

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO.

TEST BOOKLET SERIES

TEST BOOKLET

Time allowed : 90 Minutes

Full marks : 85

Answer **all** the questions.

All questions carry 1 mark each.



004921

Serial No.

Roll No. উত্তর লেখার পূর্বে নিম্নলিখিত নির্দেশাবলী ভাল করে পড়ুননির্দেশাবলী

- প্রশ্ন-পুস্তিকাতে 85টি Multiple Choice Answer Type প্রশ্ন দেওয়া আছে। নির্দেশ পাওয়ার পর প্রশ্ন-পুস্তিকার সব পৃষ্ঠা খুলে, সব পৃষ্ঠা/প্রশ্ন পর পর আছে কিনা বা ছাপা/ছেঁড়া/পুনরাবৃত্তি আছে কিনা দেখে নিন। যদি প্রশ্ন-পুস্তিকা এবং আপনাকে দেওয়া OMR উত্তরপত্রে কোথাও কোনো ত্রুটি থাকে সঙ্গে সঙ্গে পরীক্ষা তত্ত্বাবধায়ককে জানান এবং বদলে নিন।
- নির্দেশ পাওয়ার পর, OMR উত্তরপত্রে আপনার নিজের সম্বন্ধে যে সাধারণ তথ্যগুলি জানতে চাওয়া হয়েছে তা পূরণ করুন। উত্তরপত্রের 6 ক্রমিক সংখ্যায় প্রদত্ত ঘরে (BOX-এ) রোল নম্বর লিখুন এবং তার অনুরূপ বৃত্তগুলিকে ভরাট করুন। আপনি যদি নির্দেশমতো উত্তরপত্রে বিশদ তথ্যাদি এবং 6 ক্রমিক সংখ্যায় অনুরূপ বৃত্তগুলিকে ভরাট করতে ব্যর্থ হন এবং এর পরিণামে আপনার উত্তরপত্রের মূল্যায়নের ক্ষেত্রে যদি কোনো অসুবিধে হয় তার জন্য ব্যক্তিগতভাবে আপনি দায়ী থাকবেন।
- OMR উত্তরপত্রে যে 'Bar Code' ছাপা আছে তাতে কোনো দাগ দেওয়া বা কোনো বিকৃতি ঘটানো যাবে না, অন্যথায় প্রার্থীর প্রার্থীপদ বাতিল হয়ে যাবে। OMR উত্তরপত্রটি ভাঁজ করবেন না বা তাতে অযথা অন্য কোনো দাগ দেবেন না।
- প্রশ্ন-পুস্তিকার প্রত্যেক প্রশ্নের সঙ্গে 4টি করে উত্তর দেওয়া আছে। উত্তরগুলি A, B, C ও D এই 4টি ইংরেজি বর্ণ দিয়ে চিহ্নিত করা আছে। প্রতিটি প্রশ্ন মন দিয়ে পড়ুন এবং আপনার মতে 4টি উত্তরের মধ্যে সঠিক উত্তরটি বাছুন। OMR উত্তরপত্রে প্রতিটি প্রশ্নের ক্রমিক সংখ্যা অনুসারে নির্দিষ্ট বৃত্তটি সম্পূর্ণ গাঢ় করে ভরাট করুন। উত্তর চিহ্নিত করার জন্য কেবলমাত্র কালো/নীল কালির বল পয়েন্ট পেন (Black/Blue Ink Ball Point Pen) ব্যবহার করুন।
- কোনো একটি নির্দিষ্ট প্রশ্নের উত্তর হিসাবে যদি উত্তরপত্রে একাধিক বৃত্ত ভরাট করা হয় তাহলে তা ভুল উত্তর হিসাবে পরিগণিত হবে। যদি কোনো প্রশ্নে 'B' সঠিক উত্তর হয়, তাহলে নিম্নে প্রদর্শিত উপায়ে চিহ্নিত করুন :
সঠিক পদ্ধতি : ☐ A ☒ B ☐ C ☐ D
ভুল পদ্ধতি : ☐ A ☒ B ☐ C ☐ D অথবা
☐ A ☒ B ☐ C ☐ D অথবা
☐ A ☒ B ☒ C ☐ D অথবা
☐ A ☒ B ☐ C ☒ D অথবা
☐ A ☒ B ☒ C ☒ D
- প্রশ্ন-পুস্তিকার শেষের ফাঁকা জায়গা প্রয়োজনে আপনার খসড়া কাজের (Rough Work) জন্য ব্যবহার করতে পারেন। পাতাটি প্রশ্ন-পুস্তিকা থেকে ছিঁড়ে ফেলবেন না।
- পরীক্ষার পর পরীক্ষা তত্ত্বাবধায়কের হাতে আপনার OMR উত্তরপত্রটি জমা দেবেন। প্রশ্ন-পুস্তিকাটি আপনার কাছে রেখে দেবেন।
- উত্তরপত্রটির পরিকল্পনা করা হয়েছে কম্পিউটারের মাধ্যমে মূল্যায়নের উদ্দেশ্যে। উপরের নির্দেশাবলী এবং OMR উত্তরপত্রে প্রদর্শিত নির্দেশাবলী যথাযথভাবে অনুসরণ না করলে এই মূল্যায়নের কাজ দুরূহ হয়ে উঠবে। এই নির্দেশাবলী পূর্ণভাবে অনুসৃত না হলে পরিণামে চূড়ান্ত ক্ষতি পরীক্ষার্থীরই হবে।
- কোনো পরীক্ষার্থীর মোবাইল ফোন, ক্যালকুলেটর অথবা কোনো প্রকারের ইলেকট্রনিক্স গ্যাজেট ব্যবহার করার অনুমতি নেই।
- Negative Marking** আছে। প্রতি 3টি ভুল উত্তরের জন্য 1 নম্বর কাটা যাবে।

[Please Turn Over]

PART I
ENGINEERING (CIVIL)

Total Marks : 65

1. The Centre of Gravity of a triangle lies at the point of
(A) Concurrence of the medians
(B) Intersection of its altitudes
(C) Intersection of bisector of angles
(D) Intersection of diagonals
2. By compacting the soil we improve
(A) Bearing capacity of soil
(B) The drainage capacity of soil
(C) Spread of building
(D) Eccentricity of building
3. Live load on roof and floors are considered as
(A) point load.
(B) uniformly distributed load.
(C) combination of point load and uniformly distributed load.
(D) inclined point load.
4. Maximum bending moment about the face of the column is one of the consideration to determine
(A) depth of the footing
(B) depth of the slab
(C) width of the footing
(D) width of column
5. The space of the wall between facing and backing is known as
(A) Heading
(B) Jointing
(C) Hearting
(D) Plinth
6. Bottom surface of a window opening is known as
(A) Corbel
(B) Sill
(C) Cornice
(D) Coping
7. The tool used by masons for spreading mortar
(A) Trowel
(B) Claw tool
(C) Plumb bob
(D) Square
8. Bricks are obtained by molding
(A) mortar
(B) clay
(C) sand
(D) plastic
9. A free standing brick wall 20 cm thick is subjected to a wind pressure of 75kg/m^2 . The maximum height of wall from stability consideration is
(A) 0.64m
(B) 0.96m
(C) 1.28m
(D) 1.5m
10. The brick bond which shows alternate courses of header and stretchers is known as
(A) Flemish bond
(B) Facing bond
(C) Raking bond
(D) English bond
11. In building construction D.P.C. stands for
(A) Deal Polish Course
(B) Damp Proof Course
(C) Deep Pond Course
(D) Direct Poor Conduct
12. A number of forces acting at a point will be in equilibrium if
(A) their total sum is zero.
(B) two resolved parts in two directions at right angles are equal.
(C) sum of resolved parts in any two perpendicular directions are both zero.
(D) all of them are inclined equally.

13. Beam like horizontal structural flexural member, used to span over the opening of doors, windows is known as

- (A) Lintel
- (B) Beam
- (C) Slab
- (D) Column

14. The splayed surface prepared on the top of an abutment or pier to receive the arch is known as

- (A) Arch ring
- (B) Intrados
- (C) Skew back
- (D) Springers

15. Consider the following statements:

The use of relatively weak mortar

1. will accommodate movements due to loads and cracking if any, and will be distributed as thin hair cracks which are less noticeable or harmful.
2. will result in reduction of stresses due to differential expansion of masonry units.

- (A) 1 alone is correct.
- (B) 2 alone is correct.
- (C) Both 1 & 2 are correct.
- (D) Neither 1 nor 2 is correct.

16. Rapid hardening cement is suitable for

- (A) hot weather concreting
- (B) cold weather concreting
- (C) rainy weather concreting
- (D) in every weather condition

17. If 'H' is the height of wall between centers of supports, then the effective height of wall where concrete floors have a bearing on wall irrespective of the direction of span will be

- (A) 0.75H
- (B) 0.85H
- (C) 1 H
- (D) 1.5H

18. Bulking of sand means, increase in its

- (A) Area
- (B) Void
- (C) Volume
- (D) Porosity

19. Fineness modulus of medium sand varies in between

- (A) 2.6 to 2.9
- (B) 2.2 to 2.6
- (C) 2.9 to 3.2
- (D) 2.4 to 2.6

20. Nominal mix concrete of M20 grade contains cement, sand, coarse aggregate in the ratio of

- (A) 1:2:4
- (B) 1:1.5:3
- (C) 1:3:6
- (D) 1:4:8

21. The effective length of R.C.C. column which is effectively held in position at both ends, restrained against rotation at one end will be

- (A) 0.65 L
- (B) 1.0 L
- (C) 0.8 L
- (D) 1.2 L

22. Outside vertical members of framework of a shutter are known as

- (A) Putty
- (B) Louver
- (C) Reveal
- (D) Style

23. Raft foundation is a type of

- (A) Deep foundation
- (B) Caisson foundation
- (C) Shallow foundation
- (D) Pile foundation

24. For designing masonry components of a structure, seismic forces provision in the design calculation is not necessary for buildings constructed in
- (A) Zone I only
 - (B) Zone I & II
 - (C) Zone I, II & III
 - (D) Zone I, II, III & IV
25. The process by which timber is made sap free
- (A) Seasoning
 - (B) Studding
 - (C) Moulding
 - (D) Nosing
26. The process of joining two wooden pieces at an angle is known as
- (A) Mitring
 - (B) Grounds
 - (C) Rebating
 - (D) Seasoning
27. The joint which is adopted when a timber piece is to be placed between two members which are previously fixed is known as
- (A) Bridle joint
 - (B) Housed joint
 - (C) Chase mortise joint
 - (D) Bull joint
28. This type of floor is mostly suitable or is used in *kutcha* village house
- (A) Mud flooring
 - (B) Mosaic flooring
 - (C) Rubber flooring
 - (D) Glass flooring
29. The ridge formed by the intersection of two sloping surfaces having an exterior angle greater than 180° is known as
- (A) Valley
 - (B) Hip
 - (C) Common rafter
 - (D) Ridge
30. A 200mm thick wall made of modular bricks is 5m long between cross walls and 3.8m clear height between RCC slabs at top and bottom. The slenderness ratio of the wall is
- (A) 15
 - (B) 19
 - (C) 20
 - (D) 25
31. When two forces, each equal to P , act at 90° to each other, then the resultant will be
- (A) P
 - (B) $P\sqrt{2}$
 - (C) $P/\sqrt{2}$
 - (D) $2P$
32. For compaction of soil we use
- (A) Dumper
 - (B) Power shovel
 - (C) Back hoe
 - (D) Road roller
33. Burnt clay bricks are generally classified in
- (A) 7 categories
 - (B) 8 categories
 - (C) 4 categories
 - (D) 6 categories
34. In normal circumstances where ordinary Portland cement is used, removal of form work for props to slab, spanning upto 4.5 m is done after
- (A) 14 days
 - (B) 28 days
 - (C) 7 days
 - (D) 3 days
35. Moist curing for concrete made of ordinary Portland cement and placed under normal condition is done for at least
- (A) 7 days
 - (B) 28 days
 - (C) 14 days
 - (D) 3 days

36. For underwater concreting cement content as per code shall be at least

- (A) 450 kg/ m³
- (B) 400 kg/ m³
- (C) 350 kg/ m³
- (D) 300 kg/ m³

37. Earthquake forces are calculated as per IS code

- (A) IS 1893
- (B) IS 1983
- (C) IS 1389
- (D) IS 9318

38. In G+4 building , the 'G' stands for

- (A) Gird
- (B) Gross
- (C) Ground
- (D) Glass

39. Fittings that are placed at the ends of soil pipes or sillage pipes to prevent the passage of foul gases from the pipes to outside is known as

- (A) One pipe system
- (B) Two pipe system
- (C) Three pipe system
- (D) Traps

40. The portion of structure which transfer load to the soil is known as

- (A) Beam
- (B) Slab
- (C) Column
- (D) Foundation

41. For the purpose of determining the seismic forces, India has been classified into how many zones?

- (A) 3
- (B) 2
- (C) 4
- (D) 5

42. In bathroom and W.C., the term W.C. stands for

- (A) Water Closet
- (B) Wash Counter
- (C) Water Counter
- (D) Waste Closet

43. Deriving the maximum benefit from minimum dimension of the room without cramping of the plan, is known as

- (A) Circulation
- (B) Grouping
- (C) Prospect
- (D) Roominess

44. For orientation of building in West Bengal best orientation is considered to be along east and west facing which direction ?

- (A) South
- (B) North
- (C) South-west
- (D) North-east

45. One kilo Pascal is equivalent to

- (A) 1000 N/mm²
- (B) 1000 N/cm²
- (C) 1000 N/m²
- (D) 1000 N/dm²

46. The unit of kinematic viscosity is

- (A) gm/cm-sec²
- (B) dyne-sec/cm²
- (C) gm/cm²-sec
- (D) cm²/sec

47. For a well conditioned triangle no angle should be less than

- (A) 20°
- (B) 30°
- (C) 45°
- (D) 60°

48. A metallic tape is made of
(A) Steel
(B) Inver
(C) Linen
(D) Cloth & wires
49. To measure distance we use
(A) Tape
(B) Prismatic compass
(C) Trough Compass
(D) Spirit level
50. Agonic line is the line joining points having
(A) zero magnetic declination.
(B) minimum magnetic declination.
(C) maximum magnetic declination.
(D) same magnetic declination.
51. A series of closely spaced contour lines represent a
(A) Steep slope
(B) Gentle slope
(C) Uniform slope
(D) Plane surface
52. Which of the following methods of plane table surveying is used to locate the position of an inaccessible point?
(A) Radiation
(B) Intersection
(C) Traversing
(D) Resection
53. The maximum permissible eccentricity for no tension at the base of a gravity dam is
(A) B/2
(B) B/3
(C) B/4
(D) B/6
54. Which of the following represent hardest grade of bitumen ?
(A) 30/40
(B) 60/70
(C) 80/100
(D) 100/120
55. The treatment of water is done by adding
(A) Bleaching powder
(B) Epoxy powder
(C) Nylon powder
(D) Metallic powder
56. Standard BOD is measured at
(A) 20° C- 1 day
(B) 25° C- 3 day
(C) 20° C- 5 day
(D) 30° C- 5 day
57. Which of the following solid waste disposal method is ecologically most acceptable?
(A) Sanitary landfill
(B) Incineration
(C) Composting
(D) Pyrolysis
58. Which of the following is the weakness of the BAR chart?
(A) Interdependencies of activities
(B) Project progress
(C) Uncertainties
(D) All of the above
59. A fully saturated soil is said to be
(A) One phase system
(B) Two phase system with soil and air
(C) Two phase system with soil and water
(D) Three phase system

60. Inorganic soils with low compressibility are represented by

- (A) MH
- (B) SL
- (C) ML
- (D) CH

61. Sensitivity of soil can be defined as

- (A) percentage of volume change of soil under saturated condition.
- (B) ratio of compressive strength of unconfined undisturbed soil to that of soil in a remoulded state.
- (C) ratio of volume of voids to volume of solids.
- (D) None of the above

62. After storage, the strength of cement

- (A) decreases
- (B) increases
- (C) remains same
- (D) may increase or decrease

63. In R.C.C. beam side reinforcement is provided if its depth exceeds

- (A) 300 mm
- (B) 500 mm
- (C) 700 mm
- (D) 750 mm

64. For treatment of sewage we use

- (A) Water tank
- (B) Septic tank
- (C) Gas tank
- (D) Liquid tank

65. Size of right angled fillet weld is given by

- (A) $0.707 \times \text{throat thickness}$
- (B) $0.414 \times \text{throat thickness}$
- (C) $2.0 \times \text{throat thickness}$
- (D) throat thickness

PART II ENGLISH

Total Marks : 13

66. Choose the appropriate collective noun for the given sentence:

- A group of birds
- (A) herd
 - (B) litter
 - (C) flock
 - (D) bevy

Apply suitable adjectives to fill the blanks for question no. 67 and 68:

67. Lipika is _____ than Latika.

- (A) beautiful
- (B) more beautiful
- (C) most beautiful
- (D) loveliest

68. Which is the _____ continent?

- (A) small
- (B) smaller
- (C) smallest
- (D) more smaller

Choose the correct phrasal verbs to replace the words underlined for question no. 69 and 70:

69. The price of petrol has increased.

- (A) Gone up
- (B) Gone down
- (C) Go off
- (D) Go over

70. Stop the fan.

- (A) Turn on
- (B) Turn out
- (C) Turn off
- (D) Turn up

71. Nearest meaning of 'Maiden' is

- (A) Maid servant
- (B) An unmarried girl
- (C) Old woman
- (D) Old man

72. Give the simple past form of the verb 'Be'.

- (A) Am
- (B) Been
- (C) Was
- (D) Is

Choose the correct answer from the given alternatives for question no. 73 and 74:

73. He _____ till today.

- (A) has not come
- (B) did not come
- (C) does not come
- (D) do not come

74. Perhaps he _____ here tomorrow.

- (A) reach
- (B) shall reach
- (C) will reach
- (D) will be reach

75. Choose the correct form of negative present perfect continuous tense from the given alternatives.

- (A) I have been working.
- (B) Have I been working?
- (C) I have not been working.
- (D) I not have been working.

76. Soma lives _____ a village. (Insert appropriate preposition)

- (A) on
- (B) in
- (C) at
- (D) to

Report the following sentences in direct/ indirect speech from the following for question no. 77 and 78:

77. Father said to me, "Go home at once".

- (A) Father ordered me to go home at once.
- (B) Father asked me to go home at once.
- (C) Father requested me to go home at once.
- (D) Father advised me to go home at once.

78. The child said, "what a beautiful sight!"

- (A) The child exclaimed that what a beautiful sight.
- (B) The child exclaimed with delight that the sight was very beautiful.
- (C) The child exclaimed said what a beautiful sight.
- (D) The child exclaimed said delight that the sight was very beautiful.

PART III

GENERAL KNOWLEDGE

Total Marks : 07

79. The Chairman of the Rajya Sabha is

- (A) the Leader of the Opposition.
- (B) nominated by the President of India.
- (C) the Vice-President of India.
- (D) nominated by the Vice-President of India.

80. At which of the following places, the Pole Star appears at the highest angle in the sky ?

- (A) Sandakphu
- (B) Falut
- (C) Darjeeling
- (D) Kalimpong

81. In recently released Global Innovation Index (GII) 2018, India was ranked

- (A) 70th
- (B) 130th
- (C) 57th
- (D) 45th

82. Tennis player Andy Murray belongs to which country?

- (A) Italy
- (B) France
- (C) Belgium
- (D) United Kingdom

83. Lassa fever which was recently in news occurs in

- (A) West Africa
- (B) South-East Asia
- (C) Middle East
- (D) Latin America

84. Who was recently appointed as Head of Mission and Chief Military Observer for UN Military Observer Group in India and Pakistan (UNMOGIP)?

- (A) Jose Eladio Alcain
- (B) Peter Thomson
- (C) Per Gustaf Lodin
- (D) Delali Johnson Sakyi

85. In which year, Kanyashree Prakalpa was launched?

- (A) 2011
- (B) 2012
- (C) 2013
- (D) 2014

Space for Rough Work

NS

A-12

Space for Rough Work

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO.

TEST BOOKLET SERIES

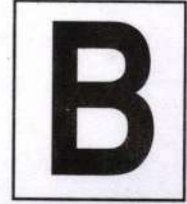
TEST BOOKLET

Time allowed : 90 Minutes

Full marks : 85

Answer *all* the questions.

All questions carry 1 mark each.



Serial No.005010

Roll No.

উত্তর লেখার পূর্বে নিম্নলিখিত নির্দেশাবলী ভাল করে পড়ুন

নির্দেশাবলী

- প্রশ্ন-পুস্তিকাতে 85টি Multiple Choice Answer Type প্রশ্ন দেওয়া আছে। নির্দেশ পাওয়ার পর প্রশ্ন-পুস্তিকার সব পৃষ্ঠা খুলে, সব পৃষ্ঠা/প্রশ্ন পর পর আছে কিনা বা ছাপা/ছেঁড়া/পুনরাবৃত্তি আছে কিনা দেখে নিন। যদি প্রশ্ন-পুস্তিকা এবং আপনাকে দেওয়া OMR উত্তরপত্রে কোথাও কোনো ত্রুটি থাকে সঙ্গে সঙ্গে পরীক্ষা তত্ত্বাবধায়ককে জানান এবং বদলে নিন।
 - নির্দেশ পাওয়ার পর, OMR উত্তরপত্রে আপনার নিজের সম্বন্ধে যে সাধারণ তথ্যগুলি জানতে চাওয়া হয়েছে তা পূরণ করুন। উত্তরপত্রের 6 ক্রমিক সংখ্যায় প্রদত্ত ঘরে (BOX-এ) রোল নম্বর লিখুন এবং তার অনুরূপ বৃত্তগুলিকে ভরাট করুন। আপনি যদি নির্দেশমতো উত্তরপত্রে বিশদ তথ্যাদি এবং 6 ক্রমিক সংখ্যায় অনুরূপ বৃত্তগুলিকে ভরাট করতে ব্যর্থ হন এবং এর পরিণামে আপনার উত্তরপত্রের মূল্যায়নের ক্ষেত্রে যদি কোনো অসুবিধে হয় তার জন্য ব্যক্তিগতভাবে আপনি দায়ী থাকবেন।
 - OMR উত্তরপত্রে যে 'Bar Code' ছাপা আছে তাতে কোনো দাগ দেওয়া বা কোনো বিকৃতি ঘটানো যাবে না, অন্যথায় প্রার্থীর প্রার্থীপদ বাতিল হয়ে যাবে। OMR উত্তরপত্রটি ভাঁজ করবেন না বা তাতে অযথা অন্য কোনো দাগ দেবেন না।
 - প্রশ্ন-পুস্তিকার প্রত্যেক প্রশ্নের সঙ্গে 4টি করে উত্তর দেওয়া আছে। উত্তরগুলি A, B, C ও D এই 4টি ইংরেজি বর্ণ দিয়ে চিহ্নিত করা আছে। প্রতিটি প্রশ্ন মন দিয়ে পড়ুন এবং আপনার মতে 4টি উত্তরের মধ্যে সঠিক উত্তরটি বাছুন। OMR উত্তরপত্রে প্রতিটি প্রশ্নের ক্রমিক সংখ্যা অনুসারে নির্দিষ্ট বৃত্তটি সম্পূর্ণ গাঢ় করে ভরাট করুন। উত্তর চিহ্নিত করবার জন্য কেবলমাত্র কালো/নীল কালির বল পয়েন্ট পেন (Black/Blue Ink Ball Point Pen) ব্যবহার করুন।
 - কোনো একটি নির্দিষ্ট প্রশ্নের উত্তর হিসাবে যদি উত্তরপত্রে একাধিক বৃত্ত ভরাট করা হয় তাহলে তা ভুল উত্তর হিসাবে পরিগণিত হবে। যদি কোনো প্রশ্নে 'B' সঠিক উত্তর হয়, তাহলে নিম্নে প্রদর্শিত উপায়ে চিহ্নিত করুন :
- সঠিক পদ্ধতি : (A) ● (C) (D)
- ভুল পদ্ধতি : (A) (B) (C) (D) অথবা
 (A) (B) (C) (D) অথবা
 (A) ● ● (D) অথবা
 (A) ● (C) (D) অথবা
 (A) ● ● (D)
- প্রশ্ন-পুস্তিকার শেষের ফাঁকা জায়গা প্রয়োজনে আপনার খসড়া কাজের (Rough Work) জন্য ব্যবহার করতে পারেন। পাতাটি প্রশ্ন-পুস্তিকা থেকে ছিঁড়ে ফেলবেন না।
 - পরীক্ষার পর পরীক্ষা তত্ত্বাবধায়কের হাতে আপনার OMR উত্তরপত্রটি জমা দেবেন। প্রশ্ন-পুস্তিকাটি আপনার কাছে রেখে দেবেন।
 - উত্তরপত্রটির পরিকল্পনা করা হয়েছে কম্পিউটারের মাধ্যমে মূল্যায়নের উদ্দেশ্যে। উপরের নির্দেশাবলী এবং OMR উত্তরপত্রে প্রদর্শিত নির্দেশাবলী যথাযথভাবে অনুসরণ না করলে এই মূল্যায়নের কাজ দুরূহ হয়ে উঠবে। এই নির্দেশাবলী পূর্ণভাবে অনুসৃত না হলে পরিণামে চূড়ান্ত ক্ষতি পরীক্ষার্থীরই হবে।
 - কোনো পরীক্ষার্থীর মোবাইল ফোন, ক্যালকুলেটর অথবা কোনো প্রকারের ইলেকট্রনিক্স গ্যাজেট ব্যবহার করার অনুমতি নেই।
 - Negative Marking** আছে। প্রতি 3টি ভুল উত্তরের জন্য 1 নম্বর কাটা যাবে।

[Please Turn Over]

PART I
ENGINEERING (CIVIL)

Total Marks : 65

1. Bulking of sand means, increase in its
 - (A) Area
 - (B) Void
 - (C) Volume
 - (D) Porosity
2. A 200mm thick wall made of modular bricks is 5m long between cross walls and 3.8m clear height between RCC slabs at top and bottom. The slenderness ratio of the wall is
 - (A) 15
 - (B) 19
 - (C) 20
 - (D) 25
3. Standard BOD is measured at
 - (A) 20° C- 1 day
 - (B) 25° C- 3 day
 - (C) 20° C- 5 day
 - (D) 30° C- 5 day
4. Size of right angled fillet weld is given by
 - (A) $0.707 \times$ throat thickness
 - (B) $0.414 \times$ throat thickness
 - (C) $2.0 \times$ throat thickness
 - (D) throat thickness
5. If 'H' is the height of wall between centers of supports, then the effective height of wall where concrete floors have a bearing on wall irrespective of the direction of span will be
 - (A) $0.75H$
 - (B) $0.85H$
 - (C) $1H$
 - (D) $1.5H$
6. In G+4 building, the 'G' stands for
 - (A) Gird
 - (B) Gross
 - (C) Ground
 - (D) Glass
7. Burnt clay bricks are generally classified in
 - (A) 7 categories
 - (B) 8 categories
 - (C) 4 categories
 - (D) 6 categories
8. Which of the following methods of plane table surveying is used to locate the position of an inaccessible point?
 - (A) Radiation
 - (B) Intersection
 - (C) Traversing
 - (D) Resection
9. Consider the following statements:
The use of relatively weak mortar
 1. will accommodate movements due to loads and cracking if any, and will be distributed as thin hair cracks which are less noticeable or harmful.
 2. will result in reduction of stresses due to differential expansion of masonry units.
 - (A) 1 alone is correct.
 - (B) 2 alone is correct.
 - (C) Both 1 & 2 are correct.
 - (D) Neither 1 nor 2 is correct.
10. For underwater concreting cement content as per code shall be at least
 - (A) 450 kg/m^3
 - (B) 400 kg/m^3
 - (C) 350 kg/m^3
 - (D) 300 kg/m^3
11. For the purpose of determining the seismic forces, India has been classified into how many zones?
 - (A) 3
 - (B) 2
 - (C) 4
 - (D) 5

12. When two forces, each equal to P , act at 90° to each other, then the resultant will be

- (A) P
- (B) $P\sqrt{2}$
- (C) $P/\sqrt{2}$
- (D) $2P$

13. The tool used by masons for spreading mortar

- (A) Trowel
- (B) Claw tool
- (C) Plumb bob
- (D) Square

14. Outside vertical members of framework of a shutter are known as

- (A) Putty
- (B) Louver
- (C) Reveal
- (D) Style

15. Which of the following solid waste disposal method is ecologically most acceptable?

- (A) Sanitary landfill
- (B) Incineration
- (C) Composting
- (D) Pyrolysis

16. The ridge formed by the intersection of two sloping surfaces having an exterior angle greater than 180° is known as

- (A) Valley
- (B) Hip
- (C) Common rafter
- (D) Ridge

17. Fineness modulus of medium sand varies in between

- (A) 2.6 to 2.9
- (B) 2.2 to 2.6
- (C) 2.9 to 3.2
- (D) 2.4 to 2.6

18. In building construction D.P.C. stands for

- (A) Deal Polish Course
- (B) Damp Proof Course
- (C) Deep Pond Course
- (D) Direct Poor Conduct

19. Agonic line is the line joining points having

- (A) zero magnetic declination.
- (B) minimum magnetic declination.
- (C) maximum magnetic declination.
- (D) same magnetic declination.

20. The brick bond which shows alternate courses of header and stretchers is known as

- (A) Flemish bond
- (B) Facing bond
- (C) Raking bond
- (D) English bond

21. The portion of structure which transfer load to the soil is known as

- (A) Beam
- (B) Slab
- (C) Column
- (D) Foundation

22. The splayed surface prepared on the top of an abutment or pier to receive the arch is known as

- (A) Arch ring
- (B) Intrados
- (C) Skew back
- (D) Springers

23. Which of the following represent hardest grade of bitumen ?

- (A) 30/40
- (B) 60/70
- (C) 80/100
- (D) 100/120

24. Beam like horizontal structural flexural member, used to span over the opening of doors, windows is known as
- (A) Lintel
 - (B) Beam
 - (C) Slab
 - (D) Column
25. After storage, the strength of cement
- (A) decreases
 - (B) increases
 - (C) remains same
 - (D) may increase or decrease
26. In R.C.C. beam side reinforcement is provided if its depth exceeds
- (A) 300 mm
 - (B) 500 mm
 - (C) 700 mm
 - (D) 750 mm
27. A number of forces acting at a point will be in equilibrium if
- (A) their total sum is zero.
 - (B) two resolved parts in two directions at right angles are equal.
 - (C) sum of resolved parts in any two perpendicular directions are both zero.
 - (D) all of them are inclined equally.
28. For treatment of sewage we use
- (A) Water tank
 - (B) Septic tank
 - (C) Gas tank
 - (D) Liquid tank
29. For compaction of soil we use
- (A) Dumper
 - (B) Power shovel
 - (C) Back hoe
 - (D) Road roller
30. Rapid hardening cement is suitable for
- (A) hot weather concreting
 - (B) cold weather concreting
 - (C) rainy weather concreting
 - (D) in every weather condition
31. This type of floor is mostly suitable or is used in *kutch* village house
- (A) Mud flooring
 - (B) Mosaic flooring
 - (C) Rubber flooring
 - (D) Glass flooring
32. The Centre of Gravity of a triangle lies at the point of
- (A) Concurrence of the medians
 - (B) Intersection of its altitudes
 - (C) Intersection of bisector of angles
 - (D) Intersection of diagonals
33. A metallic tape is made of
- (A) Steel
 - (B) Inver
 - (C) Linen
 - (D) Cloth & wires
34. Maximum bending moment about the face of the column is one of the consideration to determine
- (A) depth of the footing
 - (B) depth of the slab
 - (C) width of the footing
 - (D) width of column
35. Bricks are obtained by molding
- (A) mortar
 - (B) clay
 - (C) sand
 - (D) plastic

36. Deriving the maximum benefit from minimum dimension of the room without cramping of the plan, is known as

- (A) Circulation
- (B) Grouping
- (C) Prospect
- (D) Roominess

37. Raft foundation is a type of

- (A) Deep foundation
- (B) Caisson foundation
- (C) Shallow foundation
- (D) Pile foundation

38. For designing masonry components of a structure, seismic forces provision in the design calculation is not necessary for buildings constructed in

- (A) Zone I only
- (B) Zone I & II
- (C) Zone I, II & III
- (D) Zone I, II, III & IV

39. Live load on roof and floors are considered as

- (A) point load.
- (B) uniformly distributed load.
- (C) combination of point load and uniformly distributed load.
- (D) inclined point load.

40. The unit of kinematic viscosity is

- (A) gm/cm-sec^2
- (B) dyne-sec/cm^2
- (C) $\text{gm/cm}^2\text{-sec}$
- (D) cm^2/sec

41. The maximum permissible eccentricity for no tension at the base of a gravity dam is

- (A) $B/2$
- (B) $B/3$
- (C) $B/4$
- (D) $B/6$

42. In normal circumstances where ordinary Portland cement is used, removal of form work for props to slab, spanning upto 4-5 m is done after

- (A) 14 days
- (B) 28 days
- (C) 7 days
- (D) 3 days

43. Fittings that are placed at the ends of soil pipes or sullage pipes to prevent the passage of foul gases from the pipes to outside is known as

- (A) One pipe system
- (B) Two pipe system
- (C) Three pipe system
- (D) Traps

44. The space of the wall between facing and backing is known as

- (A) Heading
- (B) Jointing
- (C) Hearting
- (D) Plinth

45. A series of closely spaced contour lines represent a

- (A) Steep slope
- (B) Gentle slope
- (C) Uniform slope
- (D) Plane surface

46. For a well conditioned triangle no angle should be less than

- (A) 20°
- (B) 30°
- (C) 45°
- (D) 60°

47. Nominal mix concrete of M20 grade contains cement, sand, coarse aggregate in the ratio of

- (A) 1:2:4
- (B) 1:1.5:3
- (C) 1:3:6
- (D) 1:4:8

48. Sensitivity of soil can be defined as
(A) percentage of volume change of soil under saturated condition.
(B) ratio of compressive strength of unconfined undisturbed soil to that of soil in a remoulded state.
(C) ratio of volume of voids to volume of solids.
(D) None of the above
49. Earthquake forces are calculated as per IS code
(A) IS 1893
(B) IS 1983
(C) IS 1389
(D) IS 9318
50. For orientation of building in West Bengal best orientation is considered to be along east and west facing which direction ?
(A) South
(B) North
(C) South-west
(D) North-east
51. Inorganic soils with low compressibility are represented by
(A) MH
(B) SL
(C) ML
(D) CH
52. One kilo Pascal is equivalent to
(A) 1000 N/mm^2
(B) 1000 N/cm^2
(C) 1000 N/m^2
(D) 1000 N/dm^2
53. A free standing brick wall 20 cm thick is subjected to a wind pressure of 75 kg/m^2 . The maximum height of wall from stability consideration is
(A) 0.64m
(B) 0.96m
(C) 1.28m
(D) 1.5m
54. The process of joining two wooden pieces at an angle is known as
(A) Mitring
(B) Grounds
(C) Rebating
(D) Seasoning
55. The effective length of R.C.C. column which is effectively held in position at both ends, restrained against rotation at one end will be
(A) 0.65 L
(B) 1.0 L
(C) 0.8 L
(D) 1.2 L
56. The process by which timber is made sap free
(A) Seasoning
(B) Studding
(C) Moulding
(D) Nosing
57. The treatment of water is done by adding
(A) Bleaching powder
(B) Epoxy powder
(C) Nylon powder
(D) Metallic powder
58. Which of the following is the weakness of the BAR chart?
(A) Interdependencies of activities
(B) Project progress
(C) Uncertainties
(D) All of the above
59. By compacting the soil we improve
(A) Bearing capacity of soil
(B) The drainage capacity of soil
(C) Spread of building
(D) Eccentricity of building

60. The joint which is adopted when a timber piece is to be placed between two members which are previously fixed is known as

- (A) Bridle joint
- (B) Housed joint
- (C) Chase mortise joint
- (D) Bull joint

61. A fully saturated soil is said to be

- (A) One phase system
- (B) Two phase system with soil and air
- (C) Two phase system with soil and water
- (D) Three phase system

62. To measure distance we use

- (A) Tape
- (B) Prismatic compass
- (C) Trough Compass
- (D) Spirit level

63. In bathroom and W.C., the term W.C. stands for

- (A) Water Closet
- (B) Wash Counter
- (C) Water Counter
- (D) Waste Closet

64. Moist curing for concrete made of ordinary Portland cement and placed under normal condition is done for at least

- (A) 7 days
- (B) 28 days
- (C) 14 days
- (D) 3 days

65. Bottom surface of a window opening is known as

- (A) Corbel
- (B) Sill
- (C) Cornice
- (D) Coping

PART II

ENGLISH

Total Marks : 13

66. Choose the appropriate collective noun for the given sentence:

A group of birds

- (A) herd
- (B) litter
- (C) flock
- (D) bevy

Choose the correct phrasal verbs to replace the words underlined for question no. 67 and 68:

67. The price of petrol has increased.

- (A) Gone up
- (B) Gone down
- (C) Go off
- (D) Go over

68. Stop the fan.

- (A) Turn on
- (B) Turn out
- (C) Turn off
- (D) Turn up

Apply suitable adjectives to fill the blanks for question no. 69 and 70:

69. Lipika is _____ than Latika.

- (A) beautiful
- (B) more beautiful
- (C) most beautiful
- (D) loveliest

70. Which is the _____ continent?

- (A) small
- (B) smaller
- (C) smallest
- (D) more smaller

71. Choose the correct form of negative present perfect continuous tense from the given alternatives.

- (A) I have been working.
- (B) Have I been working?
- (C) I have not been working.
- (D) I not have been working.

72. Soma lives _____ a village. (Insert appropriate preposition)

- (A) on
- (B) in
- (C) at
- (D) to

Report the following sentences in direct/ indirect speech from the following for question no. 73 and 74:

73. Father said to me, "Go home at once".

- (A) Father ordered me to go home at once.
- (B) Father asked me to go home at once.
- (C) Father requested me to go home at once.
- (D) Father advised me to go home at once.

74. The child said, "what a beautiful sight!"

- (A) The child exclaimed that what a beautiful sight.
- (B) The child exclaimed with delight that the sight was very beautiful.
- (C) The child exclaimed said what a beautiful sight.
- (D) The child exclaimed said delight that the sight was very beautiful.

75. Nearest meaning of 'Maiden' is

- (A) Maid servant
- (B) An unmarried girl
- (C) Old woman
- (D) Old man

76. Give the simple past form of the verb 'Be'.

- (A) Am
- (B) Been
- (C) Was
- (D) Is

Choose the correct answer from the given alternatives for question no. 77 and 78:

77. He _____ till today.

- (A) has not come
- (B) did not come
- (C) does not come
- (D) do not come

78. Perhaps he _____ here tomorrow.

- (A) reach
- (B) shall reach
- (C) will reach
- (D) will be reach

PART III

GENERAL KNOWLEDGE

Total Marks : 07

79. Tennis player Andy Murray belongs to which country?

- (A) Italy
- (B) France
- (C) Belgium
- (D) United Kingdom

80. In recently released Global Innovation Index (GII) 2018, India was ranked

- (A) 70th
- (B) 130th
- (C) 57th
- (D) 45th

81. At which of the following places, the Pole Star appears at the highest angle in the sky ?

- (A) Sandakphu
- (B) Falut
- (C) Darjeeling
- (D) Kalimpong

82. The Chairman of the Rajya Sabha is

- (A) the Leader of the Opposition.
- (B) nominated by the President of India.
- (C) the Vice-President of India.
- (D) nominated by the Vice-President of India.

83. Lassa fever which was recently in news occurs in

- (A) West Africa
- (B) South-East Asia
- (C) Middle East
- (D) Latin America

84. In which year, Kanyashree Prakalpa was launched?

- (A) 2011
- (B) 2012
- (C) 2013
- (D) 2014

85. Who was recently appointed as Head of Mission and Chief Military Observer for UN Military Observer Group in India and Pakistan (UNMOGIP)?

- (A) Jose Eladio Alcain
- (B) Peter Thomson
- (C) Per Gustaf Lodin
- (D) Delali Johnson Sakyi

Space for Rough Work

Space for Rough Work

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO.

TEST BOOKLET SERIES

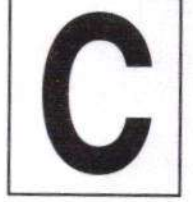
TEST BOOKLET

Time allowed : 90 Minutes

Full marks : 85

Answer *all* the questions.

All questions carry 1 mark each.



004995

Serial No.

Roll No. উত্তর লেখার পূর্বে নিম্নলিখিত নির্দেশাবলী ভাল করে পড়ুননির্দেশাবলী

- প্রশ্ন-পুস্তিকাতে 85টি Multiple Choice Answer Type প্রশ্ন দেওয়া আছে। নির্দেশ পাওয়ার পর প্রশ্ন-পুস্তিকার সব পৃষ্ঠা খুলে, সব পৃষ্ঠা/প্রশ্ন পর পর আছে কিনা বা ছাপা/ছেঁড়া/পুনরাবৃত্তি আছে কিনা দেখে নিন। যদি প্রশ্ন-পুস্তিকা এবং আপনাকে দেওয়া OMR উত্তরপত্রে কোথাও কোনো ত্রুটি থাকে সঙ্গে সঙ্গে পরীক্ষা তত্ত্বাবধায়ককে জানান এবং বদলে নিন।
- নির্দেশ পাওয়ার পর, OMR উত্তরপত্রে আপনার নিজের সম্বন্ধে যে সাধারণ তথ্যগুলি জানতে চাওয়া হয়েছে তা পূরণ করুন। উত্তরপত্রের 6 ক্রমিক সংখ্যায় প্রদত্ত ঘরে (BOX-এ) রোল নম্বর লিখুন এবং তার অনুরূপ বৃত্তগুলিকে ভরাট করুন। আপনি যদি নির্দেশমতো উত্তরপত্রে বিশদ তথ্যাদি এবং 6 ক্রমিক সংখ্যায় অনুরূপ বৃত্তগুলিকে ভরাট করতে ব্যর্থ হন এবং এর পরিণামে আপনার উত্তরপত্রের মূল্যায়নের ক্ষেত্রে যদি কোনো অসুবিধে হয় তার জন্য ব্যক্তিগতভাবে আপনি দায়ী থাকবেন।
- OMR উত্তরপত্রে যে 'Bar Code' ছাপা আছে তাতে কোনো দাগ দেওয়া বা কোনো বিকৃতি ঘটানো যাবে না, অন্যথায় প্রার্থীর প্রার্থীপদ বাতিল হয়ে যাবে। OMR উত্তরপত্রটি ভাঁজ করবেন না বা তাতে অযথা অন্য কোনো দাগ দেবেন না।
- প্রশ্ন-পুস্তিকার প্রত্যেক প্রশ্নের সঙ্গে 4টি করে উত্তর দেওয়া আছে। উত্তরগুলি A, B, C ও D এই 4টি ইংরেজি বর্ণ দিয়ে চিহ্নিত করা আছে। প্রতিটি প্রশ্ন মন দিয়ে পড়ুন এবং আপনার মতে 4টি উত্তরের মধ্যে সঠিক উত্তরটি বাছুন। OMR উত্তরপত্রে প্রতিটি প্রশ্নের ক্রমিক সংখ্যা অনুসারে নির্দিষ্ট বৃত্তটি সম্পূর্ণ গাঢ় করে ভরাট করুন। উত্তর চিহ্নিত করবার জন্য কেবলমাত্র কালো/নীল কালির বল পয়েন্ট পেন (Black/Blue Ink Ball Point Pen) ব্যবহার করুন।
- কোনো একটি নির্দিষ্ট প্রশ্নের উত্তর হিসাবে যদি উত্তরপত্রে একাধিক বৃত্ত ভরাট করা হয় তাহলে তা ভুল উত্তর হিসাবে পরিগণিত হবে। যদি কোনো প্রশ্নে 'B' সঠিক উত্তর হয়, তাহলে নিম্নে প্রদর্শিত উপায়ে চিহ্নিত করুন :
সঠিক পদ্ধতি :

(A)	☒	(C)	(D)
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ভুল পদ্ধতি :

(A)	☒	(C)	(D)
(A)	☒	(C)	(D)
(A)	☒	(C)	(D)
(A)	☒	(C)	(D)
(A)	☒	(C)	(D)

 অথবা
- প্রশ্ন-পুস্তিকার শেষের ফাঁকা জায়গা প্রয়োজনে আপনার খসড়া কাজের (Rough Work) জন্য ব্যবহার করতে পারেন। পাতাটি প্রশ্ন-পুস্তিকা থেকে ছিঁড়ে ফেলবেন না।
- পরীক্ষার পর পরীক্ষা তত্ত্বাবধায়কের হাতে আপনার OMR উত্তরপত্রটি জমা দেবেন। প্রশ্ন-পুস্তিকাটি আপনার কাছে রেখে দেবেন।
- উত্তরপত্রটির পরিকল্পনা করা হয়েছে কম্পিউটারের মাধ্যমে মূল্যায়নের উদ্দেশ্যে। উপরের নির্দেশাবলী এবং OMR উত্তরপত্রে প্রদর্শিত নির্দেশাবলী যথাযথভাবে অনুসরণ না করলে এই মূল্যায়নের কাজ দুর্ভাগ্য হয়ে উঠবে। এই নির্দেশাবলী পূর্ণভাবে অনুসৃত না হলে পরিণামে চূড়ান্ত ক্ষতি পরীক্ষার্থীরই হবে।
- কোনো পরীক্ষার্থীর মোবাইল ফোন, ক্যালকুলেটর অথবা কোনো প্রকারের ইলেকট্রনিক্স গ্যাজেট ব্যবহার করার অনুমতি নেই।
- Negative Marking** আছে। প্রতি 3টি ভুল উত্তরের জন্য 1 নম্বর কাটা যাবে।

[Please Turn Over]

PART I
ENGINEERING (CIVIL)

Total Marks : 65

1. For underwater concreting cement content as per code shall be at least
 - (A) 450 kg/ m³
 - (B) 400 kg/ m³
 - (C) 350 kg/ m³
 - (D) 300 kg/ m³
2. Consider the following statements:
The use of relatively weak mortar
 1. will accommodate movements due to loads and cracking if any, and will be distributed as thin hair cracks which are less noticeable or harmful.
 2. will result in reduction of stresses due to differential expansion of masonry units.
 - (A) 1 alone is correct.
 - (B) 2 alone is correct.
 - (C) Both 1 & 2 are correct.
 - (D) Neither 1 nor 2 is correct.
3. Deriving the maximum benefit from minimum dimension of the room without cramping of the plan, is known as
 - (A) Circulation
 - (B) Grouping
 - (C) Prospect
 - (D) Roominess
4. A free standing brick wall 20 cm thick is subjected to a wind pressure of 75kg/m². The maximum height of wall from stability consideration is
 - (A) 0.64m
 - (B) 0.96m
 - (C) 1.28m
 - (D) 1.5m
5. Live load on roof and floors are considered as
 - (A) point load.
 - (B) uniformly distributed load.
 - (C) combination of point load and uniformly distributed load.
 - (D) inclined point load.
6. For the purpose of determining the seismic forces, India has been classified into how many zones?
 - (A) 3
 - (B) 2
 - (C) 4
 - (D) 5
7. The splayed surface prepared on the top of an abutment or pier to receive the arch is known as
 - (A) Arch ring
 - (B) Intrados
 - (C) Skew back
 - (D) Springers
8. Nominal mix concrete of M20 grade contains cement, sand, coarse aggregate in the ratio of
 - (A) 1:2:4
 - (B) 1:1.5:3
 - (C) 1:3:6
 - (D) 1:4:8
9. Standard BOD is measured at
 - (A) 20° C- 1 day
 - (B) 25° C- 3 day
 - (C) 20° C- 5 day
 - (D) 30° C- 5 day
10. Rapid hardening cement is suitable for
 - (A) hot weather concreting
 - (B) cold weather concreting
 - (C) rainy weather concreting
 - (D) in every weather condition
11. For a well conditioned triangle no angle should be less than
 - (A) 20°
 - (B) 30°
 - (C) 45°
 - (D) 60°

12. In G+4 building, the 'G' stands for
(A) Gird
(B) Gross
(C) Ground
(D) Glass
13. Inorganic soils with low compressibility are represented by
(A) MH
(B) SL
(C) ML
(D) CH
14. After storage, the strength of cement
(A) decreases
(B) increases
(C) remains same
(D) may increase or decrease
15. The process by which timber is made sap free
(A) Seasoning
(B) Studding
(C) Moulding
(D) Nosing
16. In normal circumstances where ordinary Portland cement is used, removal of form work for props to slab, spanning upto 4-5 m is done after
(A) 14 days
(B) 28 days
(C) 7 days
(D) 3 days
17. In R.C.C. beam side reinforcement is provided if its depth exceeds
(A) 300 mm
(B) 500 mm
(C) 700 mm
(D) 750 mm
18. Fittings that are placed at the ends of soil pipes or sullage pipes to prevent the passage of foul gases from the pipes to outside is known as
(A) One pipe system
(B) Two pipe system
(C) Three pipe system
(D) Traps
19. The treatment of water is done by adding
(A) Bleaching powder
(B) Epoxy powder
(C) Nylon powder
(D) Metallic powder
20. The Centre of Gravity of a triangle lies at the point of
(A) Concurrence of the medians
(B) Intersection of its altitudes
(C) Intersection of bisector of angles
(D) Intersection of diagonals
21. The brick bond which shows alternate courses of header and stretchers is known as
(A) Flemish bond
(B) Facing bond
(C) Raking bond
(D) English bond
22. This type of floor is mostly suitable or is used in *kutchha* village house
(A) Mud flooring
(B) Mosaic flooring
(C) Rubber flooring
(D) Glass flooring
23. A fully saturated soil is said to be
(A) One phase system
(B) Two phase system with soil and air
(C) Two phase system with soil and water
(D) Three phase system

24. A 200mm thick wall made of modular bricks is 5m long between cross walls and 3.8m clear height between RCC slabs at top and bottom. The slenderness ratio of the wall is

- (A) 15
- (B) 19
- (C) 20
- (D) 25

25. Bottom surface of a window opening is known as

- (A) Corbel
- (B) Sill
- (C) Cornice
- (D) Coping

26. A number of forces acting at a point will be in equilibrium if

- (A) their total sum is zero.
- (B) two resolved parts in two directions at right angles are equal.
- (C) sum of resolved parts in any two perpendicular directions are both zero.
- (D) all of them are inclined equally.

27. The unit of kinematic viscosity is

- (A) gm/cm-sec^2
- (B) dyne-sec/cm^2
- (C) $\text{gm/cm}^2\text{-sec}$
- (D) cm^2/sec

28. If 'H' is the height of wall between centers of supports, then the effective height of wall where concrete floors have a bearing on wall irrespective of the direction of span will be

- (A) 0.75H
- (B) 0.85H
- (C) 1 H
- (D) 1.5H

29. To measure distance we use

- (A) Tape
- (B) Prismatic compass
- (C) Trough Compass
- (D) Spirit level

30. For orientation of building in West Bengal best orientation is considered to be along east and west facing which direction ?

- (A) South
- (B) North
- (C) South-west
- (D) North-east

31. For treatment of sewage we use

- (A) Water tank
- (B) Septic tank
- (C) Gas tank
- (D) Liquid tank

32. Moist curing for concrete made of ordinary Portland cement and placed under normal condition is done for at least

- (A) 7 days
- (B) 28 days
- (C) 14 days
- (D) 3 days

33. Size of right angled fillet weld is given by

- (A) $0.707 \times \text{throat thickness}$
- (B) $0.414 \times \text{throat thickness}$
- (C) $2.0 \times \text{throat thickness}$
- (D) throat thickness

34. Sensitivity of soil can be defined as

- (A) percentage of volume change of soil under saturated condition.
- (B) ratio of compressive strength of unconfined undisturbed soil to that of soil in a remoulded state.
- (C) ratio of volume of voids to volume of solids.
- (D) None of the above

35. Beam like horizontal structural flexural member, used to span over the opening of doors, windows is known as

- (A) Lintel
- (B) Beam
- (C) Slab
- (D) Column

36. Which of the following solid waste disposal method is ecologically most acceptable?

- (A) Sanitary landfill
- (B) Incineration
- (C) Composting
- (D) Pyrolysis

37. Fineness modulus of medium sand varies in between

- (A) 2.6 to 2.9
- (B) 2.2 to 2.6
- (C) 2.9 to 3.2
- (D) 2.4 to 2.6

38. The tool used by masons for spreading mortar

- (A) Trowel
- (B) Claw tool
- (C) Plumb bob
- (D) Square

39. The space of the wall between facing and backing is known as

- (A) Heading
- (B) Jointing
- (C) Hearting
- (D) Plinth

40. Burnt clay bricks are generally classified in

- (A) 7 categories
- (B) 8 categories
- (C) 4 categories
- (D) 6 categories

41. Bricks are obtained by molding

- (A) mortar
- (B) clay
- (C) sand
- (D) plastic

42. Which of the following represent hardest grade of bitumen ?

- (A) 30/40
- (B) 60/70
- (C) 80/100
- (D) 100/120

43. In building construction D.P.C. stands for

- (A) Deal Polish Course
- (B) Damp Proof Course
- (C) Deep Pond Course
- (D) Direct Poor Conduct

44. Raft foundation is a type of

- (A) Deep foundation
- (B) Caisson foundation
- (C) Shallow foundation
- (D) Pile foundation

45. The process of joining two wooden pieces at an angle is known as

- (A) Mitring
- (B) Grounds
- (C) Rebating
- (D) Seasoning

46. The joint which is adopted when a timber piece is to be placed between two members which are previously fixed is known as

- (A) Bridle joint
- (B) Housed joint
- (C) Chase mortise joint
- (D) Bull joint

47. By compacting the soil we improve

- (A) Bearing capacity of soil
- (B) The drainage capacity of soil
- (C) Spread of building
- (D) Eccentricity of building

48. The portion of structure which transfer load to the soil is known as

- (A) Beam
- (B) Slab
- (C) Column
- (D) Foundation

49. Maximum bending moment about the face of the column is one of the consideration to determine

- (A) depth of the footing
- (B) depth of the slab
- (C) width of the footing
- (D) width of column

50. For compaction of soil we use

- (A) Dumper
- (B) Power shovel
- (C) Back hoe
- (D) Road roller

51. When two forces, each equal to P , act at 90° to each other, then the resultant will be

- (A) P
- (B) $P\sqrt{2}$
- (C) $P/\sqrt{2}$
- (D) $2P$

52. The maximum permissible eccentricity for no tension at the base of a gravity dam is

- (A) $B/2$
- (B) $B/3$
- (C) $B/4$
- (D) $B/6$

53. Which of the following methods of plane table surveying is used to locate the position of an inaccessible point?

- (A) Radiation
- (B) Intersection
- (C) Traversing
- (D) Resection

54. Earthquake forces are calculated as per IS code

- (A) IS 1893
- (B) IS 1983
- (C) IS 1389
- (D) IS 9318

55. Outside vertical members of framework of a shutter are known as

- (A) Putty
- (B) Louver
- (C) Reveal
- (D) Style

56. The effective length of R.C.C. column which is effectively held in position at both ends, restrained against rotation at one end will be

- (A) $0.65 L$
- (B) $1.0 L$
- (C) $0.8 L$
- (D) $1.2 L$

57. A metallic tape is made of

- (A) Steel
- (B) Inver
- (C) Linen
- (D) Cloth & wires

58. A series of closely spaced contour lines represent a

- (A) Steep slope
- (B) Gentle slope
- (C) Uniform slope
- (D) Plane surface

59. The ridge formed by the intersection of two sloping surfaces having an exterior angle greater than 180° is known as

- (A) Valley
- (B) Hip
- (C) Common rafter
- (D) Ridge

60. One kilo Pascal is equivalent to
 (A) 1000 N/mm²
 (B) 1000 N/cm²
 (C) 1000 N/m²
 (D) 1000 N/dm²
61. Agonic line is the line joining points having
 (A) zero magnetic declination.
 (B) minimum magnetic declination.
 (C) maximum magnetic declination.
 (D) same magnetic declination.
62. Which of the following is the weakness of the BAR chart?
 (A) Interdependencies of activities
 (B) Project progress
 (C) Uncertainties
 (D) All of the above
63. In bathroom and W.C., the term W.C. stands for
 (A) Water Closet
 (B) Wash Counter
 (C) Water Counter
 (D) Waste Closet
64. For designing masonry components of a structure, seismic forces provision in the design calculation is not necessary for buildings constructed in
 (A) Zone I only
 (B) Zone I & II
 (C) Zone I, II & III
 (D) Zone I, II, III & IV
65. Bulking of sand means, increase in its
 (A) Area
 (B) Void
 (C) Volume
 (D) Porosity

PART II
ENGLISH

Total Marks : 13

66. Choose the appropriate collective noun for the given sentence:

A group of birds

- (A) herd
 (B) litter
 (C) flock
 (D) bevy

Apply suitable adjectives to fill the blanks for question no. 67 and 68:

67. Lipika is _____ than Latika.

- (A) beautiful
 (B) more beautiful
 (C) most beautiful
 (D) loveliest

68. Which is the _____ continent?

- (A) small
 (B) smaller
 (C) smallest
 (D) more smaller

Choose the correct phrasal verbs to replace the words underlined for question no. 69 and 70:

69. The price of petrol has increased.

- (A) Gone up
 (B) Gone down
 (C) Go off
 (D) Go over

70. Stop the fan.

- (A) Turn on
 (B) Turn out
 (C) Turn off
 (D) Turn up

71. Nearest meaning of 'Maiden' is

- (A) Maid servant
 (B) An unmarried girl
 (C) Old woman
 (D) Old man

72. Give the simple past form of the verb 'Be'.

- (A) Am
- (B) Been
- (C) Was
- (D) Is

Choose the correct answer from the given alternatives for question no. 73 and 74:

73. He _____ till today.

- (A) has not come
- (B) did not come
- (C) does not come
- (D) do not come

74. Perhaps he _____ here tomorrow.

- (A) reach
- (B) shall reach
- (C) will reach
- (D) will be reach

75. Choose the correct form of negative present perfect continuous tense from the given alternatives.

- (A) I have been working.
- (B) Have I been working?
- (C) I have not been working.
- (D) I not have been working.

76. Soma lives _____ a village. (Insert appropriate preposition)

- (A) on
- (B) in
- (C) at
- (D) to

Report the following sentences in direct/ indirect speech from the following for question no. 77 and 78:

77. Father said to me, "Go home at once".

- (A) Father ordered me to go home at once.
- (B) Father asked me to go home at once.
- (C) Father requested me to go home at once.
- (D) Father advised me to go home at once.

78. The child said, "what a beautiful sight!"

- (A) The child exclaimed that what a beautiful sight.
- (B) The child exclaimed with delight that the sight was very beautiful.
- (C) The child exclaimed said what a beautiful sight.
- (D) The child exclaimed said delight that the sight was very beautiful.

PART III

GENERAL KNOWLEDGE

Total Marks : 07

79. Lassa fever which was recently in news occurs in

- (A) West Africa
- (B) South-East Asia
- (C) Middle East
- (D) Latin America

80. The Chairman of the Rajya Sabha is

- (A) the Leader of the Opposition.
- (B) nominated by the President of India.
- (C) the Vice-President of India.
- (D) nominated by the Vice-President of India.

81. In which year, Kanyashree Prakalpa was launched?

- (A) 2011
- (B) 2012
- (C) 2013
- (D) 2014

82. Who was recently appointed as Head of Mission and Chief Military Observer for UN Military Observer Group in India and Pakistan (UNMOGIP)?

- (A) Jose Eladio Alcain
- (B) Peter Thomson
- (C) Per Gustaf Lodin
- (D) Delali Johnson Sakyi

83. In recently released Global Innovation Index (GII) 2018, India was ranked

- (A) 70th
- (B) 130th
- (C) 57th
- (D) 45th

84. At which of the following places, the Pole Star appears at the highest angle in the sky ?

- (A) Sandakphu
- (B) Falut
- (C) Darjeeling
- (D) Kalimpong

85. Tennis player Andy Murray belongs to which country?

- (A) Italy
- (B) France
- (C) Belgium
- (D) United Kingdom

Space for Rough Work

NS

C-12

Space for Rough Work

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO.

TEST BOOKLET SERIES

TEST BOOKLET

Time allowed : 90 Minutes

Full marks : 85

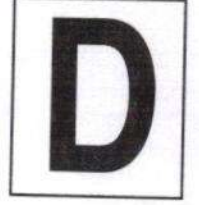
Answer *all* the questions.

All questions carry 1 mark each.

005248

Serial No.

Roll No.



উত্তর লেখার পূর্বে নিম্নলিখিত নির্দেশাবলী ভাল করে পড়ুন

নির্দেশাবলী

- প্রশ্ন-পুস্তিকাতে 85টি Multiple Choice Answer Type প্রশ্ন দেওয়া আছে। নির্দেশ পাওয়ার পর প্রশ্ন-পুস্তিকার সব পৃষ্ঠা খুলে, সব পৃষ্ঠা/প্রশ্ন পর পর আছে কিনা বা ছাপা/ছেঁড়া/পুনরাবৃত্তি আছে কিনা দেখে নিন। যদি প্রশ্ন-পুস্তিকা এবং আপনাকে দেওয়া OMR উত্তরপত্রে কোথাও কোনো ত্রুটি থাকে সঙ্গে সঙ্গে পরীক্ষা তত্ত্বাবধায়ককে জানান এবং বদলে নিন।
- নির্দেশ পাওয়ার পর, OMR উত্তরপত্রে আপনার নিজের সম্বন্ধে যে সাধারণ তথ্যগুলি জানতে চাওয়া হয়েছে তা পূরণ করুন। উত্তরপত্রের 6 ক্রমিক সংখ্যায় প্রদত্ত ঘরে (BOX-এ) রোল নম্বর লিখুন এবং তার অনুরূপ বৃত্তগুলিকে ভরাট করুন। আপনি যদি নির্দেশমতো উত্তরপত্রে বিশদ তথ্যাদি এবং 6 ক্রমিক সংখ্যায় অনুরূপ বৃত্তগুলিকে ভরাট করতে ব্যর্থ হন এবং এর পরিণামে আপনার উত্তরপত্রের মূল্যায়নের ক্ষেত্রে যদি কোনো অসুবিধে হয় তার জন্য ব্যক্তিগতভাবে আপনি দায়ী থাকবেন।
- OMR উত্তরপত্রে যে 'Bar Code' ছাপা আছে তাতে কোনো দাগ দেওয়া বা কোনো বিকৃতি ঘটানো যাবে না, অন্যথায় প্রার্থীর প্রার্থীপদ বাতিল হয়ে যাবে। OMR উত্তরপত্রটি ভাঁজ করবেন না বা তাতে অযথা অন্য কোনো দাগ দেবেন না।
- প্রশ্ন-পুস্তিকার প্রত্যেক প্রশ্নের সঙ্গে 4টি করে উত্তর দেওয়া আছে। উত্তরগুলি A, B, C ও D এই 4টি ইংরেজি বর্ণ দিয়ে চিহ্নিত করা আছে। প্রতিটি প্রশ্ন মন দিয়ে পড়ুন এবং আপনার মতে 4টি উত্তরের মধ্যে সঠিক উত্তরটি বাছুন। OMR উত্তরপত্রে প্রতিটি প্রশ্নের ক্রমিক সংখ্যা অনুসারে নির্দিষ্ট বৃত্তটি সম্পূর্ণ গাঢ় করে ভরাট করুন। উত্তর চিহ্নিত করার জন্য কেবলমাত্র কালো/নীল কালির বল পয়েন্ট পেন (Black/Blue Ink Ball Point Pen) ব্যবহার করুন।
- কোনো একটি নির্দিষ্ট প্রশ্নের উত্তর হিসাবে যদি উত্তরপত্রে একাধিক বৃত্ত ভরাট করা হয় তাহলে তা ভুল উত্তর হিসাবে পরিগণিত হবে। যদি কোনো প্রশ্নে 'B' সঠিক উত্তর হয়, তাহলে নিম্নে প্রদর্শিত উপায়ে চিহ্নিত করুন :
সঠিক পদ্ধতি :

(A)	(B)	(C)	(D)
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ভুল পদ্ধতি :

(A)	(B)	(C)	(D)	অথবা
(A)	(B)	(C)	(D)	অথবা
(A)	(B)	(C)	(D)	অথবা
(A)	(B)	(C)	(D)	অথবা
(A)	(B)	(C)	(D)	অথবা
- প্রশ্ন-পুস্তিকার শেষের ফাঁকা জায়গা প্রয়োজনে আপনার খসড়া কাজের (Rough Work) জন্য ব্যবহার করতে পারেন। পাতাটি প্রশ্ন-পুস্তিকা থেকে ছিঁড়ে ফেলবেন না।
- পরীক্ষার পর পরীক্ষা তত্ত্বাবধায়কের হাতে আপনার OMR উত্তরপত্রটি জমা দেবেন। প্রশ্ন-পুস্তিকাটি আপনার কাছে রেখে দেবেন।
- উত্তরপত্রটির পরিকল্পনা করা হয়েছে কম্পিউটারের মাধ্যমে মূল্যায়নের উদ্দেশ্যে। উপরের নির্দেশাবলী এবং OMR উত্তরপত্রে প্রদর্শিত নির্দেশাবলী যথাযথভাবে অনুসরণ না করলে এই মূল্যায়নের কাজ দুরূহ হয়ে উঠবে। এই নির্দেশাবলী পূর্ণভাবে অনুসৃত না হলে পরিণামে চূড়ান্ত ক্ষতি পরীক্ষার্থীরই হবে।
- কোনো পরীক্ষার্থীর মোবাইল ফোন, ক্যালকুলেটর অথবা কোনো প্রকারের ইলেকট্রনিক্স গ্যাজেট ব্যবহার করার অনুমতি নেই।
- Negative Marking** আছে। প্রতি 3টি ভুল উত্তরের জন্য 1 নম্বর কাটা যাবে।

[Please Turn Over]

PART I
ENGINEERING (CIVIL)

Total Marks : 65

1. If 'H' is the height of wall between centers of supports, then the effective height of wall where concrete floors have a bearing on wall irrespective of the direction of span will be
 - (A) $0.75H$
 - (B) $0.85H$
 - (C) $1H$
 - (D) $1.5H$
2. The maximum permissible eccentricity for no tension at the base of a gravity dam is
 - (A) $B/2$
 - (B) $B/3$
 - (C) $B/4$
 - (D) $B/6$
3. The space of the wall between facing and backing is known as
 - (A) Heading
 - (B) Jointing
 - (C) Hearting
 - (D) Plinth
4. Which of the following methods of plane table surveying is used to locate the position of an inaccessible point?
 - (A) Radiation
 - (B) Intersection
 - (C) Traversing
 - (D) Resection
5. Beam like horizontal structural flexural member, used to span over the opening of doors, windows is known as
 - (A) Lintel
 - (B) Beam
 - (C) Slab
 - (D) Column
6. The brick bond which shows alternate courses of header and stretchers is known as
 - (A) Flemish bond
 - (B) Facing bond
 - (C) Raking bond
 - (D) English bond
7. Burnt clay bricks are generally classified in
 - (A) 7 categories
 - (B) 8 categories
 - (C) 4 categories
 - (D) 6 categories
8. A 200mm thick wall made of modular bricks is 5m long between cross walls and 3.8m clear height between RCC slabs at top and bottom. The slenderness ratio of the wall is
 - (A) 15
 - (B) 19
 - (C) 20
 - (D) 25
9. For treatment of sewage we use
 - (A) Water tank
 - (B) Septic tank
 - (C) Gas tank
 - (D) Liquid tank
10. Sensitivity of soil can be defined as
 - (A) percentage of volume change of soil under saturated condition.
 - (B) ratio of compressive strength of unconfined undisturbed soil to that of soil in a remoulded state.
 - (C) ratio of volume of voids to volume of solids.
 - (D) None of the above
11. Fineness modulus of medium sand varies in between
 - (A) 2.6 to 2.9
 - (B) 2.2 to 2.6
 - (C) 2.9 to 3.2
 - (D) 2.4 to 2.6
12. The splayed surface prepared on the top of an abutment or pier to receive the arch is known as
 - (A) Arch ring
 - (B) Intrados
 - (C) Skew back
 - (D) Springers

13. Earthquake forces are calculated as per IS code

- (A) IS 1893
- (B) IS 1983
- (C) IS 1389
- (D) IS 9318

14. A free standing brick wall 20 cm thick is subjected to a wind pressure of 75kg/m^2 . The maximum height of wall from stability consideration is

- (A) 0.64m
- (B) 0.96m
- (C) 1.28m
- (D) 1.5m

15. A number of forces acting at a point will be in equilibrium if

- (A) their total sum is zero.
- (B) two resolved parts in two directions at right angles are equal.
- (C) sum of resolved parts in any two perpendicular directions are both zero.
- (D) all of them are inclined equally.

16. Size of right angled fillet weld is given by

- (A) $0.707 \times \text{throat thickness}$
- (B) $0.414 \times \text{throat thickness}$
- (C) $2.0 \times \text{throat thickness}$
- (D) throat thickness

17. Rapid hardening cement is suitable for

- (A) hot weather concreting
- (B) cold weather concreting
- (C) rainy weather concreting
- (D) in every weather condition

18. Which of the following represent hardest grade of bitumen ?

- (A) 30/40
- (B) 60/70
- (C) 80/100
- (D) 100/120

19. The joint which is adopted when a timber piece is to be placed between two members which are previously fixed is known as

- (A) Bridle joint
- (B) Housed joint
- (C) Chase mortise joint
- (D) Bull joint

20. Bulking of sand means, increase in its

- (A) Area
- (B) Void
- (C) Volume
- (D) Porosity

21. The treatment of water is done by adding

- (A) Bleaching powder
- (B) Epoxy powder
- (C) Nylon powder
- (D) Metallic powder

22. In building construction D.P.C. stands for

- (A) Deal Polish Course
- (B) Damp Proof Course
- (C) Deep Pond Course
- (D) Direct Poor Conduct

23. A series of closely spaced contour lines represent a

- (A) Steep slope
- (B) Gentle slope
- (C) Uniform slope
- (D) Plane surface

24. Consider the following statements:

The use of relatively weak mortar

1. will accommodate movements due to loads and cracking if any, and will be distributed as thin hair cracks which are less noticeable or harmful.
2. will result in reduction of stresses due to differential expansion of masonry units.

- (A) 1 alone is correct.
- (B) 2 alone is correct.
- (C) Both 1 & 2 are correct.
- (D) Neither 1 nor 2 is correct.

25. Bricks are obtained by molding
(A) mortar
(B) clay
(C) sand
(D) plastic
26. Standard BOD is measured at
(A) 20°C - 1 day
(B) 25°C - 3 day
(C) 20°C - 5 day
(D) 30°C - 5 day
27. In G+4 building, the 'G' stands for
(A) Gird
(B) Gross
(C) Ground
(D) Glass
28. For compaction of soil we use
(A) Dumper
(B) Power shovel
(C) Back hoe
(D) Road roller
29. Inorganic soils with low compressibility are represented by
(A) MH
(B) SL
(C) ML
(D) CH
30. By compacting the soil we improve
(A) Bearing capacity of soil
(B) The drainage capacity of soil
(C) Spread of building
(D) Eccentricity of building
31. In R.C.C. beam side reinforcement is provided if its depth exceeds
(A) 300 mm
(B) 500 mm
(C) 700 mm
(D) 750 mm
32. The effective length of R.C.C. column which is effectively held in position at both ends, restrained against rotation at one end will be
(A) $0.65 L$
(B) $1.0 L$
(C) $0.8 L$
(D) $1.2 L$
33. One kilo Pascal is equivalent to
(A) 1000 N/mm^2
(B) 1000 N/cm^2
(C) 1000 N/m^2
(D) 1000 N/dm^2
34. Maximum bending moment about the face of the column is one of the consideration to determine
(A) depth of the footing
(B) depth of the slab
(C) width of the footing
(D) width of column
35. Deriving the maximum benefit from minimum dimension of the room without cramping of the plan, is known as
(A) Circulation
(B) Grouping
(C) Prospect
(D) Roominess
36. Live load on roof and floors are considered as
(A) point load.
(B) uniformly distributed load.
(C) combination of point load and uniformly distributed load.
(D) inclined point load.

37. For underwater concreting cement content as per code shall be at least

- (A) 450 kg/ m³
- (B) 400 kg/ m³
- (C) 350 kg/ m³
- (D) 300 kg/ m³

38. When two forces , each equal to P , act at 90° to each other, then the resultant will be

- (A) P
- (B) $P\sqrt{2}$
- (C) $P/\sqrt{2}$
- (D) 2P

39. The process by which timber is made sap free

- (A) Seasoning
- (B) Studding
- (C) Moulding
- (D) Nosing

40. In bathroom and W.C., the term W.C. stands for

- (A) Water Closet
- (B) Wash Counter
- (C) Water Counter
- (D) Waste Closet

41. Nominal mix concrete of M20 grade contains cement, sand, coarse aggregate in the ratio of

- (A) 1:2:4
- (B) 1:1.5:3
- (C) 1:3:6
- (D) 1:4:8

42. A fully saturated soil is said to be

- (A) One phase system
- (B) Two phase system with soil and air
- (C) Two phase system with soil and water
- (D) Three phase system

43. To measure distance we use

- (A) Tape
- (B) Prismatic compass
- (C) Trough Compass
- (D) Spirit level

44. For the purpose of determining the seismic forces, India has been classified into how many zones?

- (A) 3
- (B) 2
- (C) 4
- (D) 5

45. Which of the following is the weakness of the BAR chart?

- (A) Interdependencies of activities
- (B) Project progress
- (C) Uncertainties
- (D) All of the above

46. The ridge formed by the intersection of two sloping surfaces having an exterior angle greater than 180° is known as

- (A) Valley
- (B) Hip
- (C) Common rafter
- (D) Ridge

47. In normal circumstances where ordinary Portland cement is used, removal of form work for props to slab, spanning upto 4.5 m is done after

- (A) 14 days
- (B) 28 days
- (C) 7 days
- (D) 3 days

48. Fittings that are placed at the ends of soil pipes or sullage pipes to prevent the passage of foul gases from the pipes to outside is known as

- (A) One pipe system
- (B) Two pipe system
- (C) Three pipe system
- (D) Traps

49. Bottom surface of a window opening is known as
(A) Corbel
(B) Sill
(C) Cornice
(D) Coping
50. For designing masonry components of a structure, seismic forces provision in the design calculation is not necessary for buildings constructed in
(A) Zone I only
(B) Zone I & II
(C) Zone I, II & III
(D) Zone I, II, III & IV
51. For orientation of building in West Bengal best orientation is considered to be along east and west facing which direction?
(A) South
(B) North
(C) South-west
(D) North-east
52. For a well conditioned triangle no angle should be less than
(A) 20°
(B) 30°
(C) 45°
(D) 60°
53. Moist curing for concrete made of ordinary Portland cement and placed under normal condition is done for at least
(A) 7 days
(B) 28 days
(C) 14 days
(D) 3 days
54. The unit of kinematic viscosity is
(A) gm/cm-sec^2
(B) dyne-sec/cm^2
(C) $\text{gm/cm}^2\text{-sec}$
(D) cm^2/sec
55. Which of the following solid waste disposal method is ecologically most acceptable?
(A) Sanitary landfill
(B) Incineration
(C) Composting
(D) Pyrolysis
56. The tool used by masons for spreading mortar
(A) Trowel
(B) Claw tool
(C) Plumb bob
(D) Square
57. Raft foundation is a type of
(A) Deep foundation
(B) Caisson foundation
(C) Shallow foundation
(D) Pile foundation
58. The process of joining two wooden pieces at an angle is known as
(A) Mitring
(B) Grounds
(C) Rebating
(D) Seasoning
59. The portion of structure which transfer load to the soil is known as
(A) Beam
(B) Slab
(C) Column
(D) Foundation

60. After storage, the strength of cement
 (A) decreases
 (B) increases
 (C) remains same
 (D) may increase or decrease
61. A metallic tape is made of
 (A) Steel
 (B) Inver
 (C) Linen
 (D) Cloth & wires
62. This type of floor is mostly suitable or is used in *kutchha* village house
 (A) Mud flooring
 (B) Mosaic flooring
 (C) Rubber flooring
 (D) Glass flooring

63. Outside vertical members of framework of a shutter are known as
 (A) Putty
 (B) Louver
 (C) Reveal
 (D) Style
64. Agonic line is the line joining points having
 (A) zero magnetic declination.
 (B) minimum magnetic declination.
 (C) maximum magnetic declination.
 (D) same magnetic declination.
65. The Centre of Gravity of a triangle lies at the point of
 (A) Concurrence of the medians
 (B) Intersection of its altitudes
 (C) Intersection of bisector of angles
 (D) Intersection of diagonals

PART II
ENGLISH

Total Marks : 13

66. Choose the appropriate collective noun for the given sentence:
 A group of birds
 (A) herd
 (B) litter
 (C) flock
 (D) bevy

Report the following sentences in direct/ indirect speech from the following for question no. 67 and 68:

67. Father said to me, "Go home at once".
 (A) Father ordered me to go home at once.
 (B) Father asked me to go home at once.
 (C) Father requested me to go home at once.
 (D) Father advised me to go home at once.
68. The child said, "what a beautiful sight!"
 (A) The child exclaimed that what a beautiful sight.
 (B) The child exclaimed with delight that the sight was very beautiful.
 (C) The child exclaimed said what a beautiful sight.
 (D) The child exclaimed said delight that the sight was very beautiful.

69. Choose the correct form of negative present perfect continuous tense from the given alternatives.
 (A) I have been working.
 (B) Have I been working?
 (C) I have not been working.
 (D) I not have been working.

70. Soma lives _____ a village. (Insert appropriate preposition)
 (A) on
 (B) in
 (C) at
 (D) to

Choose the correct answer from the given alternatives for question no. 71 and 72:

71. He _____ till today.
 (A) has not come
 (B) did not come
 (C) does not come
 (D) do not come

72. Perhaps he _____ here tomorrow.

- (A) reach
- (B) shall reach
- (C) will reach
- (D) will be reach

73. Nearest meaning of 'Maiden' is

- (A) Maid servant
- (B) An unmarried girl
- (C) Old woman
- (D) Old man

74. Give the simple past form of the verb 'Be'.

- (A) Am
- (B) Been
- (C) Was
- (D) Is

Choose the correct phrasal verbs to replace the words underlined for question no. 75 and 76:

75. The price of petrol has increased.

- (A) Gone up
- (B) Gone down
- (C) Go off
- (D) Go over

76. Stop the fan.

- (A) Turn on
- (B) Turn out
- (C) Turn off
- (D) Turn up

Apply suitable adjectives to fill the blanks for question no. 77 and 78:

77. Lipika is _____ than Latika.

- (A) beautiful
- (B) more beautiful
- (C) most beautiful
- (D) loveliest

78. Which is the _____ continent?

- (A) small
- (B) smaller
- (C) smallest
- (D) more smaller

PART III

GENERAL KNOWLEDGE

Total Marks : 07

79. At which of the following places, the Pole Star appears at the highest angle in the sky ?

- (A) Sandakphu
- (B) Falut
- (C) Darjeeling
- (D) Kalimpong

80. In which year, Kanyashree Prakalpa was launched?

- (A) 2011
- (B) 2012
- (C) 2013
- (D) 2014

81. Lassa fever which was recently in news occurs in

- (A) West Africa
- (B) South-East Asia
- (C) Middle East
- (D) Latin America

82. The Chairman of the Rajya Sabha is

- (A) the Leader of the Opposition.
- (B) nominated by the President of India.
- (C) the Vice-President of India.
- (D) nominated by the Vice-President of India.

83. In recently released Global Innovation Index (GII) 2018, India was ranked

- (A) 70th
- (B) 130th
- (C) 57th
- (D) 45th

84. Who was recently appointed as Head of Mission and Chief Military Observer for UN Military Observer Group in India and Pakistan (UNMOGIP)?

- (A) Jose Eladio Alcain
- (B) Peter Thomson
- (C) Per Gustaf Lodin
- (D) Delali Johnson Sakyi

85. Tennis player Andy Murray belongs to which country?

- (A) Italy
- (B) France
- (C) Belgium
- (D) United Kingdom

Space for Rough Work

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