Marks: 120

**Instructions:** Please read the following instructions carefully before writing your answers:

- 1) All Questions are compulsory.
- 2) Each Questions carries 1 mark.
- 3) There are four alternatives - (A), (B), (C), (D) given against each question out of which only one is the most appropriate answer. **If (A) is correct, round on the correct alternative like (A) .**
- 4) If a question is answered wrongly or more than one answers are marked, 0.25 marks will be deducted for each such question.
- 4) No sheet from the Question Paper / Answer Book should be detached.
- 5) **Please DO NOT repeat DO NOT write your name anywhere on the Question Paper.**

71.The unit of energy in MKS system is?

- A.Joules
- B.Watts
- C.Power
- D.Force

**Ans: C**

72.The sum of two number is 25 and their difference is 13. Find their product?

- A.204
- B.114
- C.315
- D.325

**Ans: B**

73.Metals selected for making worse should have?

- A.More hardness
- B.More brittleness
- C.More malleability
- D.More ductility

**Ans: D**

74.To which king belongs the Lion capitol at Sarnath?

- A.Chandragupta
- B.Ashoka
- C.Kanishka
- D.Harsha

**Ans: B**

75. $3251 + 587 + 369 - ? = 3007$

- A.1250
- B.1300

- C.1375
- D.1200
- E.None of these

**Ans: D**

76.In order to convert fractional inches into decimal inches?

- A.Look on a metric conversion chart
- B.Divide the numerator (top number) by the denominator (bottom number)
- C.Check the engineer's scale
- D.All of the above

**Ans: B**

77.Some traditional board drafters preferred the drafting machine over the parallel straight edge because it could be used without the need for?

- A.Circle templates
- B.Triangles
- C.Technical pens
- D.Lettering guides

**Ans: B**

78.The ozone layer restricts

- A.Visible light
- B.Infrared radiation
- C.X-rays and gamma rays
- D.Ultraviolet radiation

**Ans: D**

79.Which of the following is not a leap year?

- A.700
- B.800
- C.1200
- D.2000

**Ans: A**

80.The ratio of ultimate stress to working stress is?

- A.Modulus of elasticity
- B.Factor of safety
- C.Chane in length
- D.Tensile load

**Ans: B**

81.Which of the following countries is not a member of a SAARC?

- A.Sri Lanka
- B.Myanmar
- C.Maldives
- D.Bhutan

**Ans: B**

82.Under the Government of India, Provincial Legislatures consisted of two chambers, except in the case of?

- A.Assam
- B.Bihar
- C.Madras

D.Punjab

**Ans: D**

83.The Parliament can restrict or abrogate by law, fundamental rights with respect to?

A.The members of the armed forces

B.The forces charged with the maintenance of public order

C.The persons employed in any bureau or other organization established by the state for purpose of intelligence

D.All of the above

**Ans: D**

84.3, 5, 7, 12, 17, 19?

A.19

B.17

C.5

D.12

**Ans: D**

85.A half-moon protractor is divided into how many degrees?

A.360

B.180

C.270

D.310

**Ans: B**

86. Bronze is an alloy of?

A.Copper-Zinc

B.Copper-Tin

C.Copper-Lead

D.Copper and Tungsten

**Ans: B**

87.The angle between the minute hand and the hour hand of a clock when the time is 8.30, is?

A.80°

B.75°

C.60°

D.105°

**Ans: B**

88.Who is known as 'Indian Bismarck'?

A.Kamaraj

B.Sardar Vallabhbhai Patel

C.Nehru

D.Rajaji

**Ans: B**

89.The largest part of our hydrosphere is?

A.Atlantic Ocean

B.Indian Ocean

C.Pacific ocean

D.Antarctica ocean

**Ans: C**

90. Who invented Electric Generator?

- A. Sir Alexander Graham Bell
- B. Michael Faraday
- C. Alfred B. Nobel
- D. Thomas Alva Edison

**Ans: B**

91. In a 100 m race, A can beat B by 25 m and B can beat C by 4 m. In the same race, A can beat C by?

- A. 21 m
- B. 26 m
- C. 28 m
- D. 29 m

**Ans: C**

92. Coral reefs in India can be found in?

- A. The coast of Orissa
- B. Waltair
- C. Rameshwaram
- D. Trivandrum

**Ans: C**

93. A man has some hens and cows. If the number of heads be 48 and the number of feet equals 140, then the number of hens will be?

- A. 22
- B. 23
- C. 24
- D. 26

**Ans: D**

94. A bag contains 6 black and 8 white balls. One ball is drawn at random. What is the probability that the ball drawn is white?

- A.  $\frac{3}{4}$
- B.  $\frac{4}{7}$
- C.  $\frac{1}{8}$
- D.  $\frac{3}{7}$

**Ans: B**

95. Three candidates contested an election and received 1136, 7636 and 11628 votes respectively. What percentage of the total votes did the winning candidate get?

- A. 57%
- B. 60%
- C. 65%
- D. 90%

**Ans: A**

96. If  $\log 27 = 1.431$ , then the value of  $\log 9$  is?

- A. 0.934
- B. 0.945
- C. 0.954
- D. 0.958

**Ans: C**

97.  $6.17 + 6.017 + 0.617 + 6.0017 = ?$

- A.6.2963
- B.62.965
- C.629.6357
- D.None of these

98.The percentage increase in the area of a rectangle, if each of its sides is increased by 20% is?

- A.40%
- B.42%
- C.44%
- D.46%

**Ans: C**

99.The average weight of A, B and C is 45 kg. If the average weight of A and B be 40 kg and that of B and C be 43 kg, then the weight of B is?

- A.17 kg
- B.20 kg
- C.26 kg
- D.31 kg

**Ans: D**

100.A civil engineer working on a bridge design would probably rely on his ..... scale for checking printed drawings?

- A.Engineer's
- B.Metric
- C.Architect's
- D.None of the above

**Ans: A**

101.Oxygen in our blood is transported by a protein named?

- A. Hemoglobin
- B.Keratin
- C.Collagen
- D.Myoglobin

**Ans: A**

102.When is the World Population Day observed?

- A.May 31
- B.October 4
- C.December 10
- D.July 11

**Ans: D**

103.The Homolographic projection has the correct representation of?

- A.Shape
- B.Area
- C.Baring
- D.Distance

**Ans: B**

104.Who invented the Ball Point Pen?

- A.Biro Brothers
- B.Waterman Brothers
- C.Bicc Brothers

D. Write Brothers

**Ans: A**

105. Entomology is the science that studies?

A. Behavior of human beings

B. Insects

C. The origin and history of technical and scientific terms

D. The formation of rocks

**Ans: B**

106. Mass quantity is called as?

A. Newton

B. Vector

C. Scalar

D. Dyne

**Ans: C**

107. Which of the following is not associated with the UNO?

A. ILO

B. WHO

C. ASEAN

D. All of the above

**Ans: C**

108. Who was known as Iron man of India?

A. Govind Ballabh Pant

B. Jawaharlal Nehru

C. Subhas Chandra Bose

D. Sardar Vallabai Patel

**Ans: D**

109. What Galileo invented?

A. Barometer

B. Pendulum clock

C. Microscope

D. Thermometer

**Ans: D**

110. The intersecting lines drawn on maps and globes are?

A. Latitudes

B. Longitudes

C. Geographic grids

D. None of the above

**Ans: C**

111. Capacity of doing work is?

A. Power

B. Newton

C. Energy

D. Joules

**Ans: C**

112. Traditional drafters need to be able to create several different line widths because?

- A. Different line widths convey different information
- B. The line width has to do with how dark it appears in the finished drawing
- C. They seem to transmit better in a fax machine
- D. It makes no difference

**Ans: A**

113. The density of water is?

- A. 5
- B. 2
- C. 1
- D. 7

**Ans: C**

114. Unit of frictional force in SI units is?

- A. Newton
- B. Watts
- C. Power
- D. None of the above

**Ans: A**

115. Several of the tools used in traditional drafting include the following?

- A. Parallel straight edge
- B. 45 degree triangle
- C. Circle template
- D. All of the above

**Ans: D**

116. He is a mathematician and astronomer of the 12th century. His name is associated with India's seventh satellite. He is?

- A. Aryabhatta
- B. Bhaskara I
- C. Bhaskara II
- D. None of the above

**Ans: C**

117. Acceleration quantity is?

- A. Speed
- B. Scalar
- C. Vector
- D. None of the above

**Ans: C**

118. The first step in creating a traditional technical drawing is to?

- A. Draw a series of guide lines
- B. Set up the miter line
- C. Align the paper so that it will be positioned square to the parallel bar
- D. Sharpen the leads in the technical pens

**Ans: C**

119. Files are made of?

- A. High carbon steel
- B. High speed steel
- C. Low carbon steel

D.Mild steel

**Ans: A**

120.A line drawn with a long section, short dash, and another long section is a?

A.Hidden feature

B.Center of a circle

C.Center axis of a hidden cylinder

D.Center of a radius

**Ans: C**