

21597

Booklet Serial No.

DO NOT BREAK THE SEAL OF THE BOOKLET UNTIL YOU ARE TOLD TO DO SO**SERIES : I****QUESTION BOOKLET****Subjects : General English, General Knowledge and Civil Engineering****Full Marks : 300****Time Allowed : 2½ 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 Ballpoint Pen in the 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. Answer must be shown by completely blackening the corresponding circle in the Answer Sheet against the relevant question number by Black Ballpoint Pen. OMR Answer Sheet without marking Series shall not be evaluated.

Example :

Suppose 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 Ballpoint Pen only as below :

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

The example shown above 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.

SEAL

PART—A : GENERAL ENGLISH

(Marks : 50)

Each question carries 2 marks

Directions (Q. Nos. 1-5) :

In the questions given below, out of four options, choose the one that can be substituted for the given words/phrase.

1. A speech delivered without any prior preparation
 - (A) Extempore
 - (B) Dialogue
 - (C) Monologue
 - (D) Rehearsed
2. One who eats too much
 - (A) Glutton
 - (B) Gourmet
 - (C) Epicure
 - (D) Cannibal
3. A person who looks on the bright side of everything
 - (A) Optimist
 - (B) Realist
 - (C) Idealist
 - (D) Dreamer
4. A person who believes in the absence of government or laws
 - (A) Anarchist
 - (B) Pacifist
 - (C) Socialist
 - (D) Nihilist
5. One who is indifferent to pleasure or pain
 - (A) Stoic
 - (B) Cynic
 - (C) Egoist
 - (D) Mystic

Directions (Q. Nos. 6-10) :

In the questions given below, pick out from the alternatives the one that expresses the correct meaning of the given phrase or idiom.

6. Beat around the bush
 - (A) Speak angrily
 - (B) Avoid the main topic
 - (C) Argue unnecessarily
 - (D) Search something in a hurry

7. Cry over spilt milk

- (A) Complain over a past loss
- (B) Spill something accidentally
- (C) Mourn someone's death
- (D) Clean up a mess

8. Hit the nail on the head

- (A) Hurt someone
- (B) Miss the point
- (C) Say the right thing
- (D) To do carpentry

9. Under the weather

- (A) Travelling
- (B) Feeling unwell
- (C) Tired of the climate
- (D) Busy with work

10. Cost an arm and a leg

- (A) Be very expensive
- (B) Be a physical loss
- (C) Be a lucky deal
- (D) Be a minor expense

Directions (Q. Nos. 11-15) :

In the following questions, a sentence is given in Direct/Indirect form. Out of four alternatives, choose the one which best expresses the same sentence in Indirect/Direct speech.

11. He said that he was going to the market.

- (A) He says, "I am going to the market."
- (B) He said, "I was going to the market."
- (C) He said, "I am going to the market."
- (D) He said, "I am going to market."

12. He said to me, "Do you like cricket?"

- (A) He asked me did I like cricket.
- (B) He asked me if I liked cricket.
- (C) He asked me whether I like cricket.
- (D) He asked me if I like cricket.

13. He said to me, "Please help me."

- (A) He said me to help him.
- (B) He asked me that I help him.
- (C) He requested me to help him.
- (D) He told me help him.

14. John said that he had been working all day.

- (A) John said, "I worked all day."
- (B) John said, "I had worked all day."
- (C) John said, "I had been working all day."
- (D) John said, "I have been working all day."

15. She said, "I am cooking dinner."

- (A) She said she had been cooking dinner.
- (B) She said she is cooking dinner.
- (C) She said she was cooking dinner.
- (D) She said she will cook dinner.

Directions (Q. Nos. 16-20) :

In the following questions, choose the word from the following which is opposite in meaning to the given word.

16. Bold

- (A) Brave
- (B) Timid
- (C) Courageous
- (D) Strong

17. Harsh

- (A) Rough
- (B) Severe
- (C) Gentle
- (D) Cruel

18. Scarce

- (A) Rare
- (B) Precious
- (C) Abundant
- (D) Limited

19. Adversity

- (A) Misfortune
- (B) Hardship
- (C) Prosperity
- (D) Challenge

20. Mitigate

- (A) Soften
- (B) Ease
- (C) Intensify
- (D) Alleviate

Directions (Q. Nos. 21-25) :

In the following passage, some numbered blanks are given. For each numbered blank space, four answer choices are given. Pick out the one which is most appropriate for the blank space, keeping the passage in mind.

This morning, I woke up early and looked out the window. The sky was 21 with shades of orange and pink. I quickly got dressed and 22 to the park for a walk. The air was fresh and the birds were 23 cheerfully in the trees. As I walked along the path, I saw an old man 24 on a bench, feeding some pigeons. It was a peaceful and 25 start to the day.

21. (A) frozen

(B) cloudy

(C) glowing

(D) dark

22. (A) gone

(B) go

(C) went

(D) going

23. (A) chirping

(B) shouting

(C) screaming

(D) whispering

24. (A) sitting

(B) sit

(C) sat

(D) sits

25. (A) dull

(B) lovely

(C) noisy

(D) lazy

PART—B : GENERAL KNOWLEDGE

(Marks : 50)

Each question carries 2 marks

26. The Women's Reservation Act, 2023 provides 33% reservation to women in the
- (A) Lok Sabha only
- (B) Lok Sabha and State Legislative Assemblies
- (C) Rajya Sabha and Lok Sabha
- (D) Lok Sabha, Rajya Sabha, State Legislative Councils and State Legislative Assemblies
27. The word 'epicentre' is used to describe which of the following?
- (A) Tsunami
- (B) Cyclone
- (C) Earthquake
- (D) Tornado
28. The acronym PDF stands for
- (A) Program Digital Format
- (B) Printable Design Format
- (C) Portable Document Format
- (D) Portable Digital Format
29. Which of the following monuments is found on the reverse side of an Indian 200 rupee note?
- (A) Ellora Caves
- (B) Charminar
- (C) Red Fort
- (D) Sanchi Stupa
30. Who is the Supreme Commander of the Indian Armed Forces?
- (A) The President
- (B) The Prime Minister
- (C) The Chief of Defence Staff
- (D) The Defence Minister
31. The Meghalaya High Court was established in the year
- (A) 2009
- (B) 2011
- (C) 2013
- (D) 2015

32. Which of the following battles marked the beginning of the British Raj in India?

- (A) Second Battle of Tarain
- (B) Battle of Plassey
- (C) Third Battle of Panipat
- (D) Battle of Buxar

33. The Pulitzer Prize is associated with which of the following fields?

- (A) Literature
- (B) Medicine
- (C) Social work
- (D) Sports

34. Who won the French Open, 2025 Men's Single title?

- (A) Jannik Sinner
- (B) Carlos Alcaraz
- (C) Novak Djokovic
- (D) Lorenzo Musetti

35. IRIS, the first robot teacher in India, was introduced in which State?

- (A) Maharashtra
- (B) Tamil Nadu
- (C) Kerala
- (D) Telangana

36. How many States of India share a border with Bangladesh?

- (A) 5
- (B) 4
- (C) 6
- (D) 3

37. The headquarters of UNESCO is located in

- (A) London
- (B) Paris
- (C) Geneva
- (D) New York

38. Identify the **incorrect** match from the following.

- (A) Kaziranga National Park—Assam
- (B) Balpakram National Park—Meghalaya
- (C) Gir National Park—Rajasthan
- (D) Jim Corbett National Park—Uttarakhand

39. Which one of the following is also known as 'the Land of the Rising Sun'?

- (A) Arunachal Pradesh
- (B) Manipur
- (C) Nagaland
- (D) Mizoram

40. Which of the following is associated with the Panchayati Raj?

- (A) Shah Commission
- (B) Balwant Rai Commission
- (C) Nanavati Commission
- (D) Liberhan Commission

41. Select the correct match from the following.

- (A) *Indica*—Kautilya
- (B) *Arthashastra*—Megasthenes
- (C) *Shahnama*—Firdausi
- (D) *Akbarnama*—Birbal

42. Cooking gas is a mixture of

- (A) oxygen and carbon dioxide
- (B) oxygen and carbon monoxide
- (C) propane and butane
- (D) hexane and methane

43. India's first underwater metro service was inaugurated in March 2024 in

- (A) Cochin
- (B) Vishakhapatnam
- (C) Mumbai
- (D) Kolkata

44. The State which has the largest forest cover in India is

- (A) Madhya Pradesh
- (B) Arunachal Pradesh
- (C) Chhattisgarh
- (D) Assam

45. The British introduced Provincial Autonomy in India through

- (A) The Morley-Minto Reforms Act of 1909
- (B) The Government of India Act, 1935
- (C) The Montagu-Chelmsford Reforms of 1919
- (D) The Indian Councils Act of 1892

46. Inflation, in economic terms, refers to

- (A) increase in the price of goods and services
- (B) decrease in the price of goods and services
- (C) increase in the quantity of goods and services
- (D) decrease in the quantity of goods and services

47. Breeding and management of bees is called

- (A) pisciculture
- (B) sericulture
- (C) vermiculture
- (D) apiculture

48. Which of the following statements is **not** true with regards to the Vice President of India?

- (A) Must be a citizen of India and at least 35 years old
- (B) Is appointed by the President
- (C) Term of office is 5 years
- (D) Acts as the ex officio chairman of the Rajya Sabha

49. The vitamin responsible for the clotting of blood is

- (A) vitamin A
- (B) vitamin D
- (C) vitamin E
- (D) vitamin K

50. Sriharikota, a place in Andhra Pradesh, is famous for

- (A) atomic power station
- (B) satellite launching
- (C) batik textile
- (D) block printing

PART—C : CIVIL ENGINEERING

(Marks : 200)

Each question carries 2 marks

51. The angle between the direction of star and the direction of earth's axis of rotation is called
- (A) co-declination
 - (B) co-latitude
 - (C) declination
 - (D) latitude
52. Triangular surveys are carried out for providing
- (A) planimetric control
 - (B) height control
 - (C) both planimetric control and height control
 - (D) None of the above
53. 5-day Biochemical Oxygen Demand (BOD₅) is taken at the temperature of
- (A) 0 °C
 - (B) 15 °C
 - (C) 20 °C
 - (D) 25 °C
54. For supersonic transport aircraft, the minimum turning radius of taxiway is
- (A) 60 m
 - (B) 120 m
 - (C) 180 m
 - (D) 240 m
55. The base material for distemper is
- (A) chalk
 - (B) lime
 - (C) lime putty
 - (D) cement wash
56. Stones used for retaining walls must be
- (A) soft
 - (B) hard
 - (C) light
 - (D) heavy
57. For a 50 kg cement bag, water required is
- (A) 16.5 litres
 - (B) 18.5 litres
 - (C) 20.5 litres
 - (D) 22.5 litres
58. Slump test for concrete is carried out to determine
- (A) strength
 - (B) durability
 - (C) workability
 - (D) water content

59. For road pavements, the cement generally used is
- (A) ordinary Portland cement
 - (B) rapid hardening cement
 - (C) low heat cement
 - (D) blast furnace slag cement
60. The slab is designed as one way if the ratio of long span to short span is
- (A) less than 1
 - (B) between 1 and 1.5
 - (C) between 1.5 and 2
 - (D) greater than 2
61. In a counterfort retaining wall, the main reinforcement in the stem at mid-span is provided on
- (A) front face only
 - (B) inner face only
 - (C) both front face and inner face
 - (D) None of the above
62. Internal friction between the ingredients of concrete is decreased by
- (A) less water
 - (B) fine aggregates
 - (C) rich mix
 - (D) more water and coarse aggregates
63. Poisson's ratio for concrete
- (A) remains constant
 - (B) increases with richer mixes
 - (C) decreases with richer mixes
 - (D) None of the above
64. Which of the following **does not** represent an activity?
- (A) Site located
 - (B) Foundation is being dug
 - (C) The office area is being cleaned
 - (D) The invitations are being sent
65. Bar charts are suitable for
- (A) minor works
 - (B) major works
 - (C) large projects
 - (D) All of the above
66. Slack time refers to
- (A) an activity
 - (B) an event
 - (C) both event and activity
 - (D) None of the above
67. The forces acting on a web splice of a plate girder are
- (A) axial forces
 - (B) shear and axial forces
 - (C) shear and bending forces
 - (D) axial and bending forces

68. In the virtual work method, the virtual quantity is
 (A) displacement
 (B) load
 (C) slope
 (D) moment
69. The maximum permissible span of asbestos cement sheets is
 (A) 650 mm
 (B) 810 mm
 (C) 1250 mm
 (D) 1680 mm
70. As compared to field rivets, the shop rivets are
 (A) stronger
 (B) weaker
 (C) equally strong
 (D) Any of the above
71. The heaviest I section for same depth is
 (A) ISMB
 (B) ISLB
 (C) ISHB
 (D) ISWB
72. The central deflection of a simply supported steel beam of length L with a concentrated load W at the centre is
 (A) $WL^3/3EI$
 (B) $WL^4/3EI$
 (C) $WL^3/48EI$
 (D) $WL^3/384EI$
73. The least dimension in case of a circular column of diameter D is taken as
 (A) $0.5D$
 (B) $0.68D$
 (C) $0.88D$
 (D) D
74. The minimum pitch of rivet holes of diameter d **should not** be less than
 (A) d
 (B) $1.25d$
 (C) $1.5d$
 (D) $2.5d$
75. When the length of a tension member is too long
 (A) a wire rope is used
 (B) a rod is used
 (C) a bar is used
 (D) a single angle is used
76. The beams supporting the steps of a stair are generally known as
 (A) headers
 (B) trimmers
 (C) stringers
 (D) spandrel beams
77. The bending moment on a section is maximum where shear force is
 (A) maximum
 (B) minimum
 (C) changing sign
 (D) zero

78. The maximum slenderness ratio of a compression member carrying both dead and superimposed load is
- 180
 - 200
 - 250
 - 350
79. The difference in height between the highest high water and the lowest low water is called
- mean range
 - maximum range
 - maximum rise
 - mean rise
80. For completion of a project, the critical path of the network represents
- minimum time
 - maximum time
 - maximum cost
 - minimum cost
81. Which one of the following represents an event?
- Concrete cured
 - Fixing of door
 - Plastering of walls
 - Selecting sites
82. The basic action involved in sheep foot rolling is
- kneading
 - pressing
 - tamping
 - vibration
83. Military organization is known as
- line organization
 - line and staff organization
 - functional organization
 - None of the above
84. The first stage of a construction is
- preparation of estimate
 - survey of the site
 - initiation of proposal
 - preparation of tender
85. The basic stress in masonry units having height to width ratio of 1.5 may be increased by a factor of
- 1.2
 - 1.4
 - 1.6
 - 2.0
86. The thickness of each leaf of a cavity wall **should not** be less than
- 5 cm
 - 7.5 cm
 - 10 cm
 - 15 cm
87. In the virtual work method, the virtual quantity is
- displacement
 - load
 - slope
 - moment

88. ABCD is a square. Bearing of AB is 40° . Hence bearing of DC is
 (A) 220°
 (B) 310°
 (C) 40°
 (D) None of the above
89. If 1500 g of water is required to have a cement paste 1875 g of normal consistency, the percentage of water is
 (A) 20
 (B) 25
 (C) 30
 (D) 35
90. According to IS:456, the number of grades of concrete mixes is
 (A) 4
 (B) 5
 (C) 7
 (D) None of the above
91. The hydration of cement is due to chemical action of water with
 (A) tricalcium silicate and dicalcium silicate
 (B) dicalcium silicate and tricalcium aluminate
 (C) tricalcium aluminate and tricalcium aluminoferrite
 (D) All of the above
92. A fillet weld may be termed as
 (A) mitre weld
 (B) concave weld
 (C) convex weld
 (D) All of the above
93. The commonly used material in the manufacture of cement is
 (A) sandstone
 (B) slate
 (C) limestone
 (D) graphite
94. In rolled steel beams, shear force is mostly resisted by
 (A) web only
 (B) flanges only
 (C) web and flanges together
 (D) None of the above
95. Which of the following lines is used for tying a ship with a dock?
 (A) Bowline
 (B) Stern line
 (C) Spring line
 (D) All of the above
96. The depth of borings for soil investigation is generally kept below the low water level by
 (A) 30 m
 (B) 35 m
 (C) 45 m
 (D) 40 m
97. Which one of the following factors **does not** affect the scale of the air photographs?
 (A) Focal length
 (B) Flying height
 (C) Ground elevation
 (D) None of the above

98. The normal altitude of GPS satellite is about

- (A) 16200 km
- (B) 20200 km
- (C) 24200 km
- (D) 36100 km

99. The chemical most commonly used to increase the speed of sedimentation of sewage is

- (A) sulphuric acid
- (B) copper sulphate
- (C) lime
- (D) sodium permanganate

100. Generally the detention period for grit chambers is kept as

- (A) 1 minute
- (B) 5 minutes
- (C) 24 hours
- (D) 12 hours

101. The surface run-off is the quantity of water

- (A) absorbed by soil
- (B) intercepted by buildings and vegetative cover
- (C) required to fill surface depressions
- (D) that reaches the stream channels

102. Flexible pavements are those pavements in which the wearing surfaces are constructed of

- (A) RCC
- (B) PCC
- (C) bitumen
- (D) None of the above

103. The standard height of a standard rain gauge is

- (A) 10 cm
- (B) 20 cm
- (C) 30 cm
- (D) 50 cm

104. Consumptive use of a crop during growth is the amount of

- (A) interception
- (B) transpiration
- (C) evaporation
- (D) All of the above

105. As per IS : 1172-1963, water required per head per day for average domestic purposes is

- (A) 65 litres
- (B) 85 litres
- (C) 105 litres
- (D) 135 litres

106. The biochemical treatment of sewage effluents is essentially a process of

- (A) oxidation
- (B) dehydration
- (C) reduction
- (D) alkalization

107. Sewage treatment units are normally designed for

- (A) 5-10 years
- (B) 15-20 years
- (C) 30-40 years
- (D) 40-50 years

- 108.** The increased cohesiveness of concrete makes it
- (A) less liable to segregation
 - (B) more liable to segregation
 - (C) more liable to bleeding
 - (D) more liable for surface scaling in frosty weather
- 109.** In slow sand filters, the turbidity of raw water can be removed up to
- (A) 60 mg/litre
 - (B) 75 mg/litre
 - (C) 100 mg/litre
 - (D) 150 mg/litre
- 110.** Corrosion in concrete sewers is caused by
- (A) septic conditions
 - (B) dissolved oxygen
 - (C) chlorine
 - (D) nitrogen
- 111.** Due to attack of dry rot, the timber
- (A) cracks
 - (B) shrinks
 - (C) reduces to powder
 - (D) None of the above
- 112.** Poise is the unit of
- (A) mass density
 - (B) kinematic viscosity
 - (C) viscosity
 - (D) velocity gradient
- 113.** Water flows at the rate of 100 m/min in a pipe of 30 cm dia. If the diameter is reduced to 15 cm, then the velocity of flow is
- (A) 200 m/min
 - (B) 400 m/min
 - (C) 300 m/min
 - (D) 500 m/min
- 114.** Stoke is the unit of
- (A) surface tension
 - (B) viscosity
 - (C) kinematic viscosity
 - (D) None of the above
- 115.** Surface tension has the unit of
- (A) force per unit area
 - (B) force per unit length
 - (C) force per unit volume
 - (D) None of the above
- 116.** For a floating body, if the meta-centre is above the centre of gravity, the equilibrium is called
- (A) stable
 - (B) unstable
 - (C) neutral
 - (D) None of the above
- 117.** For a floating body, if the meta-centre is below the centre of gravity, the equilibrium is called
- (A) stable
 - (B) unstable
 - (C) neutral
 - (D) None of the above

- 118.** For a floating body, if the meta-centre coincides with the centre of gravity, the equilibrium is called
- stable
 - unstable
 - neutral
 - None of the above
- 119.** Venturi meter is used to measure
- discharge
 - average velocity
 - velocity at a point
 - pressure at a point
- 120.** Orifice meter is used to measure
- discharge
 - average velocity
 - velocity at a point
 - pressure at a point
- 121.** A cantilever beam is the one which is supported with
- one end hinged and other on rollers
 - one end fixed and other on rollers
 - both end on rollers
 - one end fixed and the other free
- 122.** A horizontal beam with both the ends hinged will be statically determined for which type of loading?
- Purely vertical loading
 - Purely inclined loads
 - Any general loading
 - Inclined loads with moments
- 123.** A beam is said to be, in general, stable and statically determinate for general loading when the number of reaction components is
- greater than 3
 - 0
 - less than 3
 - 3
- 124.** A beam is supported over three rollers lying in the same plane. The beam is stable for
- any general loading
 - loading with no component in the direction of the beam
 - loading with no component perpendicular to the direction of beam
 - only when no load except self-weights acts
- 125.** The effect of the size of the specimen on ultimate strength will be more serious for
- ductile materials
 - brittle materials
 - hard materials
 - None of the above
- 126.** The proportional limit of mild steel specimen is taken at the stress corresponding to a permanent set of
- 0.2%
 - 0.1%
 - 0.25%
 - 0.01%

- 127.** For structural carbon steel, the ratio of yield stress to ultimate strength will be about
- (A) 0.55 to 0.6
 - (B) 0.2 to 0.3
 - (C) 1.0
 - (D) 1.2 to 1.5
- 128.** Within the elastic range of a tensile test the deviation from Hooke's law and some after-effects may be noticed. This is due to which of the following?
- (A) The thermoelastic effect
 - (B) The material does not obey Hooke's law
 - (C) The yield stress is crossed
 - (D) The elastic limit is greater than ultimate strength
- 129.** Who introduced the terms upper and lower yield points?
- (A) Robert Hooke
 - (B) Thomas Young
 - (C) Mohr
 - (D) Bach
- 130.** The lower yield point is more significant than upper yield point because
- (A) it is less than upper yield point
 - (B) it is less influenced by the shape of specimen
 - (C) it occurs before upper yield point
 - (D) strain is more at this point
- 131.** A soil which does not permit the passage or seepage of any permeant through its voids is known as
- (A) solid soil
 - (B) hard soil
 - (C) impermeable soil
 - (D) honey comb soil
- 132.** In most of the practical flow problems in soil mechanics, the flow is
- (A) laminar
 - (B) turbulent
 - (C) supersonic
 - (D) subsonic
- 133.** The value of Reynolds' number for laminar flow through soil is
- (A) less than 20000
 - (B) less than 2000
 - (C) less than 200
 - (D) less than 20
- 134.** The velocity of percolation is defined as
- (A) the discharge per unit area of gross c/s area
 - (B) the discharge per unit of net c/s area
 - (C) the discharge per unit of total c/s area
 - (D) None of the above

135. The magnitude of capillary rise is more in

- (A) silts
- (B) sands
- (C) clays
- (D) gravels

136. The height to which water can be lifted by capillary

- (A) is independent of the atmospheric pressure
- (B) depends upon the atmospheric pressure
- (C) increases with decrease in diameter of the passage and is independent of the atmospheric pressure
- (D) None of the above

137. Piping in soils is due to

- (A) low exit gradient
- (B) erosion of subsoil by high velocity of seepage flow
- (C) leakage of water through pipes laid in dams
- (D) passage of water through well-connected pores in soil

138. Permeability of soil varies

- (A) inversely as square of grain size
- (B) as square of grain size
- (C) as grain size
- (D) inversely as grain size

139. Physical properties of a permeant which influence the permeability are

- (A) viscosity only
- (B) unit weight only
- (C) both viscosity and unit weight
- (D) None of the above

140. Permeability is

- (A) directly proportional to unit weight, inversely proportional to viscosity
- (B) directly proportional to viscosity, inversely proportional to unit weight
- (C) directly proportional to both unit weight and viscosity
- (D) inversely proportional to both unit weight and viscosity

141. In a country road, the length in km is taken to a population of

- (A) a hundred
- (B) a thousand
- (C) a lakh
- (D) a million

142. Economic survey of a proposed road project includes a detailed survey of

- (A) agricultural and industrial products available in the area
- (B) resources of income to local bodies as toll tax
- (C) origin and destination of traffic
- (D) soil characteristics at various places

143. An undesirable element to be avoided while fixing the alignment of the highway is
- (A) straight and short route
 - (B) right-angled crossing for bridges, culverts and level crossing
 - (C) rising ground and high embankments
 - (D) proximity to a place of worship
144. A precise survey is
- (A) reconnaissance
 - (B) preliminary survey
 - (C) final location survey
 - (D) economic survey
145. Mixed traffic means
- (A) both up traffic and down traffic
 - (B) light traffic as of cycles to that heavy traffic as of trucks
 - (C) pedestrians + animals drawn coaches +lorries
 - (D) slow moving traffic and fast moving traffic
146. Minimum superelevation provided is
- (A) 7%
 - (B) 10%
 - (C) not less than the grade of the road
 - (D) not less than camber at the section
147. The amount of superelevation should not be greater than
- (A) 2%
 - (B) 3%
 - (C) 5%
 - (D) 7%
148. The minimum superelevation on a curve is equal to
- (A) 0
 - (B) 7%
 - (C) camber
 - (D) gradient
149. The higher value of superelevation is highly undesirable for
- (A) fast moving vehicles
 - (B) slow moving vehicles
 - (C) mixed traffic
 - (D) non-slow falling areas
150. The higher values of superelevation is dangerous in case of
- (A) a fast moving motorcycle
 - (B) heavily loaded (but with a light material as cotton) bullock cart
 - (C) a road that is always dry
 - (D) a long truck with a trailer