संशोधन/सांख्यिकी अधिकारी, सामान्य राज्य सेवा, गट-ब 2017 (अराजपत्रित) परीक्षा दि. 7 ऑक्टोबर, 2017

प्रश्नपुस्तिका क्रमांक
BOOKLET No.
101541
F10

प्रश्नपुस्तिका

संच क्र. **A**

चाळणी परीक्षा

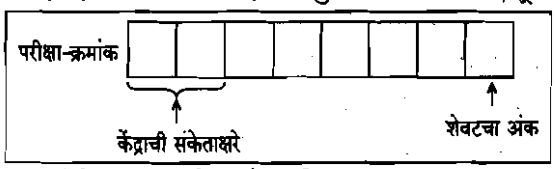
वेळ : 1 (एक) तास

एकूण प्रश्न : 100
एकूण गुण : 200

सूचना

(1) सदर प्रश्नपुस्तिकेत **100** 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.



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

(4) (अ) 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.**

(ब) **आयोगाने ज्या विषयासाठी मराठी बरोबर इंग्रजी माध्यम विहित केलेले आहे. त्या विषयाचा प्रत्येक प्रश्न मराठी बरोबर इंग्रजी भाषेत देखील छापण्यात आला आहे. त्यामधील इंग्रजीतील किंवा मराठीतील प्रश्नामध्ये मुद्रणदोषांमुळे अथवा अन्य कारणांमुळे विसंगती निर्माण झाल्याची शंका आल्यास, उमेदवाराने संबंधित प्रश्न पर्यायी भाषेतील प्रश्नाशी ताडून पहावा.**

(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 प्रश्नांकडे 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 उत्तरांपैकी 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

1. खालील विधाने विचारात घ्या :

अ. ऑक्टोबर 1976 मध्ये सामान्य खाते नियंत्रण (CGA) नावाच्या संस्थेची स्थापना झाली.

ब. सामान्य खाते नियंत्रण संस्था, ही संघीय सरकारच्या विनियोग खाते आणि वित्तीय खाते यांची संक्षिप्त रचना तयार करते.

क. सामान्य खाते नियंत्रण संस्थेचे, विनियोग लेखापरीक्षण आणि नियामक लेखापरीक्षण करण्याचे वैधानिक कर्तव्य आहे.

वरीलपैकी कोणती विधाने ***असत्य*** आहेत ?

(1) अ आणि क (2) ब आणि क

(3) अ, ब आणि क (4) अ आणि ब

Consider the following statements :

a. In October 1976, an organisation named Controller-General of Accounts (CGA) was set up.

b. The CGA prepares a condensed form of the Appropriation Accounts and the Finance Accounts of the Union Government.

c. The appropriation audit and regulatory audit are the statutory duties of the CGA.

Which of the statements given above are ***incorrect*** ?

(1) a and c (2) b and c

(3) a, b and c (4) a and b

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2. खालीलपैकी कोणती बँक ग्रामीण क्षेत्रामधील शेती, व्यापार, वाणिज्य आणि उद्योगधंद्याच्या विकासासाठी कार्यरत आहे ?

(1) नाबार्ड

(2) प्रादेशिक ग्रामीण बँका (RRBs)

(3) भारतीय औद्योगिक विकास बँक

(4) वरीलपैकी सर्व

Which of the following banks is responsible for developing agriculture, trade, commerce and industry in rural areas ?

(1) NABARD

(2) Regional Rural Banks (RRBs)

(3) Industrial Development Bank of India

(4) All of the above

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3. भारतातील सर्वात मोठी 3·6 मीटर व्यासाची दृश्य प्रकाश दुर्बिण _____ येथील संशोधन संस्थेत स्थित आहे.

(1) नारायणगाव

(2) नैनीताल

(3) कोलकाता

(4) बंगलोर

In India, the largest optical telescope of diameter 3·6 metres is located in the research institute at _____.

(1) Narayangaon

(2) Nainital

(3) Kolkata

(4) Bangalore

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4. खालीलपैकी कोणती गोष्ट "वैज्ञानिक पद्धतीत" बसत *नाही* ?

अ. कारणमिमांसा

ब. प्रयोगशीलता

क. विश्वास

ड. प्रश्न विचारणे

(1) फक्त अ आणि क

(2) फक्त क

(3) फक्त ब

(4) फक्त अ आणि ड

Which of the following is ***not*** a part of "scientific method" ?

a. Reasoning

b. Experimentation

c. Faith

d. Questioning

(1) Only a and c

(2) Only c

(3) Only b

(4) Only a and d

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5. साहित्य अकादमी पुरस्कारा (2017 चा) बाबत खालील विधाने लक्षात घ्या व योग्य उत्तर निवडा.

अ. बालसाहित्य पुरस्कार ल.म. कडू यांना 'उभं आडवं' या पुस्तकासाठी जाहीर झाला.

ब. 'युवा साहित्य पुरस्कार' राहूल कोसंबी यांना 'खारीचा वाटा' या पुस्तकासाठी ही पुरस्कार जाहीर झाला.

(1) दोन्ही चूक आहेत (2) दोन्ही बरोबर आहेत

(3) अ चुक आहे आणि ब बरोबर आहे (4) अ बरोबर आहे आणि ब चुक आहे

Consider the following statements regarding Sahitya Academy Puraskar (of 2017) and select the correct answer.

a. 'Balsahitya Puraskar' is awarded to L.M. Kadu for the book 'Ubha-Aadava'.

b. 'Yuva Sahitya Puraskar' is awarded to Rahul Kosambi for his book 'Kharicha Vata'.

(1) Both are wrong (2) Both are correct

(3) a is wrong and b is correct (4) a is correct and b is wrong

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6. 'मेक इन इंडिया' अभियानांतर्गत भारतातील पहिले मेडिपार्क उभारण्याचा निर्णय दि. 5 ऑक्टोबर, 2016 रोजी घेण्यात आला, तो कोणत्या ठिकाणी उभारण्यात येणार आहे ?

(1) महाराष्ट्र – मुंबई (2) कर्नाटक – बेंगलोर

(3) पश्चिम बंगाल – कोलकाता (4) तामिळनाडू – चेंगलपट्टू

On 5th October, 2016 it was decided to raise a Medipark under the campaign of 'Make in India'. Where will it be raised ?

(1) Maharashtra – Mumbai (2) Karnataka – Bangalore

(3) West Bengal – Kolkata (4) Tamil Nadu – Chengalpattu

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7. 50 मीटर बाजूंच्या चौरसाकृती मैदानाच्या कडेने प्रत्येक 5 मीटर अंतरावर एक विद्यार्थी उभा केल्यास. एकूण किती विद्यार्थी उभे असतील ?

(1) 44 (2) 50 (3) 40 (4) 36

On each side of a square ground having 50 m, the boys are standing at an equal distance of 5 m. How many boys are standing on the square ?

(1) 44 (2) 50 (3) 40 (4) 36

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8. पाच वाट्या आणि 7 ताटे यांची किंमत ₹ 650 आहे. तीन ताटे व 8 वाट्या यांची किंमत ₹ 425 आहे. तर 5 ताटांची किंमत किती ?

(1) ₹ 75 (2) ₹ 375 (3) ₹ 125 (4) ₹ 400

The cost of 5 bowls and 7 plates is ₹ 650 and the cost of 3 plates and 8 bowls is ₹ 425. Then what will be the cost of 5 plates ?

(1) ₹ 75 (2) ₹ 375 (3) ₹ 125 (4) ₹ 400

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9. जर BODY हा शब्द cocy अशा सांकेतिक भाषेत लिहिला जातो, तर DADY हा त्याच भाषेत कसा लिहिला जाईल ?

(1) cady (2) eacy (3) bacy (4) easy

If BODY is coded as cocy, then DADY will be coded as _____.

(1) cady (2) eacy (3) bacy (4) easy

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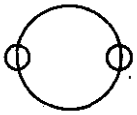
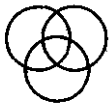
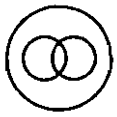
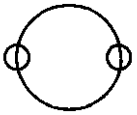
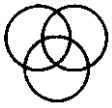
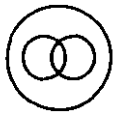
10. खालील आकृत्यांपैकी प्रॉफिट, डिव्हीडंट व बोनस यांचे सर्वोत्तम नाते दर्शविणारी आकृती कोणती ?

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

Which of the following diagrams indicates the best relation between Profit, Dividend and Bonus ?

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

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11. '?' च्या जागी योग्य अक्षर असलेला पर्याय निवडा.

L	H	G
E	C	S
N	?	A

(1) N (2) A (3) L (4) M

Which letter replaces the question mark ?

L	H	G
E	C	S
N	?	A

(1) N (2) A (3) L (4) M

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12. एका गटातील 20% विद्यार्थ्यांनी गणितात 80% पेक्षा अधिक गुण मिळविले. गणितात 80% पेक्षा कमी गुण मिळविणाऱ्यांची संख्या नेमके 80% गुण मिळविणाऱ्यांच्या 2/3 इतकी आहे, की जी संख्या 48 आहे. तर गटातील एकूण विद्यार्थी किती ?

(1) 98 (2) 100 (3) 128 (4) 102

In a group 20% students secured more than 80% marks in Mathematics. The number of students securing less than 80% marks in Mathematics is 2/3 of the number of students who secured exactly 80% marks which is 48. What is the total number of students in a group ?

(1) 98 (2) 100 (3) 128 (4) 102

कच्च्या कामासाठी जागा / SPACE FOR ROUGH WORK

13. एक मुलगा मंदिरातून निघून सरळ 24 मीटर चालत गेला आणि तेथे उजवीकडे काटकोनात वळून थेट 14 मीटर चालत गेला. पुन्हा तो डावीकडे काटकोनात वळून सरळ 24 मीटर चालत गेला व तेथे थांबला, तर तो मुलगा मंदिरापासून कमीत कमी किती अंतरावर आहे ?

(1) 50 किमी (2) 500 डेसीमीटर

(3) 0·062 किमी (4) 62 मीटर

A boy walked straight 24 m from a temple and then he turned to right in right angle and walked 14 m. Again he turned to the left in right angle and walked 24 m and stopped there, then how much the minimum distance, he is away from the temple ?

(1) 50 km (2) 500 decimetres

(3) 0·062 km (4) 62 metres

---

14. नझीर वायव्येला पाहत आहे. तो उजवी कडून 90° वळला व नंतर त्याच दिशेने 135° तून वळला. नंतर प्रतिघटिवत दिशेने 270° तून वळला. तर नझीर आता कोणत्या दिशेला पाहत आहे ?

(1) वायव्य (2) पश्चिम (3) उत्तर (4) नैऋत्य

Nazir is facing North-west. He turns to his right in 90° and then turns 135° in the same direction. Then he turns 270° anticlockwise. Which direction does Nazir is facing now ?

(1) North-west (2) West (3) North (4) South-west

---

15. खालीलपैकी वेगळी संख्या शोधा.

1331, 2197, 3375, 4913

(1) 1331 (2) 2197 (3) 3375 (4) 4913

Find out the odd term from the given below.

1331, 2197, 3375, 4913

(1) 1331 (2) 2197 (3) 3375 (4) 4913

---

16. अर्णव आपल्या मोटार सायकलने घरापासून उत्तरेस 10 कि.मी. अंतरावर असणाऱ्या पोस्ट ऑफिसमध्ये जातो. नंतर तो पूर्वकडे वळून 10 कि.मी. अंतरावरील आपल्या कॉलेजला जातो. पुन्हा तो दक्षिणेकडे वळून 5 कि.मी. अंतरावरील क्लास ला जातो. क्लास संपल्यावर तो पश्चिमेकडे 10 कि.मी. अंतरावर असणाऱ्या मित्राकडे जातो. तर घरापासून अर्णवचे घर व मित्राचे घर यामधील सरळ अंतर किती असावे ?

(1) 10 km (2) 5 km (3) 7·5 km (4) 12·5 km

Arnav goes with motorcycle to post office which is 10 km away from his home in the north. Then he turns to east and goes to 10 km for his college. Again he turns to south and goes 5 km for his classes. After completing the classes he goes 10 km in the west for his friend's house. Then what will be the straight distance between Arnav's home and his friend's house ?

(1) 10 km (2) 5 km (3) 7·5 km (4) 12·5 km

17. बंगालमधील अनुशीलन समिती च्या क्रांतिकारी संघटनेची स्थापना कोणी केली ?

(1) वीरेंद्र कुमार घोष

(2) रविंद्रनाथ टागोर

(3) भुपेंद्रनाथ दत्त

(4) स्वामी विवेकानंद

Who established the Revolutionary Organisation in Bengal, Anushilan Samiti ?

(1) Virendra Kumar Ghosh

(2) Ravindranath Tagore

(3) Bhupendranath Dutta

(4) Swami Vivekanand

---

18. खालीलपैकी कोणती जोडी विसंगत आहे ?

(1) महात्मा फुले – शेतकऱ्यांचा असुड

(2) बाबासाहेब आंबेडकर – हू वेअर द शुद्राज

(3) मौलाना मुहम्मद अली – कॉमरेड

(4) स्वामी विवेकानंद – सत्यार्थ प्रकाश

Which one of the following pairs is ***not*** correctly matched ?

(1) Mahatma Phule – Shetakaryancha Asud

(2) Babasaheb Ambedkar – Who were the Shudras

(3) Maulana Muhammad Ali – Comrade

(4) Swami Vivekanand – Satyartha Prakash

---

19. ठाणे जिल्ह्यातील मासेमारी करणाऱ्या केंद्राचा उत्तरे कडून दक्षिणेकडे खालील कोणता क्रम बरोबर आहे ?

(1) अर्नाळा, दातिवार, सातपाटी, डहाणू

(2) डहाणू, सातपाटी, दातिवार, अर्नाळा

(3) दातिवार, अर्नाळा, डहाणू, सातपाटी

(4) डहाणू, सातपाटी, दातिवार, अर्नाळा

Which of the following sequence of finishing centres from North to South in Thane district is correct ?

(1) Arnala, Datiwar, Satpati, Dahanu

(2) Dahanu, Satpati, Datiwar, Arnala

(3) Datiwar, Arnala, Dahanu, Satpati

(4) Dahanu, Satpati, Datiwar, Arnala

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20. जोड्या लावा :

	स्तंभ I (खिंडी)		*स्तंभ II (जोडतात)*
अ.	बनीहाल	I.	जम्मु – श्रीनगर
ब.	बारा लाच्या	II.	अरुणाचल – ल्हासा
क.	बोमडी ला	III.	अरुणाचल – मंडाले
ड.	दिहांग	IV.	मंडी – लेह

	अ	ब	क	ड
(1)	I	IV	II	III
(2)	IV	I	II	III
(3)	I	IV	III	II
(4)	III	I	II	IV

Match the following :

	Column I (Passes)		*Column II (Connects)*
a.	Banihal	I.	Jammu – Srinagar
b.	Bara Lacha	II.	Arunachal – Lhasa
c.	Bomdi La	III.	Arunachal – Mandalay
d.	Dihang	IV.	Mandi – Leh

	a	b	c	d
(1)	I	IV	II	III
(2)	IV	I	II	III
(3)	I	IV	III	II
(4)	III	I	II	IV

21. 42 व्या संविधान दुरुस्तीने, भारतीय संविधानाच्या उद्देश्यपत्रिकेमध्ये खालीलपैकी कोणत्या मुल्यांचा समावेश केला आहे ?

(1) समता (2) स्वातंत्र्य

(3) धर्मनिरपेक्ष (4) कल्याणकारी राज्य

In the Preamble of Indian Constitution which of the following principles is inserted by 42nd amendment ?

(1) Equality (2) Liberty

(3) Secular (4) Welfare State

22. भारतीय संविधानाच्या कलम 170 अनुसार, घटक राज्याचे, विधानसभेचे जास्तीत-जास्त सदस्य किती असू शकतात ?

(1) 403

(2) 485

(3) 484

(4) 500

According to Article 170 of the Indian Constitution, what is the maximum number of members of the State Legislative Assemblies ?

(1) 403

(2) 485

(3) 484

(4) 500

---

23. भारतीय संविधानाच्या खालील कोणत्या कलमानुसार, केंद्रीय लोकसेवा आयोग व राज्य लोकसेवा आयोगाची निर्मिती करण्यात आली आहे ?

(1) कलम 315

(2) कलम 320

(3) कलम 415

(4) कलम 420

According to which of the following Articles of the Indian Constitution, Union Public Service Commission and State Public Service Commission is created ?

(1) Article 315

(2) Article 320

(3) Article 415

(4) Article 420

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24. खालील योग्य जोड्या जुळवा :

	भारतीय संविधानातील तत्वे		*संविधानातून स्विकारली*
अ.	संसदीय शासन पद्धती	I.	अमेरीका
ब.	सर्वोच्च न्यायालयाची स्थापना	II.	ब्रिटन
क.	राज्याच्या धोरणाची मार्गदर्शक तत्वे	III.	जर्मनी
ड.	आणीबाणीच्या दरम्यान मूलभूत हक्क रद्द करणे	IV.	आयर्लंड

	अ	ब	क	ड
(1)	II	I	IV	III
(2)	I	II	III	IV
(3)	IV	III	II	I
(4)	IV	II	III	I

Match the following pairs correctly :

	Principles in Indian Constitution		*Adopted from the Constitution*
a.	Parliamentary form of government	I.	United States of America
b.	Establishment of Supreme Court	II.	Britain
c.	Directive Principles of State Policy	III.	Germany
d.	Suspension of fundamental rights during emergency	IV.	Ireland

	a	b	c	d
(1)	II	I	IV	III
(2)	I	II	III	IV
(3)	IV	III	II	I
(4)	IV	II	III	I

---

25. सर्वोच्च न्यायालयाने खालीलपैकी कोणत्या एका खटल्यात राष्ट्रीय व राज्य महामार्गापासून 500 मीटर अंतरापर्यंत मद्य दुकानांवर बंदीचा आदेश दिला ?

(1) तामिळनाडू सरकार विरुद्ध के. बाळू व इतर
(2) पंजाब राज्य विरुद्ध रफीक मसीह व इतर
(3) भारत सरकार विरुद्ध श्याम बाबू वर्मा व इतर
(4) भारत सरकार विरुद्ध अजय कुमार चौधरी व इतर

In which of the following cases did the Supreme Court give order to ban on liquor shops within five hundred metres area of national and state highways ?

(1) Tamil Nadu Government Vs. K. Balu and others
(2) Punjab State Vs. Rafiq Masih and others
(3) Government of India Vs. Shyam Babu Verma and others
(4) Government of India Vs. Ajay Kumar Choudhary and others

---

26. Paasche's price index number is an example of

(1) Weighted average of price relative method

(2) Weighted aggregative index number

(3) Simple average of price relative method

(4) Unweighted index number

---

27. Marshall-Edgeworth price index number formula considers the weights as

(1) Quantity of the base year

(2) Quantity of the current year

(3) Quantity of base and current year

(4) None of these

---

28. The only index number which satisfies the factor reversal test is

(1) Bowley's index number

(2) Paasche's index number

(3) Marshall-Edgeworth index number

(4) Fisher's index number

---

29. The process by which two different index number series with different base years are joined into series of index numbers with common base year is known as

(1) Deflating the series (2) Splicing the series

(3) Chain base series (4) None of the above

---

30. The component of time series which is associated with short term fluctuations is

(1) Cyclic variation (2) Secular trend

(3) Irregular variation (4) Seasonal variation

---

31. Laspeyre's price index number is calculated using

(1) Simple aggregative method

(2) Weighted aggregative method, weights being taken as quantity consumed in the base year

(3) Weighted aggregative method, weights being taken as quantity consumed in the current year

(4) Simple average of price relative method

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32. The terms Prosperity, Recession, Depression and Recovery are in particular associated with the component of time series which is
(1) Cyclic variation (2) Seasonal variation
(3) Irregular variation (4) Random variation

33. The phases of the business cycle follow in the order
(1) Decline → Prosperity → Depression → Improvement
(2) Prosperity → Decline → Depression → Improvement
(3) Prosperity → Improvement → Decline → Depression
(4) Depression → Prosperity → Improvement → Decline

34. If the annual trend equation for a time series is $Y = a + b X$, then quarterly trend equation is
(1) $Y = \frac{a}{4} + \frac{b}{4} X$ (2) $Y = \frac{a}{4} + \frac{b}{16} X$
(3) $Y = \frac{a}{4} + \frac{b}{32} X$ (4) $Y = \frac{a}{4} + \frac{b}{48} X$

35. In which year was the Directorate of National Sample Survey created ?
(1) 1947 (2) 1950 (3) 1971 (4) 1987

36. Which one of the following is ***not*** a division of the National Sample Survey Office (NSSO) ?
(1) Survey Design and Research Division (SDRD)
(2) Field Operations Division (FOD)
(3) National Accounts Division (NAD)
(4) Data Processing Division (DPD)

37. The National Sample Survey Organisation (NSSO) maintains records relating to
(1) Agricultural Statistics (2) Industrial Statistics
(3) Demographic Statistics (4) All of the above

38. The office of the Registrar General of India is under
(1) The Ministry of Home Affairs
(2) The Ministry of Statistics and Programme Implementation
(3) The Ministry of Finance
(4) The Ministry of Human Resources

39. NSSO conducted the 69th round from July 2012 – December 2012 of its survey on

a. Employment and Unemployment

b. Unincorporated Non-agricultural Enterprises

c. Indicators of Urban Slums in India

d. Indicators of Drinking Water, Sanitation, Hygiene and Housing Conditions in India

(1) a and b only (2) c only (3) c and d only (4) a and d only

40. As per 2011 Census reports, which State or Union territory in India has the lowest female sex ratio ?

(1) Rajasthan (2) Delhi

(3) Daman and Diu (4) Haryana

41. Which is the principal statistical organisation of State Government and declared as the 'Nodal Agency' for all statistical activities ?

(1) Directorate of Economics and Statistics

(2) National Sample Survey Organisation

(3) State Statistical Office

(4) State Registrar General

42. As per the 2011 population census report, female sex ratio per 1000 males in India is

(1) 964 (2) 943 (3) 1084 (4) 933

43. Which one of the following instruments used by the Reserve Bank of India to formulate and implement monetary policy is ***not*** the direct instrument ?

(1) Cash Reserve Ratio (CRR) (2) Repo Rate

(3) Statutory Liquidity Ratio (SLR) (4) Refinance Facilities

44. Fertility rate calculations of a given region accounts for

(1) Entire female population of the region in a given time period.

(2) Female population of the region in child bearing age groups in a given time period.

(3) Entire population of the region in a given time period.

(4) Only female births in the region in a given time period.

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45. Net Reproduction Rate is defined as

(1) The extent to which mothers produce female infants.
(2) The extent to which mothers produce infants who survive to replace them.
(3) The extent to which mothers produce female infants who survive to replace them.
(4) None of the above

---

46. For overall comparison of death rates of two regions which one of the following measures is used ?

(1) Crude death rate
(2) Age-specific death rate
(3) Standardized death rate
(4) Central death rate

---

47. Match the following :

a.	Gross reproduction rate	I.	CBR – CDR
b.	Measure of mortality	II.	$\frac{CBR}{CDR} \times 100$
c.	Vital index	III.	$\frac{\text{Number of female births}}{\text{Total number of births}} \times TFR$
d.	Crude rate of natural increase	IV.	STDR

	a	b	c	d
(1)	III	IV	II	I
(2)	IV	III	I	II
(3)	II	IV	III	I
(4)	II	III	IV	I

---

48. The relationship between Net Reproduction Rate (NRR) and Gross Reproduction Rate (GRR) is

(1) NRR ≥ GRR
(2) NRR ≤ GRR
(3) NRR > GRR
(4) None of these

---

49. The probability that a life aged x years will die in the age group (x + m, x + m + n) is given by the expression in terms of l_x is

(1) $\frac{l_{x+m} - l_{x+m+n}}{l_x}$
(2) $\frac{l_x - l_{x+m} - l_{x+m+n}}{l_x}$
(3) $\frac{l_x - l_{x+m+n}}{l_{x+m}}$
(4) $\frac{l_x - l_{x+m}}{l_{x+m+n}}$

---

50. The ratio of the rate of decrease in l_x to the initial population l_x is called as

(1) Average mortality rate

(2) Force of mortality

(3) Central mortality rate

(4) Survival rate

---

51. The number of live births during a certain year in a certain geographical area is 10,000 and the number of deaths of children less than one year old during the same year in the same area is 100. The infant mortality rate for this area is

(1) 100

(2) 10

(3) 1

(4) 0·1

---

52. National Income Estimates in India are prepared by

(1) The Reserve Bank of India

(2) The Ministry of Finance

(3) The Planning Commission

(4) The Central Statistical Office

---

53. Consider the following statements :

a. National wealth is a flow concept and it has time dimension

b. National income is a stock concept and it has no time dimension.

Which of the above statements is/are true ?

(1) Only a is true

(2) Only b is true

(3) Both a and b are true

(4) Both a and b are false

---

54. Net Domestic Product (NDP) at market prices is expressed as

(1) GNP at factor cost + Indirect taxes – Subsidies

(2) GNP – Net Income from Abroad

(3) Net National Product at market prices – Net Factor Income from Abroad

(4) None of these

---

55. The income earned by nationals outside the country is

a. Included in GNP
b. Not included in GNP
c. Included in GDP
d. Not included in GDP

(1) a and c
(2) a and d
(3) b and c
(4) b and d

---

56. The following is/are the difficulty(ies) faced while measurement of National Income :

(1) Problem of double counting
(2) Existence of non-monetized sectors
(3) Non-market activities
(4) All of these

---

57. Which of the following is an intermediate good ?

(1) Furniture purchased by a household
(2) Raw cotton used by a spinning mill
(3) Food cooked at home
(4) Sewing machine purchased by tailoring firm

---

58. Which one of the following is the sum of all income actually received by the people of the country ?

(1) National Income
(2) Gross Domestic Product
(3) Gross National Product
(4) Personal Income

---

59. The GNP of a country is 200 and its GDP is 180. What is its net income from assets abroad ?

(1) 20
(2) 80
(3) 380
(4) – 20

---

60. In a questionnaire, the information resulting from an opinion in the form of 'yes' or 'no' is known as

(1) Quantitative data (2) Qualitative data

(3) Pictorial data (4) None of these

---

61. The data obtained from completed questionnaires is considered as

(1) Primary data (2) Secondary data

(3) Both (1) and (2) (4) Neither (1) nor (2)

---

62. Match the information about statistical table given below :

	List I		*List II*
a.	Headings of columns	I.	Body of the table
b.	Headings of rows	II.	Stubs
c.	Numerical information	III.	Caption

	a	**b**	**c**
(1)	I	II	III
(2)	I	III	II
(3)	III	II	I
(4)	II	III	I

---

63. The class width of grouped classes 10 – 19, 20 – 29, 30 – 39 is

(1) 9 (2) 10 (3) 4·5 (4) 1

---

64. The graph of less than type and more than type ogive curves intersect at

(1) 3^{rd} quartile (2) 6^{th} decile

(3) 60^{th} percentile (4) 2^{nd} quartile

---

65. The median of a frequency distribution can be graphically obtained from

(1) A pie chart (2) A bar diagram

(3) Ogives (4) A histogram

---

66. The variance between two observations x_1 and x_2 is given by

(1) $\left(\frac{x_1 + x_2}{2}\right)^2$ (2) $\left(\frac{x_1 - x_2}{2}\right)^2$

(3) $\frac{(x_1 - x_2)^2}{2}$ (4) None of these

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67. The Karl Pearson's coefficient of Kurtosis β_2 is 4. Then the frequency curve is said to be

(1) Platykurtic (2) Mesokurtic
(3) Leptokurtic (4) None of these

---

68. In a frequency distribution, 25% observations are less than 40 and 25% observations are more than 80. Then quartile deviation is

(1) 40 (2) 0 (3) 20 (4) 60

---

69. For a certain bivariate data, the regression coefficients for the two regression lines are $-\frac{1}{2}$ and -2. Then the Karl Pearson's coefficient of correlation is

(1) -1 (2) $+1$ (3) 0·5 (4) $-0{\cdot}25$

---

70. The median of some data is 40. It is also the

(1) 50^{th} percentile (2) 5^{th} decile
(3) 2^{nd} quartile (4) All of these

---

71. Dialling a telephone number, a man forgot the last two digits and remembering only that they are different, dialled them at random. The probability of the number being dialled correctly is

(1) $\frac{1}{2}$ (2) $\frac{1}{45}$ (3) $\frac{1}{72}$ (4) $\frac{1}{90}$

---

72. If A and B are two mutually exclusive events, then they are certainly ***not***

(1) Equally likely (2) Complementary
(3) Independent (4) None of these

---

73. A man is known to speak the truth in 75% cases. If he throws an unbiased die and tells his friend that it is a six, then the probability that it is actually a six is

(1) $\frac{1}{6}$ (2) $\frac{1}{8}$ (3) $\frac{3}{4}$ (4) $\frac{3}{8}$

---

74. If X is a binomial variate with parameters 'n' and 'p', then its

(1) mean = variance (2) mean > variance
(3) mean < variance (4) None of these

---

75. A coin is tossed three times. What is the probability of getting three heads when the first two tosses result in heads ?

(1) $\frac{1}{2}$ (2) $\frac{3}{8}$ (3) $\frac{7}{8}$ (4) $\frac{5}{8}$

---

76. X is a random variable with mean 10 and standard deviation 5. The variance of $4X - 5$ is

(1) 95 (2) 395 (3) 100 (4) 400

---

77. A normal curve is _____ and _____.

(1) symmetric, leptokurtic (2) symmetric, mesokurtic
(3) asymmetric, platykurtic (4) asymmetric, mesokurtic

---

78. An estimator Y_n, of parameter θ, is based on a random sample of size 'n' drawn from a population with parameter θ. If Y_n converges in probability to θ as 'n' tends to infinity, then Y_n is said to be

(1) Unbiased (2) Consistent
(3) Sufficient (4) None of these

---

79. Bias of an estimator can be

(1) Always positive (2) Always negative
(3) Either positive or negative (4) Always zero

---

80. If $x_1, x_2, ..., x_n$ is a random sample from a normal population with mean μ and variance σ^2 with $\sum_{i=1}^{11}(x_i - \bar{x})^2 = 110$ then the unbiased estimate of σ^2 is

(1) 10 (2) 11 (3) 12 (4) 13

---

81. Let $x_1, x_2, ..., x_n$ be a random sample from Poisson with parameter λ. Then unbiased estimator of λ is

(1) $\sum_{i=1}^{n} X_i$ (2) $\prod_{i=1}^{n} X_i$ (3) $\bar{X}$ (4) Max $(x_1, x_2, ..., x_n)$

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82. Let $X_1, X_2, ..., X_n$ be a random sample from population

$$f(x) = \begin{cases} e^{-(x-\theta)} & \text{for } x > \theta \\ 0 & \text{otherwise} \end{cases}$$

Then unbiased estimator of θ is

(1) $\overline{X}$ (2) $\overline{X} - 1$ (3) $\overline{X} + 1$ (4) None of these

---

83. If the sample mean and sample median are two unbiased estimators of the normal population mean μ then the

(1) sample mean is more efficient than the sample median

(2) sample mean is as efficient as the sample median

(3) sample mean is less efficient than the sample median

(4) None of the statements (1), (2) and (3) are true

---

84. 1600 graduate students were randomly selected for a university level survey. Among the survey participants, the mean grade point average was 5·2 and the standard deviation was 1. What is the margin of error assuming a 95% confidence level ?

(1) 0·04 (2) 0·05 (3) 0·06 (4) 0·07

---

85. Equality of two normal population variances can be tested by

(1) t-test (2) F-test (3) Z-test (4) Chi-Square test

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86. Two samples of size 10 and 12 are taken from populations and the means is tested for significance of difference. The number of degrees of freedom is

(1) 22 (2) 21 (3) 20 (4) None of these

---

87. For a certain test of hypothesis the p-value is less than the level of significance. The conclusion of the test is

(1) Reject null hypothesis (2) Accept null hypothesis

(3) Perform one more test (4) None of these

---

88. If the correlation between two variables X and Y is 0·4, then the coefficient of determination is

(1) 0·6 (2) 0·16

(3) 0·4 (4) 0·2

---

89. For a bivariate data on variables X and Y, the scatter diagram shows a set of points in a straight line perpendicular to the X-axis. We can say, from the scatter diagram, that the correlation coefficient between X and Y is

(1) 0 (2) 1 (3) -1 (4) 0·5

90. The multiple correlation coefficient $R_{1\cdot 23}$ involves

(1) One independent and two dependent variables
(2) One dependent and two independent variables
(3) Three independent variables
(4) Three dependent variables

91. Which of the following statements is/are true/false ?

a. Coefficient of determination gives the ratio of the explained variance to total variance.
b. Coefficient of determination is given by the square of the correlation coefficient.

(1) Only a is true (2) Only b is true
(3) Both (a) and (b) are true (4) Both (a) and (b) are false

92. If the two regression lines, obtained from a bivariate data, are perpendicular to each other then the two variables are

(1) Perfectly positively correlated (2) Perfectly negatively correlated
(3) Uncorrelated (4) None of these

93. Match the following :

a.	Fraction of population	I.	Parameter
b.	Population constant	II.	Sample
c.	List of all units of the population	III.	Sampling frame
d.	Function of sample values	IV.	Statistic

	a	b	c	d
(1)	I	II	III	IV
(2)	II	I	III	IV
(3)	IV	III	II	I
(4)	II	I	IV	III

94. The chances of drawing the same unit, at each selection, remains the same in

(1) Simple random sampling with replacement
(2) Simple random sampling without replacement
(3) Stratified random sampling
(4) All of these

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95. A population consists of three strata of sizes 40, 40 and 120 respectively. A random sample of size 40 is to be drawn using proportional allocation. The number of units to be sampled from the second stratum are

(1) 12 (2) 20 (3) 8 (4) 16

---

96. If the number of population units N is ***not*** an integral multiple of sampling size n, the systematic sampling is called

(1) Linear Systematic Sampling (2) Circular Systematic Sampling

(3) Systematic Random Sampling (4) None of these

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97. For selecting a sample using simple random sampling the method/s used is/are

(1) Lottery method (2) Random number tables method

(3) Neither (1) nor (2) (4) Both (1) and (2)

---

98. How many methods of allocation of sample size to different strata in stratified sampling procedure are in common use ?

(1) One (2) Two (3) Three (4) Four

---

99. A simple random sample without replacement of size 100 is drawn from a population $Y_1, Y_2, ..., Y_{1000}$.

Given

$$S^2 = \frac{\sum_{i=1}^{1000} (Y_i - \overline{Y})^2}{N - 1} = 900,$$

the variance of the sample mean is

(1) 9 (2) 10

(3) 8·1 (4) None of these

---

100. A simple random sample of size 50 is drawn without replacement from a population of size 500. The finite population correction is

(1) 0·9 (2) 0·1

(3) 0·2 (4) 0·8

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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 परीक्षाकक्षाबाहेर जाण्यापूर्वी उमेदवाराने आपल्या उत्तरपत्रिकेचा भाग-1 समवेक्षकाकडे न विसरता परत करणे आवश्यक आहे.**

नमुना प्रश्न

प्र. क्र. **201.** सतीची चाल नष्ट करण्यासाठी कोणी मूलत: प्रयत्न केले ?

(1) स्वामी दयानंद सरस्वती (2) ईश्वरचंद्र विद्यासागर

(3) राजा राममोहन रॉय (4) गोपाळकृष्ण गोखले

ह्या प्रश्नाचे योग्य उत्तर "(3) राजा राममोहन रॉय" 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 उत्तर-क्रमांक 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.**

AL ★ SEAL ★ BS

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