

DO NOT BREAK THE SEAL OF THE BOOKLET UNTIL YOU ARE TOLD TO DO SO

QUESTION BOOKLET

SERIES I

Subject : General English, General Knowledge, Civil Engineering

BOOKLET SERIAL NO.

240077

Marks : 300

Time : 3 (three) hours

Read the following instructions carefully before you begin to answer the questions.

INSTRUCTIONS TO CANDIDATES

1. This booklet contains **150 questions** to be answered in a separate OMR Answer Sheet using Black Ball Pen in following three parts.

Part-A-General English : 25 questions, Part-B-General Knowledge : 25 questions, Part-C-Civil Engineering : 100 questions.

2. All Questions are compulsory.
3. You will be supplied the Answer sheet separately by the invigilator. You must complete the details of particulars asked for.
4. Answers must be shown by completely blackening the corresponding circles in the Answer Sheet against the relevant question number by Black Ball Pen. OMR Answer Sheet without marking series/double series marking shall not be evaluated.

Example :

Supposing the following question is asked :-

The Capital of Meghalaya is-

- A. Guwahati
- B. Kohima
- C. Shillong
- D. Delhi

You will have four alternatives in the Answer Sheet for your response corresponding to each question of the Question Booklet as below :-

(A) (B) (C) (D)

In the above illustration, if your chosen response is alternative C i.e. Shillong, then the same should be marked on the Answer Sheet by blackening the relevant circle with a Black Ball Point Pen only as below :-

(A) (B) (●) (D)

WHICH IS THE ONLY CORRECT METHOD OF ANSWERING :

5. Answer the questions as quickly and as carefully as you can. Some questions may be difficult and others easy. Do not spend too much time on any one question.
6. There will NOT be any negative marking for wrong answers.
7. The Answer Sheet must be handed over to the invigilator before you leave the Examination Hall.
8. No rough work is to be done on the Answer Sheet. Space for rough work has been provided in the question booklet.

PART - A - GENERAL ENGLISH

Marks :50

Each question carries 2 marks :

Directions : In question 1-5, some parts of the sentences have errors and some have none. Find out which part of a sentence has an error and mark the corresponding letter (a,b,c). If there is no error mark (d) as the answer.

1. Sam was the first (a) / person who congratulate (b) / me on my success (c) / No error (d)
2. They dig up the clay (a) / to make a bricks (b) / earthen ware and pots (c) / No error (d)
3. It is so very hot (a) / that the vegetables in the shop (b) / will perish soon (c) / No error (d)
4. Pollution of the environment (a) / is the most hazardous (b) / for health (c) / No error (d)
5. Are you thinking of (a) / joining a (b) / better job (c) / No error (d)

Directions : In question 6-10, fill in the blanks with appropriate word (s) from the given alternatives.

6. _____ you have finished your breakfast you can go outside.
a) in spite of b) although
c) and also d) as soon as
7. Adam is making a lot of progress in school _____ he hasn't studied much
a) even though b) in spite of
c) despite that d) except for
8. Jessie doesn't look _____ he is enjoying the party very much
a) even though b) such as
c) as if d) so much

9. Everyone has to take the medicine _____ want to or not
a) even though they b) in spite of he
c) whether they d) whether he

10. The hotel was small _____ attractive
a) in spite of b) but quite
c) despite of d) otherwise its

Directions : In question 11-15, choose the word (s) which best expresses the meaning of the given word.

11. Fatherly
a) adaptable b) parenting
c) strict d) paternal
12. Damp
a) dank b) temporary
c) wicked d) uncomfortable
13. Toil
a) constant b) drudgery
c) laziness d) inaction
14. Deceitful
a) cleverness b) difficult
c) deceptive d) decrease
15. Shy
a) bashful b) bold
c) brave d) fearful

Directions : In question 16-20, there are four different words out of which one is correctly spelt. Find the correctly spelt word.

16. a) acustom b) accustom
c) accustom d) accusttom
17. a) Changeable b) Changeablle
c) Changable d) Changeabble

18. a) Endictment b) Indictment
c) Indectment d) Endictement

19. a) Conseede b) Conceede
c) Conceed d) Concede

20. a) Hindrance b) Hindedrance
c) Hindrancce d) Hindderence

Directions : In question 21-25, choose the word (s) which best expresses the opposite meaning of the given word.

21. Endanger
a) dangerous b) safeguard
c) expose d) explode

22. Hysteria
a) calm b) confuse
c) wild d) cry

23. Profound
a) control b) serious
c) superficial d) genuine

24. Proliferate
a) abundance b) increase
c) deceive d) decrease

25. Relegate
a) downgrade b) upgrade
c) graceful d) stunning

PART - B - GENERAL KNOWLEDGE

Marks :50

Each question carries 2 marks :

26. Mizoram shares the international boundary with

- a) Myanmar and Bangladesh
- b) Bhutan and Bangladesh
- c) Tibet and Bangladesh
- d) China and Bangladesh

27. The District headquarter of South West Garo Hills is

- a) Resubelpara b) Williamnagar
- c) Baghmara d) Ampati

28. The Ministry of Development of North Eastern Region (DONER) was formed in

- a) 2000 b) 2001
- c) 2002 d) 2003

29. The term 'Fourth Estate' refers to

- a) The Parliament
- b) The Supreme Court
- c) The Press
- d) The Opposition Party

30. A 'Hung Parliament' occurs when

- a) two political parties gets equal number of seats
- b) every party claims to form the government
- c) no political party has a majority
- d) there is no opposition political party

31. The policy of 'Mixed Economy' refers to an economy where

- a) both agriculture and industry are promoted by the state
- b) there is co-existence of the public sector and the private sector
- c) there is co-existence of large scale and small scale industries
- d) the economy is controlled by both the state governments and central government

32. The Muslim Women (Protection of Rights

on Marriage) Bill 2017 [Triple Talaq Bill] was passed by the Lok Sabha on

- a) August 2017 b) October 2017
- c) December 2017 d) January 2018

33. The present Chief Justice of the Supreme Court of India is

- a) Dipak Misra
- b) Jagdish Singh Khehar
- c) Tirath Singh Thakur
- d) Handyala Lakshminarayanawamy Dattu

34. Which part of the human eye can be transplanted ?

- a) Retina b) Lens
- c) Cornea d) Sclera

35. A Rainbow is caused by

- a) absorption of sunlight in minute water droplets
- b) diffusion of sunlight through water droplets
- c) ionisation of water deposits
- d) refraction and reflection of sunlight by water droplets

36. Which of the following instruments can be used to measure an earthquake ?

- a) Barometer b) Pluviometer
- c) Seismograph d) Anemometer

37. WhatsApp Messenger was founded in 2009 by

- a) Brian Acton and Jan Koum
- b) Kevin Systrom and Mike Krieger
- c) Mark Zuckerberg and Eduardo Saverin
- d) Biz Stone and Evan Williams

38. A Nuclear family refers to

- a) Husband and wife
- b) Husband, wife and daughters
- c) Husband, wife and sons
- d) Husband, wife and their children

39. Human Rights Day is celebrated annually

across the world on

- a) 8th March every year
- b) 5th June every year
- c) 5th September every year
- d) 10th December every year

40. The present Secretary General of the United Nations is

- a) Ban Ki Moon b) Antonio Guterres
- c) Kofi Annan d) Boutros Boutros-Ghali

41. Which of the following films got the best picture award at the 90th Academy Awards ceremony held on March 4, 2018 ?

- a) Call Me By Your Name
- b) Dunkirk
- c) The Shape of Water
- d) Lady Bird

42. Which of the following terms are associated with tennis ?

- a) Arm Ball, Bat-Pad, Bump Ball and Cross bat
- b) Bladed shot, Bunker, Backspin and Eagle
- c) Double play, Ground ball, Pinch hitter and Strike zone
- d) Air ball, Carry, Fast break and Lay-up

43. Which is the largest state (area-wise) in the North-East Region ?

- a) Assam b) Arunachal Pradesh
- c) Manipur d) Meghalaya

44. The Right of Children to Free and Compulsory Education Act or Right to Education Act (RTE) was enacted on

- a) 12th October 2005
- b) 26th October 2006
- c) 1st November 2007
- d) 4th August 2009

45. What is the full form of a USB computer device ?

- a) Universal Security Block
- b) Universal Serial Bus
- c) Universal Smart Bus
- d) Universal Standard Bus

46. Who wrote the book 'Das Kapital' ?

- a) Karl Marx b) Jeremy Bentham
- c) Thomas Hobbes d) Karl Mannheim

47. Which of the following is India's longest river bridge ?

- a) Bandra-Worli Sea Link (Maharashtra)
- b) Mahatma Gandhi Setu (Bihar)
- c) Dhol-Sadia Bridge (Assam)
- d) Vidyasagar Setu (West Bengal)

48. What is the full form of 'https' in computer networking ?

- a) Home Text Transport Protocol Secure
- b) Hyper Text Transport Protocol Secure
- c) Hyper Text Transport Program Secure
- d) Home Text Transport Protocol Search

49. Who among the following was popularly known as the 'Frontier Gandhi' ?

- a) Maulana Abul Kalam Azad
- b) Jawaharlal Nehru
- c) Muhammad Ali Jinnah
- d) Khan Abdul Ghaffar Khan

50. Who among the following was known as the 'Iron man of India' ?

- a) Sardar Vallabhbhai Patel
- b) Subhash Chandra Bose
- c) Jawaharlal Nehru
- d) Govind Ballabh Pant

PART - C - CIVIL ENGINEERING

Marks :200

Each question carries 2 marks :

51. The Correct Sequence to proceed in new highway project is

- a) Reconnaissance, Preliminary Survey, Map Study, Detailed Survey
- b) Map Study, Reconnaissance, Preliminary Survey, Location of final alignment
- c) Map Study, Reconnaissance, Preliminary Survey, Detailed Survey
- d) Detailed Survey, Map Study, Reconnaissance, Preliminary Survey

52. Road construction in olden days based on large foundation of stones, was first done by

- a) Metcalf
- b) Telford
- c) Maccadam
- d) Harrison

53. For highway in hilly areas where radius changes quickly and land width is restricted the type of curve so provided is

- a) Spiral
- b) Lemniscate
- c) Parabola
- d) Cubic Parabola

54. On a highway when there is a presence of lamp post, telephone kiosks, distance stone traffic sign etc. they are termed as

- a) Road furniture
- b) Road amenities
- c) Road utility
- d) Road helper

55. The Characteristic of road aggregate to resist fracture under load is termed as

- a) Hardness
- b) Crushing
- c) Toughness
- d) Attrition

56. In bitumen the mixture of two immiscible liquid is known as

- a) Cutback
- b) Rapid curing
- c) Bitumen emulsion
- d) Bituminous asphalt

57. The maximum temperature at which the binder can be safely heated without being ignited that temperature is termed as

- a) Fire point
- b) Flash point

- c) Softening point
- d) Ignition point

58. The capacity refer to the maximum numbers of vehicles passing a given point in one hour under prevailing roadway and traffic conditions is called

- a) Possible capacity
- b) Basic capacity
- c) Traffic capacity
- d) Practical capacity

59. Once the Structure is completed the property of concrete that controlled corrosion is

- a) Strength
- b) Ductility
- c) Stress
- d) Permeability

60. The deterioration of concrete generally due to sulphate attack occur at

- a) Roof slab
- b) Side wall
- c) Foundations
- d) Floor level

61. In RCC the section is termed a balanced section when

- a) The yield strain of tension steel is simultaneous with failure strain of concrete
- b) The failure strain of tension steel is simultaneous with failure strain of concrete
- c) No strain occur
- d) Minimum stress occur

62. The distance measured from concrete surface to the nearest surface of reinforcing bar is known as

- a) Minimum cover against slippage
- b) Minimum cover against corrosion
- c) Nominal cover of reinforcement
- d) Concrete cover

63. In formwork of concrete plastic sheet are used during shuttering work to prevent leaking of water which intum will

- a) Prevent honeycomb formation
- b) Enhanced workability
- c) Enhanced consistency
- d) Increased density

64. The temperature in which plastic shrinkage

cracking occur during concreting work is

- a) Below 20°C b) Above 20°C
- c) Above 30°C d) Above 40°C

65. In concrete mix harshness results due to

- a) Large size coarse aggregate
- b) Smaller size coarse aggregate
- c) Too coarse a fine aggregate
- d) Too fine a fine aggregate

66. The highest speed of turbine at maximum head with wicket gates fully opened is known as

- a) Runaway speed
- b) Turbine speed
- c) Maximum turbine speed
- d) Runner speed

67. The difference between measured pressure value and its atmospheric pressure with zero as the arbitrary datum is known as

- a) Vacuum pressure
- b) Relative pressure
- c) Absolute pressure
- d) Relative surface pressure

68. When a dye is injected into a liquid to trace the subsequent motion of fluid particles passing a fixed point, then the path followed by the dye is known as

- a) Streamline b) Pathline
- c) Flow line d) Streakline

69. If the fluid and the flow characteristics such as density, velocity, pressure acceleration at a point do not change with time the flow is called

- a) Steady b) Non steady
- c) Uniform d) Non Uniform

70. When water flow through pipeline the phenomenon of abrupt increase in pressure caused by rapid closure of valve is known as

- a) Surge b) Diffusion
- c) Rapid drawdown d) Water hammer

71. The relation between the quantity of water and the area of the crop which it matures is known as

- a) Delta of crop b) Duty of water
- c) Yield of soil d) Fertile of soil

72. Total area over which the water of the canal system can flow by gravity is known as

- a) Irrigated area
- b) Farming area
- c) Commanded area
- d) Gross Commanded area

73. In a canal flow system one of the methods for seepage assessment is done by

- a) Ponding method
- b) Piezometer method
- c) Percolation method
- d) Gauge method

74. The lowest water surface elevation which has to be kept under normal operating conditions in a reservoir is known as

- a) Minimum reservoir level
- b) Normal reservoir level
- c) Normal pool level
- d) Minimum pool level

75. The channel where the shape, size, slope is constant throughout is known as

- a) Uniform channel
- b) Homogeneous channel
- c) Smooth Uniform Channel
- d) Prismatic Channel

76. Calcined ash is the ingredient of

- a) Soil b) Pozzolanna cement
- c) Concrete d) Asbestos

77. Timber in the form of felled tree is known as

- a) Rough timber b) Green timber
- c) Natural timber d) Felled timber

78. Paints consisting of white lead or zinc white ground in a small quantity of oil mixed with petroleum spirits and the resinous matter is known as

- a) Enamel paint b) Plastic paint
- c) Oil paint d) Metallic paint

79. Calendering deals with the manufacture of

- a) Wooden product b) Steel product
- c) Plastic product d) Paper product

80. Diagonal scales are used for measurements of distances which are of

- a) Reducing type b) Enlarging type
- c) Diagonal type d) Minute type

81. A _____ is a solid generated by the revolution of a semi circle about its diameter as the axis.

- a) Sphere b) Cylinder
- c) Cuboid d) Evolute

82. In a metric chain each link is measured

- a) 10 cm b) 15 cm
- c) 20 cm d) 25 cm

83. During the process of plane table survey choose the term which is not related from the following

- a) Resection after orientation by back ray
- b) Resection after orientation by centering
- c) Resection after orientation by three points
- d) Resection after orientation by box compass

84. When the lower part of the wall has to be removed for the purpose of providing an opening in the wall the arrangement is done by providing

- a) Dead shores b) Underpinning
- c) Raking shores d) Flying shores

85. The efficiency of a lifting machine is given by

- a) Mechanical advantage/Velocity ratio
- b) Velocity ratio/Mechanical advantage
- c) Load/Effort
- d) Input/100xOutput

86. The moulding provided under a nosing to beautify the elevation of the step is termed as

- a) Spandrel b) Soffit
- c) Scotia d) Winder

87. A soil material which exhibits high dry strength it indicates

- a) Clay b) Silt
- c) Silty sand d) Fine sand

88. For plastic type of soil the commonly used field compaction method is

- a) Smooth wheeled roller
- b) Sheep's foot roller
- c) Rammer
- d) Vibrator

89. In a foundation Secondary settlement occurs for the following type of soil

- a) Sandy b) Clay
- c) Inorganic d) Peat

90. A loose saturated sand deposits when it loose a part or all shear strength when subject to sudden shock the phenomenon is known as

- a) Plastic failure b) Liquefaction
- c) Loss of cohesion d) Dilatancy

91. The type of soil when general shear failure occur is

- a) Plastic soil b) Clay
- c) Composite soil d) Dense sand

92. A downward drag on the pile surface when the soil moves down relative to the pile which then adds a structural load is known as

- a) Skin friction
- b) Negative skin friction
- c) Positive skin friction
- d) Pile settlement

93. Minimum gross pressure intensity at the base of the foundation at which the soil fails in shear is termed as

- a) Ultimate bearing capacity
- b) Net ultimate bearing capacity
- c) Safe bearing capacity
- d) Safe bearing pressure

94. For heavy plastic soil the material which is added to enhance its stabilization is

- a) Cement b) Lime
- c) Bentonite d) Stone aggregate

95. During the process of boiling the sand starts

to loose its

- a) Shear strength b) Cohesion
- c) Weight d) Binding

96. A soil retained in a wall as a backfill after a period of time due to some process get compacted, which in turn increase the co-efficient of passive earth pressure. This is due to the

- a) Increase in μ b) Decrease in μ
- c) Increase in ϕ d) Decrease in ϕ

97. For bearing capacity determination as per Terzaghi's method in soil the following values obtained during various computation test are $\phi > 36^\circ$, $N \geq 30$, $I_p > 70$, the ultimate results show that the failure is

- a) General shear failure
- b) Local shear failure
- c) Mixed shear failure
- d) Strain failure

98. The slow rate of loading in a soil during shear test indicates that there is a condition in the form of

- a) Drained
- b) Undrained
- c) Consolidated Undrained
- d) Unconsolidated Undrained

99. A curved traced by a point on the circumference of generating circle which rolls without slipping on another circle inside it is called

- a) Trochoid b) Cycloid
- c) Epicycloid d) Hypocycloid

100. In a panelled door the two panel in a leaf are separated vertically by

- a) Rail b) Stile
- c) Mullion d) Shash

101. In drawing the alignment of a building is represented by the

- a) Plan b) Elevation
- c) Section d) Perspective

102. The term squatting in sanitary engineer-

ing is related to

- a) Wash basin
- b) Indian water closet
- c) European water closet
- d) Cistern

103. The area of verandahs, passages, corridors is known as

- a) Floor area b) Carpet area
- c) Open area d) Circulation area

104. The item in house building work which is measured in running metre is

- a) Fabrication b) Cornice
- c) Plaster d) Brickwork

105. The true bearing of a line is $160^\circ 20'$ similarly the azimuth of that line is

- a) $70^\circ 20'$ b) $19^\circ 40'$
- c) $160^\circ 20'$ d) $199^\circ 40'$

106. Surface water is contaminated by _____ while travelling on the ground.

- a) Colloids b) Silt
- c) Rain water d) Impurities

107. _____ limit in potable water is measured in a silica scale.

- a) Turbidity b) Colour
- c) Odour d) Taste

108. With proper dose when used as a disinfectant for a minimum contact period of 5 minutes that particular disinfectant is

- a) Ultra violet ray
- b) Iodine and Bromine
- c) Ozone
- d) Potassium permanganate

109. Removal of taste and odour from public water supply is treated by

- a) Activated carbon
- b) Copper sulphate
- c) Oxidation of organic matter
- d) Fluoridation

110. When gradient of a sewer is flat in which self cleaning velocity is not develop to avoid

clogging it is usually done by

- a) Back washing
- b) Flushing of sewer
- c) Manually pushing the sewage
- d) Emptying the sewer

111. In a sewage treatment process bulky floating and suspended matters are usually removed by

- a) Racks and Screen b) Grit chamber
- c) Skimming tanks d) Floatation tanks

112. The unit of measurement for steel works in trusses and its part is in

- a) quintal b) cm
- c) numbers d) kilogram

113. In a detailed estimate the provision for contingencies is usually

- a) 1% b) 3% to 5%
- c) 10% d) 12% to 15%

114. Number of bricks of size 20 cm x 10 cm x 10 cm required for 100 cu.m of masonry wall is

- a) 500 b) 5000
- c) 50000 d) 500000

115. In measuring formwork no deduction is made for opening upto

- a) 1 m² b) 0.5 m²
- c) 0.4 m² d) 0.01 m²

116. The quantity of stone required for 10 cu.m of rubble stone masonry is

- a) 10 cu.m b) 8 cu.m
- c) 13.5 cu.m d) 12.5 cu.m

117. The estimated quantity of cement required in cement mortar 1 : 6 per cubic metre is

- a) 5.6 bags b) 4.8 bags
- c) 8 bags d) 3 bags

118. Thickness of plastering is usually

- a) 6 mm b) 12 mm
- c) 25 mm d) 40 mm

119. One cubic metre of mild steel weights about

- a) 1000 kg b) 3625 kg
- c) 7850 kg d) 12560 kg

120. Volume of sand carried in a truck is approximately

- a) 4 cu.m b) 6 cu.m
- c) 8 cu.m d) 10 cu.m

121. The total estimated cost of a building electrification usually accounts for

- a) 1% b) 2%
- c) 8% d) 15%

122. A work costing less than Rs.20000 is termed as

- a) petty work b) minor work
- c) major work d) casual work

123. While submitting a tender the contractor is required to deposit some amount with the department as guarantee of the tender known as

- a) bank guarantee b) earnest money
- c) security deposit d) caution money

124. Per capita water demand is calculated in litres

- a) per person per day
- b) per person per month
- c) per person per year
- d) none of the above

125. The total domestic water consumption in a city as compared to total demand of the city is

- a) 20% b) 30%
- c) 60% d) 75%

126. Under normal conditions, the average domestic water consumption in India per capita per day in litres is

- a) 105 b) 135
- c) 180 d) 215

127. The accurate method for predicting population for a sound and rapidly increasing city is

- a) arithmetical increase method
- b) geometrical increase method

- c) incremental increase method
- d) graphical increase method

128. Water supply scheme is usually designed for a life of

- a) 100 years b) 50 years
- c) 25 years d) 10 years

129. Per capita water consumption is highest in

- a) schools b) hospitals
- c) offices d) factories

130. The turbidimeter used for the measurement of turbidity from 0-1000 ppm directly is called

- a) Jackson's turbidimeter
- b) Baylis turbidimeter
- c) Hellige turbidimeter
- d) none of the above

131. The colour of water is measured on

- a) turbidity scale
- b) silical scale
- c) platinum cobalt scale
- d) threshold scale

132. Chlorides impart water with

- a) salty taste b) sweet taste
- c) irritating taste d) none of the above

133. Which metal if present in water causes poisoning?

- a) Mercury b) Lead
- c) Arsenic d) all of the above

134. The devices installed for drawing water from the sources are called

- a) filters b) intakes
- c) aquifers d) none of the above

135. Alum increases

- a) acidity of water b) hardness of water
- c) carbonates in water d) sulphates in water

136. The process of purifying water by passing it through a bed of fine granular material is called

- a) coagulation b) sedimentation
- c) filtration d) screening

137. Chlorination of water is done for removal of

- a) sediments b) suspended solids
- c) hardness d) bacteria

138. The waste water from bathrooms and kitchens is called

- a) refuse b) sullage
- c) sewage d) garbage

139. The colour of septic sewage is

- a) black b) green
- c) grey d) blue

140. Sewage that has received no purification treatment is called

- a) raw sewage b) untreated sewage
- c) crude sewage d) fresh sewage

141. The opening constructed on sewers or drains to enable men enter or leave the sewers is called

- a) lamp hole b) manhole
- c) inspection chamber d) street inlet

142. The effluent from septic tank is discharged into

- a) soak pit b) drainage
- c) oxidation pond d) sewer

143. The entrained air in concrete

- a) increases workability
- b) decreases workability
- c) increases strength
- d) decreases strength

144. The property of fresh concrete in which the water in the mix tends to rise to the surface while placing and compacting is known as

- a) creep b) bleeding
- c) segregation d) shrinkage

145. The maximum area of tension reinforcement in beams shall not exceed

- a) 0.04 bD b) 0.06 bD

c) 0.08 bD

d) 0.10 bD

146. The ratio of Young's modulus of steel to Young's modulus of concrete is known as

a) specific ratio

b) Poisson's ratio

c) elasticity ratio

d) modular ratio

147. Concrete is generally reinforced with bars made of

a) aluminium

b) cast iron

c) mild steel

d) high carbon steel

148. A strut is a

a) flexible member

b) compression member

c) torsion member

d) tension member

149. A tie is a

a) flexible member

b) compression member

c) torsion member

d) tension member

150. The size of the rivet is expressed by the

a) diameter of shank

b) length of shank

c) type of head

d) none of the above
