अधिव्याख्याता, स्वयंचल अभियांत्रिकी, शासकीय तंत्र नि... परीक्षा-2013
परीक्षा दिनांक - 22 जून, 2014

M

2014

CODE : U...

प्रश्नपुस्तिका क्रमांक
BOOKLET NO.

प्रश्नपुस्तिका

चाळणी परीक्षा

स्वयंचल अभियांत्रिकी

वेळ : 3 (तीन) तास

एकूण प्रश्न : 80
एकूण गुण : 200

सूचना

(1) सदर प्रश्नपुस्तिकेत **80** अनिवार्य प्रश्न आहेत. उमेदवारांनी प्रश्नांची उत्तरे लिहिण्यास सुरुवात करण्यापूर्वी या प्रश्नपुस्तिकेत सर्व प्रश्न आहेत किंवा नाहीत याची खात्री करून घ्यावी. असा तसेच अन्य काही दोष आढळल्यास ही प्रश्नपुस्तिका समवेक्षकांकडून लगेच बदलून घ्यावी.

(2) आपला परीक्षा-क्रमांक ह्या चौकोनांत **न विसरता बॉलपेनने** लिहावा.

परीक्षा-क्रमांक								
	केंद्राची संकेताक्षरे							शेवटचा अंक

(3) वर छापलेला प्रश्नपुस्तिका क्रमांक तुमच्या उत्तरपत्रिकेवर विशिष्ट जागी उत्तरपत्रिकेवरील सूचनेप्रमाणे **न विसरता नमूद करावा.**

(4) या प्रश्नपुस्तिकेतील प्रत्येक प्रश्नाला 4 पर्यायी उत्तरे सुचविली असून त्यांना 1, 2, 3 आणि 4 असे क्रमांक दिलेले आहेत. त्या चार उत्तरांपैकी सर्वात योग्य उत्तराचा क्रमांक उत्तरपत्रिकेवरील सूचनेप्रमाणे तुमच्या उत्तरपत्रिकेवर नमूद करावा. अशा प्रकारे उत्तरपत्रिकेवर उत्तरक्रमांक नमूद करताना तो संबंधित प्रश्नक्रमांकासमोर छायांकित करून दर्शविला जाईल याची काळजी घ्यावी. **ह्याकरिता फक्त काळ्या शाईचे बॉलपेन वापरावे, पेन्सिल वा शाईचे पेन वापरू नये.**

(5) सर्व प्रश्नांना समान गुण आहेत. यास्तव सर्व प्रश्नांची उत्तरे द्यावीत. घाईमुळे चुका होणार नाहीत याची दक्षता घेऊनच शक्य तितक्या वेगाने प्रश्न सोडवावेत. क्रमाने प्रश्न सोडविणे श्रेयस्कर आहे पण **एखादा प्रश्न कठीण वाटल्यास त्यावर वेळ न घालविता पुढील प्रश्नाकडे वळावे.** अशा प्रकारे शेवटच्या प्रश्नापर्यंत पोहोचल्यानंतर वेळ शिल्लक राहिल्यास कठीण म्हणून वगळलेल्या प्रश्नांकडे परतणे सोईस्कर ठरेल.

(6) उत्तरपत्रिकेत एकदा नमूद केलेले उत्तर खोडता येणार नाही. नमूद केलेले उत्तर खोडून नव्याने उत्तर दिल्यास ते तपासले जाणार नाही.

(7) **प्रस्तुत परीक्षेच्या उत्तरपत्रिकांचे मूल्यांकन करताना उमेदवाराच्या उत्तरपत्रिकेतील योग्य उत्तरांनाच गुण दिले जातील. तसेच "उमेदवाराने वस्तुनिष्ठ बहुपर्यायी स्वरूपाच्या प्रश्नांची दिलेल्या चार पर्यायापैकी सर्वात योग्य उत्तरेच उत्तरपत्रिकेत नमूद करावीत. अन्यथा त्यांच्या उत्तरपत्रिकेत सोडविलेल्या प्रत्येक चार चुकीच्या उत्तरांसाठी एका प्रश्नाचे गुण वजा करण्यात येतील".**

ताकीद

ह्या प्रश्नपत्रिकेसाठी आयोगाने विहित केलेली वेळ संपेपर्यंत ही प्रश्नपुस्तिका आयोगाची मालमत्ता असून ती परीक्षाकक्षात उमेदवाराला परीक्षेसाठी वापरण्यास देण्यात येत आहे. ही वेळ संपेपर्यंत सदर प्रश्नपुस्तिकेची प्रत/प्रती, किंवा सदर प्रश्नपुस्तिकेतील काही आशय कोणत्याही स्वरूपात प्रत्यक्ष वा अप्रत्यक्षपणे कोणत्याही व्यक्तीस पुरविणे, तसेच प्रसिद्ध करणे हा गुन्हा असून अशी कृती करणाऱ्या व्यक्तीवर शासनाने जारी केलेल्या "परीक्षांमध्ये होणाऱ्या गैरप्रकारांना प्रतिबंध करण्याबाबतचा अधिनियम-82" यातील तरतुदीनुसार तसेच प्रचलित कायद्याच्या तरतुदीनुसार कारवाई करण्यात येईल व दोषी व्यक्ती कमाल एक वर्षाच्या कारावासाच्या आणि/किंवा रुपये एक हजार रकमेच्या दंडाच्या शिक्षेस पात्र होईल.

तसेच ह्या प्रश्नपत्रिकेसाठी विहित केलेली वेळ संपण्याआधी ही प्रश्नपुस्तिका अनधिकृतपणे बाळगणे हा सुद्धा गुन्हा असून तसे करणारी व्यक्ती आयोगाच्या कर्मचारीवृंदापैकी, तसेच परीक्षेच्या पर्यवेक्षकीयवृंदापैकी असली तरीही अशा व्यक्तीविरूद्ध उक्त अधिनियमानुसार कारवाई करण्यात येईल व दोषी व्यक्ती शिक्षेस पात्र होईल.

पुढील सूचना प्रश्नपुस्तिकेच्या अंतिम पृष्ठावर पहा

पर्यवेक्षकांच्या सूचनेविना हे सील उघडू नये

SEAL

कच्च्या कामासाठी जागा / SPACE FOR ROUGH WORK

Note : (i) *All* questions are ***compulsory***.

(ii) *All* questions carry ***equal*** marks.

(iii) Assume standard data, if necessary.

(iv) Use of Scientific Calculator is ***permitted***.

---

1. Specific heat is the amount of heat required to raise the temperature :

(1) by unit degree of a substance (2) by unit degree of unit mass

(3) of a unit mass by 10 (4) None of the above

---

2. When heat is supplied at constant volume of a gas, it :

(1) increases the internal energy (2) increases the temperature

(3) does some external work (4) All of the above

---

3. For ductile materials, the most appropriate failure theory is :

(1) Maximum shear stress theory

(2) Maximum principal stress theory

(3) Maximum principal strain theory

(4) Shear strain energy theory

---

4. In case of closed coil spring carrying an axial loading, the spring is subjected to :

(1) Torsion, axial stress and bending moment

(2) Torsion and axial stress

(3) Torsion and bending moment

(4) Axial stress and bending moment

---

5. Connecting rod is made from :

(1) Low carbon steel (2) High carbon steel

(3) Medium carbon steel (4) High speed steel

SPACE FOR ROUGH WORK

P.T.O.

6. The materials used for cylinder block are :

(1) Cast iron and steel (2) Cast iron and aluminium alloy

(3) Steel and aluminium alloy (4) Brass and steel

---

7. The stroke of an engine is the :

(1) Volume of the cylinder (2) Length of connecting rod

(3) Internal diameter of the cylinder (4) Distance between T.D.C and B.D.C

---

8. The thermodynamic cycle on which petrol engine works, is :

(1) Otto cycle (2) Joule cycle (3) Dual cycle (4) Rankine cycle

---

9. Automobile radiator is a heat exchanger of :

(1) Counter flow type (2) Parallel flow type

(3) Cross flow type (4) Regenerator type

---

10. Which of the following is the inversion of double slider crank chain ?

(1) Whitworth Quick Return (2) Pendulum Pump

(3) Oldham's Coupling (4) Rotary engine

---

11. In a 4-stroke I.C. Engine, the turning moment during the compression stroke is :

(1) Positive throughout (2) Positive during major portion of stroke

(3) Negative throughout (4) Negative during major portion of stroke

---

12. How many cells are used in a 12 V car battery ?

(1) 2 (2) 4 (3) 6 (4) 8

SPACE FOR ROUGH WORK

13. The ignition quality of diesel oil is expressed by :

(1) Cetane number (2) Octane number

(3) Calorific value (4) None of these

14. Double declutching process is employed in :

(1) Synchromesh gear box (2) Constant mesh gear box

(3) Sliding mesh gear box (4) Epicyclic gear box

15. Which of the following is a type of front independent suspension, for front wheel drive ?

(1) De - dion (2) Swinging half axle

(3) McPherson Strut (4) Radius rod

16. The engine oil level should be checked while :

(1) engine is idling (2) engine is just stopped

(3) engine is running at high speed (4) few minutes after engine has stopped

17. The purpose of a thermostat valve in an engine cooling system is to :

(1) prevent the coolant from boiling

(2) allow the engine to warm up quickly

(3) indicate the coolant temperature

(4) pressurize the system to raise boiling point

18. When brakes are applied, vehicle is subjected to :

(1) Yawing (2) Pitching (3) Rolling (4) Bouncing

SPACE FOR ROUGH WORK

P.T.O.

19. In steering geometry, Included Angle is the sum of :

(1) Camber and Castor (2) Castor and S.A.I.

(3) Camber and S.A.I. (4) Camber and Toe - in

---

20. During braking, the brake shoe is moved outward to force the lining against the :

(1) Wheel piston or cylinder (2) Anchor pin

(3) Brake drum (4) Wheel rim or axle

---

21. Morse test is performed on an I.C. Engine to find :

(1) Indicated Power (2) Brake Power

(3) Frictional Power (4) Brake Mean Effective Pressure

---

22. The plane of maximum shear stress has normal stress that is :

(1) Maximum (2) Minimum (3) Zero (4) None of these

---

23. The strain energy stored in a simply supported beam of span 'L' and flexural rigidity 'EI' due to a central concentrated load 'W' is :

(1) $W^3L^3/48$ EI (2) $W^2L^2/48$ EI (3) $W^3L^3/96$ EI (4) $W^2L^3/96$ EI

---

24. Critical or Whirling speed is the speed at which the shaft tends to vibrate violently in :

(1) Transverse direction (2) Longitudinal direction

(3) Linear direction (4) None of the above

---

25. Which of the following is a self aligning bearing ?

(1) Conical (2) Rectangular (3) Spherical (4) None of the above

---

SPACE FOR ROUGH WORK

26. The transmission shaft subjected to bending loads must be designed on the basis of :

(1) Maximum normal stress theory

(2) Maximum shear stress theory

(3) Both (1) and (2)

(4) Maximum distortion energy theory

---

27. A clutch plate of an automobile is designed on the assumption of uniform wear conditions because :

(1) It is closer to real life situation (2) It leads to a safer design

(3) It leads to cost - effective design (4) No other assumption is possible

---

28. Odometer is an instrument used for measurement of :

(1) Power (2) Fuel consumption (3) Engine rpm (4) Distance

---

29. The gear shift lever requires two separate motions to shift gears in which the first motion is to :

(1) move synchronizer (2) select synchronizer

(3) mesh the gear (4) operate the clutch

---

30. When a gear box has four forward and one reverse speed, it is said to be :

(1) 3 speed gear box (2) 4 speed gear box

(3) 5 speed gear box (4) 6 speed gear box

---

31. In a single dry plate clutch, the torsional vibrations are absorbed by :

(1) Coil springs (2) Cushion springs

(3) Central hub (4) Clutch pedal

SPACE FOR ROUGH WORK

P.T.O.

32. Electrolyte used in a Lead Acid Battery is :

(1) Diluted Sulphuric Acid (2) Diluted Nitric Acid

(3) Diluted Hydrochloric Acid (4) Pure Water

33. The positive plate of car battery is made of :

(1) Lead Sulphate (2) Pure Lead (3) Lead Chloride (4) Lead Peroxide

34. The two kinds of piston rings are :

(1) Compression and oil control (2) Compression and sliding seal

(3) Oil scrapper and oil control (4) Pressure and sealing

35. In a petrol engine, the high voltage for spark plug is in the order of :

(1) 1000 volts (2) 2000 volts (3) 11 kV (4) 22 kV

36. When IP and FP of an engine are known, we can calculate :

(1) Brake power (2) Compression ratio

(3) Specific air consumption (4) Mean effective pressure

37. The starting system of a vehicle includes :

(1) Battery, starter and ignition switch

(2) Battery, distributor and ignition switch

(3) Battery, starter and distributor

(4) Distributor, starter and ignition switch

38. The ignition coil is used to :

(1) Step up current (2) Step down current

(3) Step up voltage (4) Step down voltage

SPACE FOR ROUGH WORK

39. Thermal equilibrium between two or more bodies exists, when they are brought toge there is no change in :

(1) Density (2) Pressure (3) Temperature (4) All of the above

40. A cycle consisting of one constant pressure, one constant volume and two isentropic processes is known as :

(1) Carnot cycle (2) Stirling cycle (3) Otto cycle (4) Diesel cycle

41. Bending moment 'M' and torque 'T' is applied on a solid circular shaft. If the maximum bending stress equals to maximum shear stress developed, then M is equal to :

(1) T/2 (2) T (3) 2T (4) 4T

42. The coefficient of rolling resistance for a truck weighing 63,500 N is 0.018. The rolling resistance to the truck is :

(1) 1.143 N (2) 11.43 N (3) 114.3 N (4) 1143 N

43. A gradient resistance to a vehicle having a mass of 980 kg moving on an incline of 10° is :

(1) 1.6694 N (2) 16.694 N (3) 166.94 N (4) 1669.4 N

44. A petrol engine of a car develops 125 N-m torque at 2700 rpm. The car is driven in second gear having gear ratio of 1.75. The final drive ratio is 4.11. If the overall transmission efficiency is 90%, then the torque at the driving wheels is :

(1) 8.091 N-m (2) 80.91 N-m (3) 809.1 N-m (4) 8091 N-m

45. An engine has a clearance volume of 100 c.c. and swept volume of 800 c.c. Then compression ratio is :

(1) 7 : 1 (2) 8 : 1 (3) 9 : 1 (4) 10 : 1

SPACE FOR ROUGH WORK

P.T.O.

46. A gas engine has a swept volume of 300 c.c. and clearance volume of 25 c.c. Its volumetric efficiency is 0.88 and mechanical efficiency is 0.90. The volume of the mixture taken in per stroke is :

(1) 248 c.c. (2) 252 c.c. (3) 264 c.c. (4) 286 c.c.

---

47. The power output of an engine is measured by a rope brake dynamometer. The diameter of the brake pulley is 700 mm and the rope diameter is 25 mm. The load on the tight side of the rope is 50 kg and spring balance reads 50 N. Speed of the engine is 900 rpm. Brake power of the engine is :

(1) 14.03 kW (2) 15.03 kW (3) 16.03 kW (4) 12.03 kW

---

48. A test rig for a single cylinder engine has an air box with an orifice of diameter of 2 cm and coefficient of discharge of 0.7. The manometer reading is equivalent to 106.08 m of air column. The quantity of air consumed by the engine in m^3/s will be :

(1) 0.01003 (2) 0.00103 (3) 0.00013 (4) 0.10003

---

49. The outside diameter of a hollow shaft is twice its inside diameter. The ratio of its torque carrying capacity of that of a solid shaft of the same material and the same outside diameter is :

(1) 15/16 (2) 3/4 (3) 1/2 (4) 1/16

---

50. For a material, Young's modulus is 110 GN/m^2 and shear modulus is 42 GN/m^2. A round bar of 37.5 mm diameter and 2.4 m long was stretched to 2.5 mm. The Bulk modulus will be :

(1) 96 GN/m^2 (2) 96.25 GN/m^2 (3) 96.5 GN/m^2 (4) 97 GN/m^2

---

51. A solid shaft is subjected to a torque of 45 kNm. The angle of twist is 0.5° per meter length of the shaft. If G = 80 GN/m^2, the diameter of shaft will be :

(1) 140 mm (2) 160 mm (3) 150 mm (4) 170 mm

---

52. A square steel bar 2.4 m long and 3 cm thick is elongated by a load of 50 kN. The stress developed due to the load will be :

(1) 4555.5 N/cm^2 (2) 5555.5 N/cm^2 (3) 4444.4 N/cm^2 (4) 5445.5 N/cm^2

SPACE FOR ROUGH WORK

53. A circular beam of 10.5 cm diameter is subjected to a shear force of 500 N. The average shear stress is :

(1) 5.2 N/cm^2 (2) 5.3 N/cm^2 (3) 5.77 N/cm^2 (4) 5.4 N/cm^2

---

54. For a radial ball bearing, the desired rated life is 10,000 hrs for a speed of 600 rpm and radial load of 4 kN. The basic dynamic load rating for the bearing will be :

(1) 28 kN (2) 28.5 kN (3) 29 kN (4) 29.5 kN

---

55. Air is at a pressure of 50 kPa and temperature of 90° C. The mass of the air occupying a volume of 0.2 m^3 will be :

(1) 0.064 kg (2) 0.076 kg (3) 0.092 kg (4) 0.096 kg

---

56. In a slider crank mechanism, lengths of the crank and connecting rod are 0.15 m and 0.6 m respectively. The crank position is 60° from inner dead center. The crank shaft speed is 450 rpm. The angular velocity of the connecting rod is :

(1) 2.9 rad/sec (2) 5.9 rad/sec (3) 6.9 rad/sec (4) 10.9 rad/sec

---

57. A cam is to be designed for a knife edge follower with the following data :

Cam lift is 40 mm during 90° of cam rotation with SHM, Dwell for the next 30°, follower returns to the original position in the next 60°. The maximum velocities of the follower during its ascent and descent, if cam rotates at 240 rpm :

(1) 1 m/s, 1.5 m/s (2) 2 m/s, 1.5 m/s (3) 1 m/s, 3 m/s (4) 2.5 m/s, 3.5 m/s

---

58. For the data in the previous problem, the acceleration of the follower during its ascent and descent :

(1) 20.6 m/s^2, 11.8 m/s^2 (2) 20.6 m/s^2, 118 m/s^2

(3) 50.6 m/s^2, 11.8 m/s^2 (4) 50.6 m/s^2, 113 m/s^2

SPACE FOR ROUGH WORK

P.T.O.

59. Two involute gears of 20° pressure angle are in mesh. The number of teeth on pinion is 2[illegible] and the gear ratio is 2. The module is 5 mm and pitch line speed is 1.2 m/s. Assuming addendum is standard and equal to one module, the angle turned through pinion when on gear in mesh is :

(1) 29.4° (2) 35° (3) 38.4° (4) 45.4°

---

60. A cantilever beam of negligible weight is carrying a mass M at its free end, and is also resting on an elastic support of stiffness k_1. If k_2 represents the bending stiffness of the beam , the natural frequency (rad/s) of the system is :

(1) $\sqrt{\frac{k_1 k_2}{M(k_1+k_2)}}$ (2) $\sqrt{\frac{2(k_1+k_2)}{M}}$ (3) $\sqrt{\frac{(k_1+k_2)}{M}}$ (4) $\sqrt{\frac{(k_1-k_2)}{M}}$

---

61. A shaft having its diameter 20 mm and 0.6 m long carries a mass of 1 kg at its mid - point. Density of shaft material is 40 Mg/m^3 and Young's modulus is 200 GN/m^2. Assume the shaft to be freely supported. The frequency of transverse vibration will be :

(1) 25.3 Hz (2) 35.3 Hz (3) 43.3 Hz (4) 53.3 Hz

---

62. The whirling speed of the shaft in the previous problem will be :

(1) 1598 rpm (2) 2598 rpm (3) 3598 rpm (4) 3998 rpm

---

63. A body of mass 20 kg is suspended from a spring which deflects 15 mm. Under this load the frequency of free vibration is :

(1) 2.07 Hz (2) 3.07 Hz (3) 4.07 Hz (4) None of the above

---

64. The deflection of a spring with 20 active turns under a load of 1000 N is 10 mm. The spring is made into two pieces each of 10 active coils and placed in parallel under the same load. The deflection of this system is :

(1) 20 mm (2) 10 mm (3) 5 mm (4) 2.5 mm

---

65. If the ratio of the diameter of rivet hole to pitch of rivets is 0.25, then the tearing efficiency of the joint is :

(1) 0.50 (2) 0.75 (3) 0.25 (4) 0.87

SPACE FOR ROUGH WORK

66. A multiplate disc clutch is to transmit 4 kW at 750 rpm. Available steel and bronze discs of 40 mm inner radius and 70 mm outer radius are to be assembled alternately in appropriate numbers. The clutch is to operate in oil with an expected coefficient of friction of 0.1 and the maximum allowable pressure is not to exceed 350 kPa. Assume uniform wear condition to prevail. Find the number of steel (driving) and bronze (driven) discs required respectively :

(1) 3 and 2 (2) 2 and 3 (3) 2 and 2 (4) 3 and 3

---

67. For the multiplate disc clutch with the same data as given above the axial force applied to develop the full torque will be :

(1) 2160 N (2) 2260 N (3) 2360 N (4) 2560 N

---

68. An electric heater of exposed surface area 0.09 m^2 and output 600 W is designed to operate fully submersed in water. When the water is at 37°C and the surface co-efficient of heat transfer is 285.3 W/m^2-deg, the surface temperature of the heater in °C is :

(1) 30.5 (2) 60.5 (3) 90.5 (4) 120.5

---

69. For the above problem of electric heater, if the heater is mistakenly operated at 37°C in air with a surface coefficient of 8.5 W/m^2-deg, the surface temperature in °C will be :

(1) 321 (2) 621 (3) 821 (4) None of these

---

70. The brake warning lights in the dash board warn the driver of :

(1) water in master cylinder

(2) air in the hydraulic cylinder

(3) failure of the primary or secondary circuit

(4) power brake failure

---

71. Which of the bulbs in a car will have least wattage ?

(1) Head light (2) Stop light (3) Parking light (4) Ignition light

---

SPACE FOR ROUGH WORK

P.T.O.

72. The problems caused by wheel imbalance are :

(1) Hard steering and hard ride

(2) Poor acceleration and hard steering

(3) Steering wheel vibrations and uneven tyre wear

(4) Poor acceleration and reduced fuel efficiency

---

73. Bead wires in a tyre are made up of :

(1) Steel (2) Copper (3) Zinc (4) Aluminium

---

74. Orsat apparatus is used to find :

(1) Air fuel ratio (2) Contents of exhaust gases

(3) Quantity of air during intake (4) None of the above

---

75. One effect of detonation is :

(1) Delay in ignition (2) Loss of power

(3) Overheating of engine (4) Overcooling of engine

---

76. The firing order of a typical 4 cylinder 4 stroke engine is :

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

---

77. If clearance volume of an I.C. engine is increased then compression ratio will :

(1) increase (2) decrease (3) remain constant (4) be doubled

---

78. The load at which the column just buckles is called :

(1) Buckling load (2) Critical load (3) Crippling load (4) Any of the above

---

SPACE FOR ROUGH WORK

79. Rivets are generally specified by :

(1) thickness of plates (2) overall length

(3) shank diameter (4) diameter of head

---

80. The maximum deflection of a fixed beam carrying a central point load lies at :

(1) fixed ends (2) centre of beam

(3) L/3 from fixed ends (4) None of these

- o 0 o -

SPACE FOR ROUGH WORK

सूचना — (पृष्ठ 1 वरून पुढे....)

(8) प्रश्नपुस्तिकेमध्ये विहित केलेल्या विशिष्ट जागीच कच्चे काम (रफ वर्क) करावे. प्रश्नपुस्तिकेव्यतिरिक्त उत्तरपत्रिकेवर वा इतर कागदावर कच्चे काम केल्यास ते कॉपी करण्याच्या उद्देशाने केले आहे, असे मानले जाईल व त्यानुसार उमेदवारावर शासनाने जारी केलेल्या "परीक्षांमध्ये होणाऱ्या गैरप्रकारांना प्रतिबंध करण्याबाबतचे अधिनियम-82" यातील तरतुदीनुसार कारवाई करण्यात येईल व दोषी व्यक्ती कमाल एक वर्षाच्या कारावासाच्या आणि/किंवा रुपये एक हजार रकमेच्या दंडाच्या शिक्षेस पात्र होईल.

(9) सदर प्रश्नपत्रिकेसाठी आयोगाने विहित केलेली वेळ संपल्यानंतर उमेदवाराला ही प्रश्नपुस्तिका स्वत:बरोबर परीक्षाकक्षाबाहेर घेऊन जाण्यास परवानगी आहे. **मात्र परीक्षा कक्षाबाहेर जाण्यापूर्वी उमेदवाराने आपल्या उत्तरपत्रिकेचा भाग-1 समवेक्षकाकडे न विसरता परत करणे आवश्यक आहे.**

नमुना प्रश्न

Pick out the correct word to fill in the blank :

Q. No. 201. I congratulate you _____ your grand success.

(1) for (2) at (3) on (4) about

ह्या प्रश्नाचे योग्य उत्तर "(3) on" असे आहे. त्यामुळे या प्रश्नाचे उत्तर "(3)" होईल. यास्तव खालीलप्रमाणे प्रश्न क्र. 201 समोरील उत्तर-क्रमांक "③" हे वर्तुळ पूर्णपणे छायांकित करून दाखविणे आवश्यक आहे.

प्र. क्र. 201. ① ② ● ④

अशा पद्धतीने प्रस्तुत प्रश्नपुस्तिकेतील प्रत्येक प्रश्नाचा तुमचा उत्तरक्रमांक हा तुम्हाला स्वतंत्ररीत्या पुरविलेल्या उत्तरपत्रिकेवरील त्या त्या प्रश्नक्रमांकासमोरील संबंधित वर्तुळ पूर्णपणे छायांकित करून दाखवावा. **ह्याकरिता फक्त काळ्या शाईचे बॉलपेन वापरावे, पेन्सिल वा शाईचे पेन वापरू नये.**

कच्च्या कामासाठी जागा /SPACE FOR ROUGH WORK

SEAL