

2022

BENGALI LETTER WRITING, DRAFTING OF REPORTS, PRÉCIS WRITING,
COMPOSITION AND TRANSLATION

PAPER-I

Time Allowed — 3 Hours

Full Marks — 200

If the questions attempted are in excess of the prescribed number, only the questions attempted first up to the prescribed number shall be valued and the remaining ones ignored.

The figures in the margin indicate marks for each question.

Do not write your name, address etc. anywhere inside the answer book.

Write X, Y, Z if necessary.

- ১। নিম্নলিখিত যে কোনো একটি বিষয় সম্পর্কে আপনার মতামত কোনো বাংলা দৈনিক পত্রের সম্পাদকের কাছে পত্রাকারে প্রেরণ করুন : (নাম-ঠিকানার পরিবর্তে X, Y, Z লিখুন। শব্দসংখ্যা — ১৫০।) ৪০
- (ক) প্লাস্টিক বর্জনের প্রয়োজনীয়তা
- (খ) জনজীবনে ফেসবুকের প্রভাব
- ২। নিম্নলিখিত বিষয়টি অবলম্বন করে একটি সম্পাদকীয় প্রতিবেদন রচনা করুন : (শব্দসংখ্যা — ২০০) ৪০
- ‘মেয়েদের স্বনির্ভর হওয়ার আগে বিবাহ দেওয়া অনুচিত।’
- ৩। নিম্নলিখিত অংশের সারমর্ম লিখুন。(এর জন্য প্রদত্ত বিশেষ Précis sheet ব্যবহার করুন) : ৪০
- কুরুক্ষেত্র মহাযুদ্ধের পর ভারতবর্ষ যেন এক মহাশ্মশানে পরিণত হইয়াছে। গৃহে গৃহে ক্রন্দনের রোল। কাহারো পুত্র, কাহারো পিতা, কাহারো বা পতি চিরতরে ইহলোক হইতে বিদায় গ্রহণ করিয়াছে — যাইবার সময় একটি বিদায়ের বাণী, একটু সাহুনার কথাও বলিবার অবসর পায় নাই। যে-সকল প্রাসাদ আনন্দ-কোলাহলে মুখরিত ছিল, আজ সেখানে কে যেন বিষাদের কালিমা লেপিয়া দিয়াছে।
- ৪। অনুচ্ছেদটি পাঠ করে নিম্নলিখিত প্রশ্নগুলির উত্তর দিন : ১০×৪=৪০
- ধর্মের মাহাত্ম্য ও মূল কথা সম্যক উপলব্ধি করতে না পেরে, মানুষ যখন ধর্মের আচার-আচরণগত মোহে অন্ধ হয়ে পড়ে, তখন সে অন্যকে নিধন এবং নিজের আত্মহননে উদ্যত হয়। মানুষ যখন ধর্মের মহিমা অনেক সময় সম্যক উপলব্ধি করতে পারে না, কতকগুলি আচরণসর্বস্ব সংস্কার ও প্রথাকে ধর্ম বলে ভ্রম করে এবং সংস্কারের মোহে অন্ধ হয়ে যায়। সংকীর্ণ ভেদবুদ্ধির শিকার হয়ে নিজেদের ভেতর এক দুর্লভ্য বিভেদের প্রাচীর সৃষ্টি করে একে অপরকে ঐ ধর্মের দোহাই দিয়েই আক্রমণ করে, হত্যা করে এবং চরম অমানবিক হিংস্র পাশবিকতার পরিচয় দেয়। বিশ্ববিধাতার আশীর্বাদপুষ্ট মানুষ বিধাতার মহিমা ভুলে গিয়ে জাতি, ধর্ম, বর্ণ, সম্প্রদায় প্রভৃতি ক্ষুদ্র সীমায় নিজেকে আবদ্ধ করে এবং ভুল ধারণার বশবর্তী হয়ে নির্মম নিষ্ঠুর মানসিকতার পরিচয় দেয়। প্রকৃত ধর্মচেতনা মানুষকে উদার, মহৎ ও সহনশীল করে তোলে, উচ্চ-নীচ, ধনী-দরিদ্র, শিক্ষিত-অশিক্ষিত সব কিছু ভেদাভেদ তার উদার মানসিকতার কাছে লুপ্ত হয়ে যায়। বিশ্বমানবতার মহান আদর্শ, ক্ষমাসুন্দর দৃষ্টিভঙ্গি ও শুভবুদ্ধির সাধনাই তার কাছে আচরণীয় ও পালনীয় ধর্মরূপে প্রতীয়মান হয়।
- (ক) ধর্মের দোহাই দিয়ে মানুষ কীভাবে বিধাতার মহিমা ভুলে যায়?
- (খ) ধর্মের নামে মানুষ মোহাবিষ্ট হয় কেমন করে?
- (গ) মানুষ কখন এবং কীভাবে নিজেদের মধ্যে বিভেদের প্রাচীর সৃষ্টি করে?
- (ঘ) প্রকৃত ধর্মচেতনা বলতে কী বোঝায়?

६। निम्नलिखित अंशों पर बहसनुवाद करून :

80

It is very interesting to study the coming of the Aryans to India. You can find out a lot about them from our Sanskrit books. Some of these like the Vedas, must have been written about the time. The oldest Veda is the Rig Veda and you can form some idea from it of the past of India which the Aryans occupied then.

HINDI LETTER WRITING, DRAFTING OF REPORTS, PRÉCIS WRITING, COMPOSITION AND TRANSLATION

1. किसी एक विषय पर किसी समाचार पत्र के संपादक को पत्र लिखिए : (अधिकतम 150 शब्दों में। नाम और पता के स्थान पर XYZ लिखें)

[Write a letter in about 150 words (any one)(Write XYZ for Name and Address)] :

40

- (क) शिक्षा में मातृभाषा का महत्व
(ख) पर्यावरण संरक्षण
(ग) 'चंद्रयान-3' का उद्देश्य

2. निम्नलिखित विषय पर 200 शब्दों में एक संपादकीय प्रतिवेदन लिखिए (Write a report within 200 words): 40
स्वस्थ नगर योजना और गैर कानूनी निर्माण

3. निम्नलिखित गद्यांश का सारांश लिखिए (Write a précis of the following passage in Hindi)(use special Précis sheet provided for the purpose): 40

आज विश्व अनेक प्रकार की समस्याओं से घिरा है। पिछले कुछ दशकों से जिस समस्या ने विश्व को सर्वाधिक प्रभावित किया है, भयभीत किया है, वह है आतंकवाद। आज विश्व के प्रमुख देश - अमेरिका, ब्रिटेन, रूस, भारत इत्यादि इसकी चपेट में हैं। इन देशों में समाचार पत्र आतंकवाद की घटनाओं से भरे रहते हैं। रेलगाड़ी में विस्फोट, आतंकवादियों द्वारा लोगों की हत्या, सीमा पार से आतंकवादियों की घुसपैठ, आतंकवादियों और सेना की झड़प, आतंकवादियों द्वारा राष्ट्रीय प्रतिष्ठानों पर हमलों की धमकी आदि की सुर्खियों से समाचार पत्र रंगे दिखाई पड़ते हैं। आतंकवाद आज विश्व की सबसे बड़ी समस्या बन चुका है। प्रौद्योगिकी और संचार माध्यमों की प्रगति के साथ-साथ जैसे-जैसे दुनिया सिकुड़ती जा रही है, आतंकवादियों, हथियारों और धन का राष्ट्रीय सीमाओं के आर-पार जाना भी सरल होता जा रहा है। आतंकवादी निरीह लोगों की हत्या करके, सार्वजनिक स्थलों पर बम विस्फोट करके, सरकारी संपत्ति को हानि पहुँचाकर, तोड़-फोड़ की घटनाओं को अंजाम देकर समाज में आतंक फैलाने का प्रयास करते हैं।

4. प्रस्तुत गद्यांश के आधार पर दिए गये प्रश्नों के उत्तर दीजिए :

10×4=40

जरूरत है प्रदूषण रहित टेक्नालाजी की। विज्ञान और टेक्नालाजी तो आज के युग के अभिन्न अंग हैं जिनसे अलग हो पाना कोरी कल्पना की बात है। उद्योगों का विकल्प भला क्या होगा? हाँ, हम उद्योगों में ऐसी टेक्नालाजी विकसित करें जो प्रदूषण-रहित हो, अर्थात् औद्योगिक कचरे का विनाश ऐसे ढंग से हो कि वह वायु अथवा जल को प्रदूषित न कर सके।

वन हमारे रक्षक हैं। इनमें भू-क्षरण तथा भू-स्खलन और बाढ़ें रुकती हैं। ये शोर-प्रदूषण भी कम करते हैं। फैक्टरियों या प्रयोगशालाओं के आसपास वृक्ष रोपे जाने चाहिए ताकि शोर की मात्रा कुछ तो कम हो। इस प्रकार वन-रोपण को सामाजिक वानिकी का महत्वपूर्ण अंग मानना चाहिए और राष्ट्रीय विकास कार्यक्रम के रूप में अपनाया जाना चाहिए।

- (क) उपर्युक्त गद्यांश के लिए उपयुक्त शीर्षक लिखिए।
(ख) प्रदूषण रहित टेक्नालाजी क्यों आवश्यक है?
(ग) 'वन हमारे रक्षक हैं।' - इस वाक्य का आशय स्पष्ट कीजिए।
(घ) उपर्युक्त गद्यांश का सारांश अपने शब्दों में लिखिए।

5. हिंदी में अनुवाद कीजिए (Translate into Hindi) :

40

It is very interesting to study the coming of the Aryans to India. You can find out a lot about them from our Sanskrit books. Some of these like the Vedas, must have been written about the time. The oldest Veda is the Rig Veda and you can form some idea from it of the past of India which the Aryans occupied then.

URDU LETTER WRITING, DRAFTING OF REPORTS, PRÉCIS WRITING,
COMPOSITION AND TRANSLATION

1. Write a letter from the following topics to the editor of an Urdu newspaper within 150 words.
Write X, Y, Z instade of your name : 40

(الف) میڈیا کے بدلتے رجحانات

(ب) عام شاہراہوں میں روشنیوں کے مسائل

(ج) علاقے میں پینے کے پانی کی قلت

2. Draft a report on the following topics within 200 words. 40

تعلیم ہی خواتین کے مستقبل کو تباہ کر سکتی ہے

3. Write a Précis of the following passage in Urdu (Use special précis sheet provide for this purpose): 40

دلی کالج کے نام سے جس ادارے نے آگے چل کر ہندوستانی معاشرے میں ایک انفرادی اور امتیازی مقام حاصل کیا اس کی ابتدائی صورت غازی الدین خاں کے مدرسہ کی تھی۔ اس مدرسہ میں دینیات، عربی اور فارسی کی تعلیم کا انتظام تھا۔ یہ وہ زمانہ تھا جب کہ انگریز جو تاجر کی حیثیت سے ہندوستان آئے تھے۔ اب حکومت کے معاملات اور عوام کے سیاہ و سفید میں بھی ذخیل ہو چکے تھے انہیں ہندوستانیوں پر اپنی گرفت اور مضبوط کرنے کی فکر تھی اور وہ یہاں عیسائیت کی تبلیغ بھی چاہتے تھے لیکن ایسٹ انڈیا کمپنی کے نظمانے نہایت محتاط رویہ اختیار کر رکھا تھا بلکہ ایک طرح کمپنی کے نظمانے اس بارے میں اختلاف رائے بھی پایا جاتا تھا۔ چنانچہ 1793 میں ولیم ولبرفوس کی یہ تجویز مسترد کر دی گئی کہ ہندوستان کو ایسے افراد روانہ کیے جائیں جو مدرس اور مشنریوں کے فرائض انجام دے سکیں۔ بعد ازاں قحط بنگال کے زمانے میں چارلس گرانٹ نے ہندوستان میں نظام حکومت انگریزی میں چلانے کے علاوہ یہاں کے مدارس میں انگریزی ذریعہ تعلیم کی تجویز پیش کی جس کو ایسی قبولیت حاصل نہ ہو سکی۔ البتہ 1797 میں اس بات کی اجازت دی گئی کہ عیسائی مبلغین ہندوستان جا کر تبلیغ کا کام انجام دے سکتے ہیں۔ انگریزی کی تعلیم کا سوال تو یہاں نہیں اٹھا لیکن فارسی، سنسکرت اور عربی کے قدیم نسخوں کو محفوظ کرنے اور ان زبانوں میں تعلیم کی گنجائش پر زور دیا گیا۔

4. Read the following text carefully and write the answers of the questions:

10×4=40

اردو زبان و ادب میں باغ و بہار کو ایک خاص اہمیت حاصل ہے اس کی بنیادی وجہ کیا ہے؟ جب یہ کہنے کو داستان ہے اور دیگر داستانوی ادب کی طرح اس میں بھی مافوق الفطرت عناصر کی کمی نہیں ہے لہذا اسے صرف ہمارے کلاسیکی ادب کا حصہ بن کر رہ جانا چاہیے تھا۔ لیکن ایسا نہیں ہوا بلکہ حیرت ہے کہ اس کتاب کو لکھنے ہوئے دو سو سال کا عرصہ گزر گیا لیکن ہر دور میں بلکہ آج تک مسلسل یہ کتاب شامل نصاب رہی۔

اس لحاظ سے دیکھا جائے تو یہ زندہ کتاب کہلانے کی حقدار ہے۔ دراصل باغ و بہار کی اہمیت صرف داستان یا دلچسپ کہانی اور اس کے موضوع کی بنا پر نہیں بلکہ اسلوب، طرزِ تحریر اور زبان و بیان کی وجہ سے ہے اس وقت کے مروجہ نثر سے ہٹ کر عام فہم سادہ، سلیس اور بامحاورہ نثر کی طرح باغ و بہار کے ذریعہ میرامن نے ڈال دی۔ یہ وہی زبان ہے جو دلی میں ایک عرصہ سے بولی جا رہی تھی آگے چل کر ماسٹر رام چندر، مرزا غالب اور سرسید وغیرہ کی کوششوں سے اردو ادب میں اسی طرزِ تحریر کو جگہ ملنے والی تھی۔ لہذا باغ و بہار کو ایک رہنما حیثیت مل گئی اور یہی وجہ ہے کہ باغ و بہار کو جدید اردو نثر کا صحیفہ کہا گیا ہے۔ یہ اعزاز باغ و بہار کو یوں ہی نہیں ملا بلکہ اس وقت فورٹ ولیم کالج اور اس سے باہر بھی آسان نثر میں کتابیں لکھی جا رہی تھیں لیکن ان تمام میں نئے اسلوب کی تشکیل اور اس روایت کو اپنانے کی اپیل کہاں جو باغ و بہار میں موجود ہے۔ اس بنیاد پر اگر میرامن کو اپنی زبان دانی پر فخر ہو تو بجا ہے۔

(i) اردو زبان و ادب میں باغ و بہار کو خاص اہمیت کیوں حاصل ہے؟

(ii) داستان کی تعریف کیجئے۔

(iii) باغ و بہار کو جدید اردو نثر کا صحیفہ کیوں کہا جاتا ہے۔

(iv) میرامن دہلوی کی نثری انفرادیت بتائیے۔

5. Translate into Urdu:

40

It is very interesting to study the coming of the Aryans to India. You can find out a lot about them from our Sanskrit books. Some of these like the Vedas, must have been written about the time. The oldest Veda is the Rig Veda and you can form some idea from it of the past of India which the Aryans occupied then.

NEPALI LETTER WRITING, DRAFTING OF REPORT, PRÉCIS WRITING,
COMPOSITION AND TRANSLATION

1. Write a letter in about 150 words (*any one*): (Write XYZ for Name and Address) 40

तलका मध्ये कुनै एउटा विषय लगभग 150 शब्दभित्र एउटा पत्र लेख्नुहोस् : (नाम र ठेगानाका ठाँउमा XYZ लेख्नुहोस्)

(क) युवा-वर्गमा विदेशी संस्कृतिको बढ्दो प्रभाव

(ख) आफ्नो गाँउमा पुस्तकालयको प्रयोजन

(ग) वर्तमान समाजमा बढ्दो साईबर अपराध

2. Draft a report in about 200 words (*any one*): 40

पर्यावरणको रक्षा गर्नु सबै नागरिकको कर्तव्य हो।

3. Write a Précis of the following (use special précis sheet provide for this purpose): 40

कुनै-कुनै साहित्यकारका कृतिहरू धेरै चिनिन्छन् र साहित्यकार आफू चिनिँदैनन्। कुनै-कुनै साहित्यकार र तिनका कृतिहरू बराबरी चिनिन्छन्। हुन पनि कर्तव्यशील लेखक आफूलाई चिनाउनभन्दा आफ्ना कृतिहरू नै चिनाउनमा धेरै प्रयास गर्ने हुन्छन्। यस्ता साहित्यकारहरूलाई तिनको साहित्यिक जीवन, साहित्यमा योगदान आदिका आधारमा तिनको जीवन चरित्र पनि खोतल्नु साहित्यका जाग्रत पाठक एवम् पत्रकारहरूको कर्तव्य हो।

पारसमणि प्रधान अत्यन्तै जाँगरिला र एकैछिनको समय पनि दुरुपयोग नगर्नु हुने लेखक हुनुभएकोले उहाँले साहित्य, भाषा, व्याकरण, पाठ्यपुस्तक सबैतर्फ लेख्न भियाउनु भएको छ। अरूका जीवनी लेख्न भियाउनु भएको छ र आफ्नै पनि लेख्न भियाउनु भएको छ। नेपाली जंगत्मा साहित्यकार, कलाकार आदिले आफू जीवित होउञ्जेल सम्मान र स्वीकृति पाएका छैनन् भन्ने गुनासो सबैतिरबाट सुनिन्छ। अरू जाति र तिनका कलाकार-साहित्यकारबारे पनि प्रायः यही नियम रहेछ। पारसमणि प्रधानले भानुभक्त आचार्य, लक्ष्मीप्रसाद देवकोटा, लेखनाथ पौड्याल एवं बालकृष्ण सम गरी जम्मा चारवटा पुस्तक सन् 1979-देखि सन् 1980 को एकैवर्षका अवधिभित्र लेखेर प्रकाशित गरेका छन्। नेपाली साहित्य र साहित्यकारहरूको अन्य भाषा-भाषी जनतामा परिचय गराउनुपर्ने आवश्यकताका समयमा उहाँको यस्तो प्रयासलाई नेपाली साहित्य जगत्ले स्तुत्य ठान्नेपछि।

4. Read the following text carefully and write the answers of the questions: 10×4=40

निम्नलिखित उद्धरण पढेर तल दिइएका प्रश्नहरूको उत्तर लेख्नुहोस् :

चन्दनसिंह राउतको जन्म अक्टोबर 1923 मा देहरादूनमा भएको थियो। देहरादून सैनिक स्कुल र दयानन्द आर्य वैदिक पाठशालाबाट मा 1941 मा प्रवेशिका पास गरी आई. ए. पढ्दा पढ्दै एयर फोर्समा भर्ना भई दुई महिना बिताएपछि उनी सेकेन्ड गोर्खा राइफल्समा सार्जन्टको दर्जामा आए। तर उनी यी सबले प्रख्यात भएनन्-जनलाई विश्वले चिन्थो फुटबल खेलाडीको रूपमा। खेलप्रतिको प्रेम चन्दनसिंहको नसामै बगिरहेको थियो। उनलाई यसका निम्ति घर, परिवार, परिस्थिति र वातावरणले सहयोग दियो। पिता जे. सी. ओ. रहेकाले उनले सानैदेखि पल्टनिया वातावरणमा हुर्कने मौका पाए। घरकै अधि आँगन हुने हुनाले उनीहरू रातदिन गोली खेलथे। स्कुलमा पढ्न बितेका समय बाहेक अरू समय खेल्नमै बित्थ्यो। यसरी परिस्थितिले नै चन्दनसिंहलाई भविष्यको ओलम्पिक खेलाडी बनायो।

चन्दनसिंहलाई सानैदेखि कुनै योग्य शिक्षकले फुटबल खेल्न सिकाएको होइन। सबै अरू ठियाहरूले झैं उनले पनि टेनिस गोली खेले अथवा कागज आदिको गोली बनाएर धीत मारे। पेल्लेले झैं यस्ता गोली खेलै-खेलै स्कुल जान्थे औ त्यसरी खेलै घर फर्कन्थे। स्कुलमा पनि उनी खुब फुटबल खेलथे तर कुनै नियमित प्रशिक्षण थिएन। तर पछि भारतीय दलहरूमा फुटबल खेल्नुपर्दा भने उनले केही तालीम पाए। उनलाई ती 'कोच' (फुटबल खेल्न सिकाउने) हरूमध्ये जर्ज आइन्स्टेको नाम सधैं स्मरण रहेको थियो। स्कुलदेखि बाहिर चन्दनसिंहले गाउँगाउँबीच पनि फुटबल खेले, स्कुल र कलेजका दलहरूमा

खेले। एकपल्ट उनले कलेज दलमा एक फौजी दलको विरोधमा खेले औ लगातार नौ गोल लगाएर आजसम्मको खेलमा एउटा नतोडिने 'रेकर्ड' कायम गरे। सेनामा हुँदा उनले धेरै ठुला-ठुला खेलहरूमा भाग लिए अनि आफ्नो दललाई धेरै नामी शील्ड र कपहरू जिताए। उनी 'सर्भिसेस' टीममा रहेर भारतभरि मात्र होइन पाकिस्तानमा पनि फुटबल खेल्न गए। यसरी कलकत्ताको आँखामा उनी पसे। खेलाडीलाई चिन्ने कलकत्ताको पारखी आँखाले एकपल्ट चन्दनसिंहको खेल हेरेपछि उनलाई नछोड्ने निश्चय गयो। कलकत्ताका धेरै फुटबल क्लबहरू उनको पछि लागे औ अन्तमा 'इस्ट बङ्गाल' क्लबले उनलाई फेला पार्यो। यसरी सैनिक जीवन छोडेर उनी 1950 सालदेखि भारतीय फुटबल दलहरूमा सामेल भए। 1950 देखि 1957 सम्म चन्दनसिंहले निकै फुटबल खेले अनि नाम कमाए। उनको जीवनमा यो सात-आठ वर्षको अवधि एउटा लामो इतिहास बनेर रहेको छ। यही अवधिमा उनले ओलम्पिक फुटबल खेलमा भारतको प्रतिनिधित्व गरी खेले। यसरी उनी ओलम्पिक खेलमा खेल्न जाने प्रथम नेपाली भए।

- (क) चन्दनसिंहको जन्म कहाँ र कहिले भएको थियो अनि उनले कहाँ शिक्षा ग्रहण गरेका थिए?
- (ख) चन्दनसिंहले आफ्ना कुन कोचलाई सधैं सम्झाना गर्थे अनि किन?
- (ग) चन्दनसिंहले कहाँ कहाँ फुटबल खेले?
- (घ) भारतीय खेल जगतमा चन्दनसिंह किन प्रसिद्ध छन्?

5. Translate into Nepali:

40

It is very interesting to study the coming of the Aryans to India. You can find out a lot about them from our Sanskrit books. Some of these like the Vedas, must have been written about the time. The oldest Veda is the Rig Veda and you can form some idea from it of the past of India which the Aryans occupied then.

SANTALI LETTER WRITING, DRAFTING OF REPORT, PRÉCIS WRITING,
COMPOSITION AND TRANSLATION

1. 02000000 00000000 00 (Write a Letter with 150 words) :

40

[illegible]

- [illegible]

2. **ՏՂԵԾԻ ԳՅՈՒՑԻԷ** (within 200 words only).

40

'ଥପ ହୁଅ ନୁହେଁ ନାମକ ଶିଳ୍ପ

ଅନୁଷ୍ଠାନ ଓଡ଼ିଆ ଶିକ୍ଷା ଲବ୍ଧ

ଏକାଧାରୀ ଘରଠାରେ ତିନି ଗୁଣ ଲାଭେ' ।

[illegible]

- 40

$$4 \times 10 = 40$$
[illegible]

(ଢ) ଘଣ୍ଟାଘର ଲାଗୁନାହିଁ ଏବଂ ଏହା ଲାଗୁ ହେଉଥିବା ସମୟରେ ? ଲାଗୁ ହେଉଥିବା ସମୟରେ
ପ୍ରାୟତଃ ଏହା ଲାଗୁ ହେଉଥିବା ?

(ଓ) ଯେହୁଣୀର ଗୁରୁତ୍ବ ଯଥା ସମ୍ଭବ ବଢ଼ାଇବା ପାଇଁ କି ପଦକ୍ଷେପ ଗ୍ରହଣ କରାଯାଇଛି ? ଏହା ଯଥାସମ୍ଭବ କିପରି ସମ୍ପାଦିତ ହେଉଛି ?

5. Translate into Santali :

40

It is very interesting to study the coming of the Aryans to India. You can find out a lot about them from our Sanskrit books. Some of these like the Vedas, must have been written about the time. The oldest Veda is the Rig Veda and you can form some idea from it of the past of India which the Aryans occupied then.

5657

2022

ENGLISH LETTER WRITING, DRAFTING OF REPORT, PRÉCIS WRITING,
COMPOSITION AND TRANSLATION

PAPER-II

Time Allowed — 3 Hours

Full Marks — 200

If the questions attempted are in excess of the prescribed number, only the questions attempted first up to the prescribed number shall be valued and the remaining ones ignored.

1. Write an essay on *any one* of the following topics: 40
 - (a) Modern life in the Shadow of Artificial Intelligence.
 - (b) Representation of Women's Empowerment in Literatures of the World.
 - (c) Search Engines on the Internet : Lord or Devil?
2. Draft a report on the usefulness of making a year's internship in industry a compulsory part of college education (within 200 words only). 40
3. Compose (within 150 words) *any one* of the following letters using A, B, C instead of name and address: 40
 - (a) To the Director General, NCC Regiment, Indian Army on the need to make NCC training a part of education in school.
 - (b) To the Editor of a reputed English newspaper highlighting the insecurity faced by elderly people in Indian Society today.
4. Attempt a précis of the following passage (use special précis sheet provided for the purpose) and add a suitable title: 35+5=40

The medieval word for a Poet was a Maker, which indeed is the original meaning of a Poet. It is one of the points in which Greek and medieval simplicity nearly touch. There was never a man who was more of a Maker than Chaucer. He made a national language; he came very near to making a nation. At least without him it would probably never have been either so fine a language or so great a nation. Shakespeare and Milton were the greatest sons of their country; but Chaucer was the Father of his country, rather in the style of George Washington. And apart from that, he made something that has altered all Europe more than the Newspaper : the 'Novel'. He was a 'novelist' when there were no novels. I mean by the novel the narrative that is not primarily an anecdote or an allegory, but is valued because of the almost accidental variety of actual human characters.

But despite all this, what seems to be altogether missed is the greatness of Chaucer. Men emphasize the obvious things about him; they call him the Father of English Poetry, but only in the sense in which the same title has been given to an obscure Anglo-Saxon like Caedmon. They say that Chaucer marks the moment when our language began to be formed out of French and Saxon elements; but they see nothing elemental about the man who did so much to form it. They say that Chaucer borrowed from Boccaccio the notion of a framework of stories; and they admit that he brightened it a little by giving more personality to the tellers of the *Canterbury Tales*. They admit that this fourteenth-century man was acquainted with the nature of a joke; they concede a certain courtesy

[illegible][illegible][illegible]

Translate the Hindi passage into English (any one):

40

(Who opted Hindi in lieu of Bengali for Paper-I)

(2) प्रातः काल भ्रमण करने से प्रकृति के सौन्दर्य पान का लाभ मिलता है। शीतल, मन्द, सुगन्धित वायु प्राणों को जीवन प्रदान करती है। पाक्षियों का कलरव, फूलों का मुस्काना, हरी-भरी धरती पर सूर्य की अरुण किरणों का पड़ना, यह स्वर्णिम आभा सम्पूर्ण वातावरण को स्पर्शिमय बना देती है तथा तन-मन में ताजगी आ जाती है। जहाँ दिन भर चारों ओर प्रदूषित वातावरण हमें रोगी बना देती है, वहाँ प्रातः काल का ताजगी भरा शुद्ध वातावरण तथा शुद्ध वायु हमें अनेक बीमारियों से छुटकारा दिलाते हैं। एक रोगी भी स्वच्छ वायु में भ्रमण करने से नीरोगी बन जाता है। सुबह की ओस भरी घास-भर नीचे चलने से आँखों की ज्वालि बहती है। तेज तेज हाथ हिलाते हुए भ्रमण करने से पूरे शरीर का व्यायाम होता है तथा मानसिक तनाव कम होता है। शूल व ताजगी हवा में सँस लेने से शरीर के सब अंगों को प्राणवायु मिलती है।

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

2022

TEST BOOKLET

Paper-III

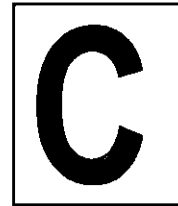
Time allowed : 3 hours

Full marks : 200

Answer *all* the questions.

Questions are of equal value.

TEST BOOKLET SERIES



5907

Serial No.

Roll No.:

Signature of the Candidate:

INSTRUCTIONS

Candidates should read the following instructions carefully before answering the questions:

1. This booklet consists of 24 pages including this front page, containing 200 questions. **Verify the Page Nos. and Test Booklet series on each page and bring at once to the Invigilator's notice any discrepancy.**
2. Answers will have to be given in the OMR Sheet supplied for the purpose.
3. Before you proceed to mark in the OMR Sheet in response to various items in the Test Booklet, you have to fill in some particulars in the OMR Sheet. **Do not fold the OMR Sheet as this will result in error in your marks.**
4. All questions are of multiple-choice answer-type. You will find **four** probable answers (A), (B), (C) and (D) against each question. Find out which of the four answers appears to you to be **correct or the best**. Now darken the circle corresponding to the letter of the selected answer in the Answer-Sheet with **Black Ball Point Pen** as per instructions printed in the reverse of the **Admit Card** and in the Answer-Sheet.
5. One and only one circle is to be fully blackened for answer. Any spot in any other circle (multiple circle) or in wrong circle will be considered as wrong answer. If more than one circle is encoded for a particular answer, it will be treated as a wrong answer.
6. **There will be negative marking of 0.25 mark for each wrong answer.**
7. **There are blank pages at the end of this Booklet for Rough Work.**
8. **The Special Answer-Sheet should be handed over to the Invigilator before leaving the Examination Hall. You are permitted to take away the used Test Booklet after completion of the examination.**

1. The Jallianwallah Bagh Massacre occurred in

- (A) 1920
- (B) 1919
- (C) 1921
- (D) 1922

2. The Indian Association was established in the year

- (A) 1875
- (B) 1876
- (C) 1880
- (D) 1885

3. Akbar was born at

- (A) Pathankot
- (B) Sialkot
- (C) Amarkot
- (D) Nagarkot

4. The autobiography of Babur was known as

- (A) Chach Namah
- (B) Firdaus Namah
- (C) Babur Namah
- (D) Shah Namah

5. The "Three Jewels" are to be found in

- (A) Vaishnavism
- (B) Buddhism
- (C) Judaism
- (D) Jainism

6. The capital of the Magadhan Empire under Bimbisara was

- (A) Girnar
- (B) Girivraja
- (C) Gauda
- (D) Gujarat

7. What was importance of Lothal?

- (A) Port
- (B) Granary
- (C) Zoo
- (D) Market

8. The court customs of Sijda and Poibos were introduced by

- (A) Qutubuddin Aibak
- (B) Alauddin Khalji
- (C) Ghiyassudin Balban
- (D) Ibrahim Lodi

9. The Hindu College was founded in the year

- (A) 1818
- (B) 1816
- (C) 1817
- (D) 1819

10. The Surat Split in the Congress Party happened in

- (A) 1906
- (B) 1907
- (C) 1908
- (D) 1909

11. The first ruler of the Pala Dynasty was
(A) Devpala
(B) Dharmapal
(C) Gopal
(D) Tejpai
12. The Saka Era was started by
(A) Bimbisara
(B) Ajatasatru
(C) Kanishka
(D) Menander
13. Karshapana was a type of
(A) Metal
(B) Paper
(C) Currency
(D) Race
14. The Maurya Emperor who propounded the concept of "Dhamma" had been
(A) Chandragupta
(B) Bindusara
(C) Ashoka
(D) None of the above
15. The last Buddhist Council was held at
(A) Sarnath
(B) Kundalvan
(C) Saket
(D) Ceylon
16. The twenty third Tirthankara was
(A) Parshvanath
(B) Vardhaman Mahavira
(C) Gautam Buddha
(D) Ajatasatru
17. The Vedas were
(A) Sacred Book of the Aryans
(B) Genealogical History
(C) Artefacts
(D) Language
18. The First Battle of Tarain took place in
(A) 1191 AD
(B) 1176 AD
(C) 1105 AD
(D) 1155 AD
19. 'Neel Darpan' was written in the context of
(A) Sepoy Mutiny
(B) Deccan Riots
(C) Indigo Revolt
(D) Ramosi Rebellion
20. Bimbisara was from the
(A) Gupta Dynasty
(B) Haryanka Dynasty
(C) Maurya Dynasty
(D) Khilji Dynasty

21. Delhi Sultanate was established in India in
(A) 1205 AD
(B) 1215 AD
(C) 1206 AD
(D) 1207 AD
22. Where was the figure of the dancing girl to be found?
(A) Indus valley
(B) Araku valley
(C) Kashmir valley
(D) Nubra valley
23. The First Partition of Bengal took place in
(A) 1910
(B) 1911
(C) 1905
(D) 1906
24. The Sadak-i-Azam was constructed by
(A) Akbar
(B) Bahadur Shah
(C) Babur
(D) Sher Shah
25. The Gandhi-Irwin Pact was concluded in
(A) 1930
(B) 1931
(C) 1932
(D) 1933
26. Abdul Hamid Lahori was the author of
(A) Padshahnama
(B) Razm Namah
(C) Iqbal Namah
(D) Tabaqat
27. Who was known as the "Indian Napoleon"?
(A) Kumargupta
(B) Skandagupta
(C) Samudragupta
(D) Yasodharman
28. The Kushanas were originally from
(A) Greece
(B) Iran
(C) Central Asia
(D) Europe
29. Nawab Alivardi Khan was the grandfather of
(A) Shuja ud Daulah
(B) Siraj ud Daulah
(C) Sarfraz Khan
(D) Mir Qasim
30. The Qadri order of Sufis was founded by
(A) Shah Niamatullah Qadri
(B) Baba Farid
(C) Bakhtiyar Kaki
(D) Shah Jalal

31. The "Boro Sona Masjid" in Bengal was built by

- (A) Alauddin Hussein Shah
- (B) Nusrat Shah
- (C) Shah Shuja
- (D) Shah Jahan

32. The Battle of Plassey was fought in

- (A) 1756
- (B) 1757
- (C) 1780
- (D) 1790

33. The "Alai Darwaza" was constructed by

- (A) Alauddin Khilji
- (B) Muhammad Bin Tughlaq
- (C) Sikander Lodi
- (D) Ibrahim Lodi

34. The Allahabad Pillar Inscription dates back to the

- (A) Maurya period
- (B) Gupta period
- (C) Kushan period
- (D) Saka period

35. The Battle of Hydaspas was fought between

- (A) Bimbisara and Ajatasatru
- (B) Bimbisara and Porus
- (C) Porus and Alexander
- (D) None of the above

36. Who was known as "the Akbar of Kashmir"?

- (A) Sikander Shah
- (B) Zain ul Abedin
- (C) Akbar
- (D) Muhammad Shah

37. The Tattwabodhini Patrika was founded by

- (A) Raja Rammohan Roy
- (B) Pandit Iswar Chandra Vidyasagar
- (C) Debendranath Tagore
- (D) Keshab Sen

38. The first ruler of the Maurya Dynasty was

- (A) Chandra Gupta Maurya
- (B) Bimbisara
- (C) Kanishka
- (D) Megasthenes

39. The book 'Indika' was written by

- (A) Fa Hien
- (B) Hiuen Tsang
- (C) Megasthenes
- (D) Asvaghosa

40. The capital from Delhi to Daulatabad was shifted by

- (A) Alauddin Khilji
- (B) Bakhtiyar Khilji
- (C) Muhammad Bin Tughlaq
- (D) Akbar

41. The Vijaynagar State was founded by
(A) Harihara and Bukka
(B) Chenna and Pedanna
(C) Tiruvalluvar
(D) Malik Ambar
42. The following is a Sufi order:
(A) Namdhari
(B) Kirpandhari
(C) Auliya
(D) None of the above
43. The Permanent Settlement was passed in the year
(A) 1803
(B) 1813
(C) 1793
(D) 1834
44. The market control regulations were introduced by
(A) Alauddin Khilji
(B) Balban
(C) Babur
(D) Sikander Lodi
45. The theory of Radical Humanism was put forth by
(A) Subhas Chandra Bose
(B) M.N. Roy
(C) Karl Marx
(D) Nehru
46. Sufi orders were generally known as
(A) Siyasa
(B) Virasat
(C) Hukumat
(D) Silsilah
47. Abul Fazl was the court poet of
(A) Babur
(B) Akbar
(C) Shah Jahan
(D) Jahangir
48. Who did Mahatma Gandhi describe as his Political Guru?
(A) Bal Gangadhar Tilak
(B) Gopal Krishna Gokhale
(C) Ananda Mohan Bose
(D) Rajnarain Bose
49. The Govt. of India Act was passed in
(A) 1946
(B) 1938
(C) 1935
(D) 1936
50. The following was a Mahajanapada:
(A) Magadha
(B) Saurashtra
(C) Pragjyotishpur
(D) Sialkot

51. Gautam Buddha was from the following clans:

- (A) Vajji
- (B) Sakya
- (C) Kushan
- (D) Saka

52. Sir Thomas Roe had visited the court of

- (A) Akbar
- (B) Shah Jahan
- (C) Jahangir
- (D) Babur

53. The Garuda Pillar at Besnagar was endowed by

- (A) Heliodorus
- (B) Megasthenes
- (C) Bimbisara
- (D) Ajatasatru

54. 'Arthashastra' was written by

- (A) Chandragupta
- (B) Bimbisara
- (C) Kautilya
- (D) None of the above

55. The Chauri Ghaura incident took place in

- (A) 1922
- (B) 1923
- (C) 1924
- (D) 1925

56. The Congress Socialist Party was founded in the year

- (A) 1935
- (B) 1934
- (C) 1936
- (D) 1937

57. The Buddha gave his first sermon at

- (A) Gaya
- (B) Sarnath
- (C) Peshawar
- (D) Karnataka

58. Tamralipta was a

- (A) River
- (B) Canal
- (C) Port
- (D) Fort

59. Who was known as "Lakh Baksh"?

- (A) Balban
- (B) Qutubuddin Aibak
- (C) Bahlol Lodi
- (D) Ibrahim Lodi

60. Bal Gangadhar Tilak was the editor of

- (A) Hindoo Patriot
- (B) Hind Swaraj
- (C) Kesari
- (D) Anandamath

61. The Arab conquest of Sindh is depicted in
(A) Akbar Namah
(B) Ain i Akbari
(C) Chach Namah
(D) Shah Namah
62. The Gupta Era starts from the reign of
(A) Chandragupta I
(B) Samudragupta
(C) Kumargupta
(D) Budhagupta
63. Raja Rammohan Roy was the founder of
(A) Bahujan Sabha
(B) Brahmo Sabha
(C) Jatiyo Sabha
(D) Lok Sabha
64. The "Tarikh i Firuz Shahi" was the work of
(A) Abdul Khader Badauni
(B) Ziauddin Barani
(C) Bhimsen Burhanpuri
(D) Tansen
65. The Battle of Buxar took place in the year
(A) 1765
(B) 1764
(C) 1795
(D) 1800
66. The First Battle of Panipat took place in
(A) 1520
(B) 1530
(C) 1525
(D) 1526
67. The term "Sakari" was used for
(A) Chandragupta II Vikramaditya
(B) Samudragupta
(C) Kumargupta
(D) Skandagupta
68. The "Milinda Panho" was a
(A) Scripture
(B) Book on Philosophical discussion
(C) Artefact
(D) Cinema
69. The Hindoo Patriot was edited by
(A) Manmohan Ghosh
(B) Harish Chandra Mookherjee
(C) Debendranath Tagore
(D) Acharya Binoba Bhave
70. The Non-Cooperation Movement was launched in
(A) 1930
(B) 1931
(C) 1920
(D) 1923

71. The last ruler of the Maurya Dynasty was
(A) Ajatasatru
(B) Bimbisara
(C) Brihadratha
(D) Kakavarna
72. Sasanka was the ruler of
(A) Kanauj
(B) Pataliputra
(C) Gaur
(D) Assam
73. 'Hind Swaraj' was written by
(A) Mahatma Gandhi
(B) Pandit Nehru
(C) Rabindranath Tagore
(D) Tilak
74. Zabti was
(A) Currency
(B) Trade
(C) Customs
(D) Land Revenue System
75. The Central Asian theory of the home of the Aryans was propounded by
(A) Friedrich Max Muller
(B) Nirad Chaudhary
(C) Rakhaldas Banerjee
(D) Risley
76. Shah Jahan had built the Taj Mahal in memory of
(A) Arjumand Bano Begum
(B) Anarkali
(C) Jahanara
(D) Rowshanara
77. The land revenue system under Akbar was systematized by
(A) Raja Beharimal
(B) Raja Todarmal
(C) Raja Chunnumal
(D) Birbal
78. The firman of 1717 was issued by
(A) Farrukhsiyar
(B) Jahangir
(C) Aurangzeb
(D) Jahandar Shah
79. The book written by Ibn Batuta was
(A) Saleha
(B) Rehala
(C) Kitab ul Ibar
(D) Razm Namah
80. The Chinese pilgrim Fa Hien had visited India during the reign of
(A) Chandragupta II Vikramaditya
(B) Bimbisara
(C) Harshavardhan
(D) Kharvela

81. The Eight-Fold path in Buddhism is known as
- (A) Dharmachakrapravartana
 - (B) Ashtangik Marg
 - (C) Nirukta
 - (D) Vimukta
82. The original name of Nurjahan was
- (A) Luftunnissa
 - (B) Khairunnisa
 - (C) Meherunnisa
 - (D) Raziya
83. The author of 'Harshacharit' was
- (A) Nagarjuna
 - (B) Banabhatta
 - (C) Aryabhatta
 - (D) Varahamihir
84. Mohenjodaro and Harappa belong to
- (A) Egyptian civilization
 - (B) Sumerian civilization
 - (C) Mesopotamian civilization
 - (D) Indus valley civilization
85. Who was afflicted by the "Deccan Ulcer"?
- (A) Akbar
 - (B) Babur
 - (C) Aurangzeb
 - (D) None of the above
86. The first woman ruler of the Delhi Sultanate was
- (A) Rabeya
 - (B) Rokeya
 - (C) Razia
 - (D) Zubeida
87. Menander was a
- (A) Kushan
 - (B) Indo-Greek
 - (C) Saka
 - (D) Chinese
88. "Sare Jahan Se Accha" was written by
- (A) Sir Syed Ahmad Khan
 - (B) Nawab Khan Bahadur Ahsanullah
 - (C) Muhammad Iqbal
 - (D) Abdul Latif
89. Akbar defeated Hemu in the
- (A) First Battle of Panipat
 - (B) Third Battle of Panipat
 - (C) Second Battle of Panipat
 - (D) Battle of Haldighati
90. The oldest Veda was
- (A) Rig Veda
 - (B) Sam Veda
 - (C) Atharva Veda
 - (D) Avesta

91. The Indian National Congress was founded by

- (A) David Hume
- (B) Allan Octavian Hume
- (C) William Wedderburn
- (D) Henry Cotton

92. 'Anandamath' was written by

- (A) Bankim Chandra Chattopadhyay
- (B) Sarat Chandra Chattopadhyay
- (C) Sarat Chandra Bose
- (D) Dwijendralal Roy

93. Mukundaram was the author of

- (A) Padma Puran
- (B) Barsha Mongal
- (C) Chandi Mongal
- (D) None of the above

94. The All India Muslim League was founded in

- (A) 1904
- (B) 1905
- (C) 1906
- (D) 1907

95. The capital of Kanishka was

- (A) Purushpura
- (B) Sialkot
- (C) Pathankot
- (D) Bodhgaya

96. The greatest Kushan ruler was

- (A) Menander
- (B) Gondophernes
- (C) Maga
- (D) Kanishka

97. The Tamralipta Jatiyo Sarkar was set up in

- (A) Bankura
- (B) Birbhum
- (C) Malda
- (D) Medinipur

98. Sati dahan Bill was passed in the year

- (A) 1830
- (B) 1829
- (C) 1831
- (D) 1832

99. Tabaqat i Nasiri was written by

- (A) Sirajuddin
- (B) Minhaj us Siraj
- (C) Khafi Khan
- (D) Firuz Tughlaq

100. Who was known as "Beloved of the Gods"?

- (A) Kalashoka
- (B) Bimbisara
- (C) Ajatasatru
- (D) Ashoka

101. Which of the following system irrigates the largest percentage of net cropped area in India?

- (A) Canals
- (B) Tanks
- (C) Wells and tube-wells
- (D) River lift

102. In which type of soil cotton is mostly grown?

- (A) Red
- (B) Regur
- (C) Alluvial
- (D) Peat

103. Which is the highest peak in the Zaskar Range?

- (A) Annapurna
- (B) Kamet
- (C) K2
- (D) Everest

104. Out of total 7 Union Territories of India which one is the biggest in terms of area ?

- (A) Delhi
- (B) Andamans
- (C) Dadra
- (D) Puduchery

105. Which types of forests are found in the southern slopes of the high Himalayas?

- (A) Wet deciduous
- (B) Dry deciduous
- (C) Tropical evergreen
- (D) Conifer evergreen

106. In which stage of Demographic Transition Model India belongs to?

- (A) First stage
- (B) Second stage
- (C) Third stage
- (D) Fourth stage

107. This Iron & Steel company was established in Sakchi (now in Jharkhand) in 1909. Identify it.

- (A) Tata Iron and Steel Company (TISCO)
- (B) Indian Iron and Steel Company (IISCO)
- (C) Vishakhapatnam Steel Plant (VSP)
- (D) Bokaro Steel Plant

108. Which is the largest river system in the peninsular India?

- (A) Godavari
- (B) Narmada
- (C) Cauvery
- (D) Mahanadi

109. The smallest Union Territory of India in terms of area is

- (A) Chandigarh
- (B) Daman & Diu
- (C) Lakshadweep
- (D) Puduchery

110. In India, it is known as the 'golden fibre'. Identify it.

- (A) Cotton
- (B) Wool
- (C) Jute
- (D) Silk

111. Which of the following State has the maximum number of towns according to Census of India, 2011?

- (A) Tamil Nadu
- (B) Maharashtra
- (C) Uttar Pradesh
- (D) Madhya Pradesh

112. JNNURM was initiated by the Government of India in 2005, which comprises four components. Which one was not included in the four major components?

- (A) Urban Infrastructure & Governance (UIG)
- (B) Basic Service for the Urban Poor (BSUP)
- (C) Integrated Housing & Slum Development Programme (IHSDP)
- (D) Atal Mission for Rejuvenation Urban Transformation (AMRUT)

113. The main worker, according to the Census of India, is a person who works for at least how many days in a year?

- (A) 180 Days
- (B) 181 Days
- (C) 182 Days
- (D) 183 Days

114. Which of the following pass connects Simla with Tibet?

- (A) Zozila
- (B) Thang La
- (C) Jelep La
- (D) Shipki La

115. Which one of the following tribes in India has no contact with the outer world?

- (A) Sentinelese
- (B) Gond
- (C) Toto
- (D) Apatani

116. Kathiawar Peninsula is an example of

- (A) Emerged shoreline
- (B) Submerged shoreline
- (C) Ria shoreline
- (D) Dalmatian shoreline

117. Kyelleng-Pyndengsohiong, Mawthabah (KPM) uranium mining project is located in the State of

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

118. Which of the following is the longest west flowing river in India?

- (A) Tapi
- (B) Luni
- (C) Narmada
- (D) Bhagirathi

119. Which among the following soils is primarily infertile?

- (A) Regur
- (B) Alluvial
- (C) Bangar
- (D) Lateritic

120. As per the Indian Standards Institution (ISI) most of the area of West Bengal lies under the following seismic zone:

- (A) I and II
- (B) II and III
- (C) III and IV
- (D) IV and V

121. Which one of the following is the oldest rock found in India?

- (A) Granite
- (B) Bauxite
- (C) Khondalite
- (D) Andesite

122. The north-eastern 'Syntaxial Bend' was formed near

- (A) Nanga Parvat
- (B) Sahyadri
- (C) Namcha Barwa
- (D) Amarkantak

123. The Godavari River originates from

- (A) Amarkantak
- (B) Nilgiri
- (C) Siwara
- (D) Trimbak

124. Match the following:

| List I | | List II | |
|---|----|-----------------|----|
| (Vegetation Zone) | | (Rainfall) | |
| I. Sub-Tropical Broad Leaved hill forests | | 1. 150 cm-300cm | |
| II. Himalayan Moist Temperate forests | | 2. 75 cm-125 cm | |
| III. Sub-Tropical Dry Evergreen forests | | 3. 150cm- 250cm | |
| IV. Montane Wet Temperate | | 4. 50cm-100cm | |
| I | II | III | IV |
| (A) 1 | 2 | 3 | 4 |
| (B) 4 | 1 | 2 | 3 |
| (C) 2 | 3 | 4 | 1 |
| (D) 3 | 4 | 1 | 2 |

125. Name the newest district of West Bengal.

- (A) Kalimpong
- (B) Paschim Bardhaman
- (C) Jhargram
- (D) Alipur Duar

126. Which day in India is celebrated as the 'National Girl Child Day'?

- (A) 23 January
- (B) 24 January
- (C) 25 January
- (D) 26 January

127. Which State of India has the lowest percentage of its total area under forests?

- (A) Jammu & Kashmir
- (B) Bihar
- (C) Tamil Nadu
- (D) Haryana

128. Which of the following countries has longest common border with India?

- (A) China
- (B) Myanmar
- (C) Pakistan
- (D) Bangladesh

129. The natural vegetation of the desert region in India is called

- (A) Halophytes
- (B) Xerophytes
- (C) Lithophytes
- (D) Heliophytes

130. In which of the following district of West Bengal the *Khoayi* or Badland topography is found?

- (A) Nadia
- (B) Darjiling
- (C) Uttar Dinajpur
- (D) Birbhum

131. The Singalila mountain range is situated on the border between West Bengal and

- (A) Sikkim
- (B) Nepal
- (C) Assam
- (D) Bhutan

132. Which iron and steel plant was established in India with the cooperation of the UK?

- (A) Bhilai
- (B) Bokaro
- (C) Durgapur
- (D) Rourkela

133. Arrange the following States of India according to their decreasing length of mainland coastline:

- (A) Tamil Nadu, Andhra Pradesh, Maharashtra, Gujarat
- (B) Gujarat, Andhra Pradesh, Maharashtra, Tamil Nadu
- (C) Andhra Pradesh, Tamil Nadu, Maharashtra, Gujarat
- (D) Gujarat, Andhra Pradesh, Tamil Nadu, Maharashtra

134. Which one of the following constitutes the largest physiographic division of the country?

- (A) The Great Himalayan range
- (B) The Northern Plain of India
- (C) The Peninsular Plateau
- (D) The Deccan trap

135. Which of the following cities does not have a unit of HAL ?

- (A) Kolkata
- (B) Koraput
- (C) Nasik
- (D) Bangalore

136. Which of the following group of cities is connected by the Golden Quadrilateral?

- (A) Delhi-Mumbai-Bangalore-Chennai
- (B) Delhi-Ahmedabad-Jaipur-Srinagar
- (C) Delhi-Kolkata-Chennai-Bangalore
- (D) Delhi-Mumbai-Chennai-Kolkata

137. Name the longest dam in India?

- (A) Bhakra Nanal
- (B) Rihand
- (C) Hirakud
- (D) Nagarjuna Sagar

138. Which of the following city of the South India has started its first metro rail named as 'Namma Metro'?

- (A) Bengaluru
- (B) Vishakhapatnam
- (C) Secunderabad
- (D) Kanpur

139. The Barakar river is a tributary of

- (A) the Mahanadi
- (B) the Ganga
- (C) the Damodar
- (D) the Ajay

140. How many landlocked States in India do not have international boundary?

- (A) Two
- (B) Four
- (C) Five
- (D) Six

141. As per the latest census, the least populous Union Territory (UT) of India is

- (A) Lakshadweep
- (B) Daman & Diu
- (C) Dadra & Nagar Haveli
- (D) Andaman & Nicobar

142. Palghat gap is situated between

- (A) Nilgiri and Anaimalai
- (B) Vindhya and Satpura
- (C) Dodabeta and Anaimudi
- (D) Dandakaranya and Bastar

143. Provision of Urban Amenities in Rural areas (PURA) was conceptualized by

- (A) Dr. A. P. J. Abdul Kalam
- (B) Dr. C. N. R. Rao
- (C) Dr. M. S. Swaminathan
- (D) Dr. Verghese Kurien

144. The Nagarjun Sagar Multipurpose Project is located in

- (A) partly Telengana and partly Andhra Pradesh
- (B) partly Tamil Nadu and partly Andhra Pradesh
- (C) partly Karnataka and partly Tamil Nadu
- (D) partly Kerala and partly Karnataka

145. According to the Census of India, 2011, in West Bengal, the highest literacy rate of population was found in the district of

- (A) Purba Medinipur
- (B) Kolkata
- (C) North 24 Parganas
- (D) Hawrah

146. Structurally, the Meghalaya plateau is a part of

- (A) the Himalayas
- (B) the Ganga Plain
- (C) the Chhotonagpur Plateau
- (D) the Trans Himalaya

147. Which of the following is the most important source of fish catch in India?

- (A) Inland natural fisheries
- (B) Deep sea fisheries
- (C) Continental shelf
- (D) Off shore fisheries

148. Adityapur Special Economic Zone is famous for

- (A) Engineering and Machine Tool
- (B) Wool Textile
- (C) Automobile and Auto-components
- (D) Dairy Products

149. Match the following:

| List I | | List II | |
|--------------|----|---------------------|----|
| (Tribe Name) | | (Location) | |
| I. Toda | | 1. Bastar | |
| II. Adivasis | | 2. Nilgiri | |
| III. Gaddis | | 3. Himachal Pradesh | |
| IV. Gond | | 4. Madhya Pradesh | |
| I | II | III | IV |
| (A) 1 | 2 | 4 | 3 |
| (B) 2 | 4 | 3 | 1 |
| (C) 4 | 3 | 1 | 2 |
| (D) 3 | 1 | 2 | 4 |

150. Which of the following series of Indian satellites is used for LULC mapping?

- (A) LANDSAT
- (B) METEOSAT
- (C) IRS
- (D) INSAT

151. It is composed with newer alluvium and forms the flood plain along the river. Identify it.

- (A) Bhangar
- (B) Khadar
- (C) Reh
- (D) Kallar

152. 'Rice Bowl' of India is

- (A) the Brahmaputra-Assam Valley
- (B) the Krishna-Godavari Basin
- (C) the Narmada Valley
- (D) the Sindh Province of Punjab

153. India's HDI rank in 2018 was

- (A) 120
- (B) 130
- (C) 141
- (D) 150

154. The type of settlements in the Bhangar Plain is of _____ type.

- (A) cluster
- (B) dispersed
- (C) fragmented
- (D) semi-dispersed

155. Majuli, the largest riverine island is situated in which of the following rivers?

- (A) The Brahmaputra
- (B) The Ganga
- (C) The Cauvery
- (D) The Mahanadi

156. Which of the following is an example of transverse valley?

- (A) Kullu valley
- (B) Kangra valley
- (C) Assam valley
- (D) Srinagar valley

157. In West Bengal, according to Census of India, 2011, the highest number of census towns (CTs) are found in the district of

- (A) North 24 Parganas
- (B) Howrah
- (C) Hooghly
- (D) Bardhaman

158. Which of the following National Highways (NH) connects Porbandar with Silchar?

- (A) NH 26
- (B) NH 27
- (C) NH 28
- (D) NH 29

159. North-Western part of India receives winter rainfall due to

- (A) Nor'wester
- (B) Western Disturbance
- (C) Low pressure systems in the Arabian Sea
- (D) Cold waves

160. Which one of the following rivers has originated from the 'Paglajhora' waterfalls of Kuerseong?

- (A) Jaldhaka
- (B) Mahananda
- (C) Sankosh
- (D) None of the above

161. Which town was planned during the Second Five Year plan?

- (A) Gwalior
- (B) Bokaro.
- (C) Bhopal
- (D) Kanpur

162. How many official languages the Constitution of India now recognizes?

- (A) 20
- (B) 21
- (C) 22
- (D) 23

163. Farakka Barrage was constructed for the purpose of

- (A) supplying irrigation water in the lower deltaic plains.
- (B) generation of hydro-electricity.
- (C) water treaty between India and Bangladesh.
- (D) navigation in the Hooghly channel.

164. In which of the following rivers the Sardar Sarovar hydro-electrical project is located?

- (A) The Sutlej
- (B) The Bhagirathi
- (C) The Narmada
- (D) The Rihand

165. The famous Vale (Valley) of Kashmir lies between

- (A) Greater and Lesser Himalaya
- (B) Lesser and Siwalik Himalaya
- (C) Zaskar and Himadri Himalaya
- (D) Pir Panjal and Himadri Himalaya

166. Which of the following projects has the biggest underground power house?

- (A) Salal project
- (B) Nathapa Jhakri
- (C) Bhakra Nangal
- (D) Damodar

167. This soil occupies the largest geographical area in India. Identify it.

- (A) Red
- (B) Black
- (C) Alluvial
- (D) Lateritic

168. The river to form a boundary between Rajasthan and Madhya Pradesh is

- (A) Yamuna
- (B) Gomti
- (C) Ken
- (D) Chambal

169. In India sandalwood is mostly found in the State of

- (A) Madhya Pradesh
- (B) Maharashtra
- (C) Karnataka
- (D) Kerala

170. Kanha National Park is located under which of the following bio-geographical regions?

- (A) Tropical sub-humid forest
- (B) Tropical humid forest
- (C) Tropical dry forest
- (D) Tropical monsoon forest

171. Which of the following States got the maximum benefits of the Green Revolution?

- (A) Uttar Pradesh and Bihar
- (B) Rajasthan and Haryana
- (C) Punjab and Rajasthan
- (D) Punjab and Haryana

172. Which is called the finest natural harbour in India?

- (A) Marmagao
- (B) Mumbai
- (C) Chennai
- (D) Kochi

173. Which State of India has the maximum common boundary?

- (A) Madhya Pradesh
- (B) Chhattisgarh
- (C) Bihar
- (D) Uttar Pradesh

174. The Andaman and Nicobar islands are thought to be the emergent peaks of a submerged mountain range of

- (A) The Eastern Himalayas
- (B) The Lusai Hill
- (C) The Arakan Yoma
- (D) The Jayantia Hill

175. In India, the decade known as the 'period of population explosion' is

- (A) 1921-1931
- (B) 1941-1951
- (C) 1951-1961
- (D) 1981-1991

176. Where is the Zaskar range located?

- (A) Between Ladakh and North Himalayas
- (B) Between Central Himalayas and Nepal
- (C) Between Central Himalayas and Siwalik
- (D) In the Eastern Himalayas

177. _____ is also called the 'Year of Great Demographic Divide' in India.

- (A) 1921
- (B) 1931
- (C) 1941
- (D) 1951

178. Match the following:

| List I | List II |
|----------------------|------------------|
| (Wildlife Sanctuary) | (Location) |
| I. Gir | 1. Assam |
| II. Dachigam | 2. Uttar Pradesh |
| III. Kaziranga | 3. Gujarat |
| IV. Bandipur | 4. Karnataka |
| I | II |
| III | IV |
| (A) 3 | 2 |
| (B) 1 | 3 |
| (C) 2 | 1 |
| (D) 4 | 3 |

179. According to the Census of India, 2011, in West Bengal, the lowest density of population was found in the district of

- (A) Darjiling
- (B) Dakshin Dinajpur
- (C) Bankura
- (D) Purulia

180. The 'Pat' or 'Pat land' is found in

- (A) Karnataka Plateau
- (B) Vale of Kashmir
- (C) Meghalaya Plateau
- (D) Chhotanagpur Plateau

181. 'Operation flood' is related to which of the following?

- (A) To control flood
- (B) Milk production
- (C) Crop production
- (D) Population control

182. Arrange the soils of India according to the decreasing share of area they cover:

- (A) Red, Alluvial, Black, Laterite
- (B) Alluvial, Black, Red, Laterite
- (C) Black, Laterite, Red, Alluvial
- (D) Alluvial, Black, Laterite, Red

183. In India, the largest region hydro-electric potential is

- (A) the Himalayas
- (B) the Western Ghats
- (C) the Eastern Ghats
- (D) the Satpura Range

184. 'Sagarmatha' is the regional name of which of the following mountains?

- (A) Karakoram
- (B) Himalaya
- (C) Sahyadri
- (D) Khasi

185. Which place in India should receive the maximum INSOLATION in the month of January?

- (A) Delhi
- (B) Amritsar
- (C) Chennai
- (D) Kanyakumari

186. Little Andaman is separated from the Great Andaman by which of the following geographical entity?

- (A) Indira Point
- (B) Duncan Passage
- (C) Saddle Peak
- (D) Pico Island

187. The biggest thermal power station of West Bengal is located at

- (A) Bandel
- (B) Kolaghat
- (C) Durgapur
- (D) Farakka

188. Arrange the following religion of India according decreasing order of number as per Census of India, 2011:

- (A) Christian, Sikh, Buddha, Jains
- (B) Sikh, Buddha, Christian, Jains
- (C) Christian, Sikh, Jains, Buddha
- (D) Jains, Christian, Sikh, Buddha

189. Match the following:

| List I | | List II | |
|-----------------|-------------|------------------------------|--|
| (Pass Name) | | (Location) | |
| I. Burzila | | 1. Jammu-Himachal Pradesh | |
| II. Bara la cha | | 2. Arunachal Pradesh-Myanmar | |
| III. Niti Pass | | 3. Srinagar-Gilgit | |
| IV. Dihang Pass | | 4. Uttarakhand-Tibet | |
| | I II III IV | | |
| (A) | 4 2 1 3 | | |
| (B) | 1 3 4 2 | | |
| (C) | 2 4 3 1 | | |
| (D) | 3 1 4 2 | | |

190. Which ethnic group first entered into India?

- (A) Negrito
- (B) Proto Australoid
- (C) Mongoloid
- (D) Nordic

191. The Standard Meridian ($82^{\circ}30'E$) of India does not pass through

- (A) Maharashtra
- (B) Chhattishgarh
- (C) Odisha
- (D) Andhra Pradesh

192. Geologically India is a part of

- (A) Angara Land
- (B) Gondwana Land
- (C) African Shield
- (D) South Asia

193. The British Island in the Indian Ocean that provides military support to USA and UK is

- (A) Diego Garcia
- (B) Madagascar
- (C) Mauritius
- (D) Philippine

194. Which of the following regions does have the highest population density as per 2011 Census?

- (A) The Punjab Plain
- (B) The Upper Ganga Plain
- (C) The Ganga Delta
- (D) The Brahmaputra Delta

195. Jharkhand ranks third after which one of the following group of States in the availability of coal reserve in India?

- (A) West Bengal and Chhattisgarh
- (B) Odisha and Chhattisgarh
- (C) Odisha and West Bengal
- (D) Chhattisgarh and Karnataka

196. Which of the following States has three mega cities now?

- (A) Uttar Pradesh
- (B) West Bengal
- (C) Gujarat
- (D) Maharashtra

197. Which State of India has the maximum number of tiger reserves?

- (A) Assam
- (B) West Bengal
- (C) Maharashtra
- (D) Madhya Pradesh

198. In India, local atmospheric disturbances during the summer season are associated with certain geographical areas. Which of the following pair is incorrect?

- (A) Loo – Punjab
- (B) Mango Shower – Odisha
- (C) Andhi – Uttar Pradesh
- (D) Nor'wester – West Bengal

199. The first passenger train in India ran between

- (A) Bombay and Thane
- (B) Bombay and Pune
- (C) Bombay and Nasik
- (D) Calcutta and Serampore

200. According to the Census of India 2011, the highest urbanization took place in which of the following States?

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

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

2022

TEST BOOKLET

Paper-IV

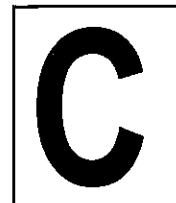
Time allowed : 3 hours

Full marks : 200

Answer *all* the questions.

Questions are of equal value.

TEST BOOKLET SERIES



5979

Serial No.

Roll No.:

Signature of the Candidate:

INSTRUCTIONS

Candidates should read the following instructions carefully before answering the questions:

1. This booklet consists of 24 pages including this front page, containing 200 questions. **Verify the Page Nos. and Test Booklet series on each page and bring at once to the Invigilator's notice any discrepancy.**
2. Answers will have to be given in the Special Answer-Sheets supplied for the purpose.
3. Before you proceed to mark in the Answer-Sheet in response to various items in the Test Booklet, you have to fill in some particulars in the Answer-Sheet as per instructions sent to you in the Admit Card. ***Do not fold the Answer-Sheet as this will result in error in your marks.***
4. All questions are of multiple-choice answer-type. You will find ***four*** probable answers (A), (B), (C) and (D) against each question. Find out which of the four answers appears to you to be **correct or the best**. Now darken the circle corresponding to the letter of the selected answer in the Answer-Sheet with **Black Ball Point Pen** as per instructions printed on the reverse of the Admit Card and in the Answer-Sheet.
5. One and only one circle is to be fully blackened for answer. Any spot in any other circle (multiple circle) or in wrong circle will be considered as wrong answer. If more than one circle is encoded for a particular answer, it will be treated as a wrong answer.
6. ***There will be negative marking of 0.25 mark for each wrong answer.***
7. ***There are blank pages at the end of this Booklet for Rough Work.***
8. ***The Special Answer-Sheet should be handed over to the Invigilator before leaving the Examination Hall. You are permitted to take away the used Test Booklet after completion of the examination.***

1. Which one is not a pollutant normally?
 - (A) Hydrocarbon
 - (B) Carbon dioxide
 - (C) Carbon monoxide
 - (D) Sulphur dioxide
2. Which one of the following is not a naturally-occurring element that may be hazardous to human health?
 - (A) Lead
 - (B) Radon
 - (C) Phthalate
 - (D) Mercury
3. Where was the 4th meeting of the "National Start-up Advisory Council" (NSAC) held?
 - (A) New Delhi
 - (B) Mumbai
 - (C) Bengaluru
 - (D) Hyderabad
4. Which of the following types of unemployment is most common in agricultural sector?
 - (A) Seasonal Unemployment
 - (B) Frictional Unemployment
 - (C) Disguised Unemployment
 - (D) Voluntary Unemployment
5. In coming years, skin related disorders will be more common due to
 - (A) water pollution
 - (B) depletion of ozone layer
 - (C) pollutants in air
 - (D) use of detergents
6. Which metal of the following is powdered, suspended in oil and used as paint?
 - (A) Fe
 - (B) Sn
 - (C) Al
 - (D) Ag
7. Study of inter-relationships between organisms and their environment is
 - (A) ecology
 - (B) ecosystem
 - (C) phyto geography
 - (D) ethology
8. Which one of the following type of pollution is cultural eutrophication?
 - (A) Noise pollution
 - (B) Thermal pollution
 - (C) Soil pollution
 - (D) Water pollution
9. DDT and bleaching powder are the compounds of
 - (A) S
 - (B) P
 - (C) Chlorine
 - (D) As
10. Which European country recently legalised same-sex marriage, becoming the 30th country in the world to do so?
 - (A) Switzerland
 - (B) Italy
 - (C) Portugal
 - (D) Spain

11. Citric acid can be produced from crude sugar by aerobic fermentation using the enzyme:

- (A) Amylase
- (B) Lipase
- (C) Thiobacilla
- (D) Aspergillus niger

12. The closely related morphologically similar sympatric populations, but reproductively isolated, are designated as

- (A) clones
- (B) sibling species
- (C) clines
- (D) demes

13. Which one of the following would most directly prevent a dead zone from forming in a water body that is already experiencing eutrophication?

- (A) Increase the O_2 concentration in the water
- (B) Lower the nutrient levels
- (C) Increase the amount of algae and phytoplankton
- (D) Increase the amount of bacteria that decompose dead organic matter

14. As of 2021, which actor holds the record of receiving most Filmfare awards for Best Actor?

- (A) Dev Anand
- (B) Raj Kapoor
- (C) Dharmendra
- (D) Dilip Kumar

15. Minor gypsum is added to cement clinker during its grinding in order to

- (A) increase the plasticity of the cement paste
- (B) decrease the plasticity of the cement paste
- (C) increase the plasticity and increase initial setting time of the cement paste
- (D) reduce plasticity and quick setting of cement paste

16. The velocity profile of a liquid flowing through a capillary is

- (A) Straight line
- (B) Circular arc
- (C) Hyperbolic
- (D) Parabolic

17. Which of the following super conducting material has the highest critical temperature and highest critical magnetic flux density?

- (A) Lead
- (B) Nb-Zr alloy
- (C) Nb_3Ge
- (D) $YBa_2Cu_3O_7$

18. Which one of the following would be described as anthropogenic?

- (A) Water backing up behind a beaver dam
- (B) The dinosaurs going extinct
- (C) Logging a forest
- (D) A mudslide burying a stream

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

- (A) Land fill
- (B) Incineration
- (C) Pyrolysis
- (D) Composting

20. Which one of the following is not a predicted consequence of global climate change?

- (A) Spread of diseases carried by insects, such as malaria.
- (B) Rise in sea levels.
- (C) Increases in the global average air and ocean temperatures.
- (D) All of the above

Please Turn Over

21. Which one of the following is associated with the issue of control and phasing out of the use of ozone depleting substances?

- (A) Bretton Woods Conference
- (B) Montreal Protocol
- (C) Kyoto Protocol
- (D) Nagoya Protocol

22. The Nobel Prize for Chemistry 2021 has been awarded for developing a new way for building molecules known as

- (A) Altered DNAs
- (B) Altered mRNAs
- (C) Asymmetric Organocatalyst
- (D) None of the above

23. In clinical laboratory thin layer chromatography (TLC) is used to identify:

- (A) Illicit drugs
- (B) Poisons
- (C) Inks
- (D) All of the above

24. The material successfully used as induction core is

- (A) Garnet
- (B) AlNiCo magnet
- (C) Ba-Sr ferrite
- (D) Ni-Zn ferrite

25. What is the name of the new model of Sustainable Development of Rivers proposed by the Government of India?

- (A) Namani Bharat
- (B) Arth Ganga
- (C) River SDG
- (D) Namani Nadi

26. India imports maximum gold from which country?

- (A) Switzerland
- (B) UAE
- (C) South Africa
- (D) Brazil

27. What is the primary cause of ocean acidification?

- (A) Atmospheric CO_2 dissolving in ocean water.
- (B) Increases in acid rain.
- (C) Increased erosion of acid-containing rocks.
- (D) Water draining into the ocean has a higher pH from industrial pollutants.

28. Oil of winter green is

- (A) Acetic acid
- (B) Benzoic acid
- (C) Methyl Salicylate
- (D) Phthalic acid

29. The real name of Gulzar, the noted poet and lyricist is

- (A) Sampooran Singh Kalra
- (B) Sadanand Singh Kalra
- (C) Surjeet Singh Kohli
- (D) Probodh Chandra Bhatt

30. Green chemistry uses following oxidising agent for clean oxidation

- (A) $\text{K}_2\text{Cr}_2\text{O}_7$
- (B) NH_4NO_3
- (C) $\text{K}_2\text{S}_2\text{O}_8$
- (D) Aqueous H_2O_2

31. Hydraulic press is based on
(A) Archimedes' Law
(B) Pascal's law
(C) Reynold's law
(D) Bernoulis' law
32. Current in a circuit is wattless when phase difference between current and voltage is
(A) 0°
(B) $\pi/2$
(C) π
(D) $-\pi$
33. Which one of the following terms describes the complete set of chemical reactions that occur within cells?
(A) Metabolism
(B) Cellular respiration
(C) Calvin cycle
(D) Bio energetics
34. Plants such as Prosopis, Acacia and Capparis represent examples of tropical
(A) deciduous forests
(B) evergreen forests
(C) grass lands
(D) thorn forests
35. The main hindrance of nanomaterials is
(A) large surface area to volume ratio.
(B) uniform size distribution in nanometer range.
(C) coarsening effect from ostwald ripening or agglomeration on aging.
(D) even morphology.
36. National Science Day is observed on
(A) 1st July
(B) 14th November
(C) 28th February
(D) 5th September
37. Phosphate pollution is caused by
(A) sewage and phosphate rock
(B) sewage and agricultural fertilizers
(C) phosphate rock only
(D) agricultural fertilizers only
38. The Rourkela Steel Plant is located on the bank of
(A) Bhadra River
(B) Suvarnarekha River
(C) Damodar River
(D) Brahmani River
39. Which of the following is a secondary pollutant?
(A) PAN
(B) Aerosol
(C) CO
(D) CO_2
40. Which of the following is known as inorganic graphite?
(A) $(\text{BN})_3$
(B) $\text{B}_3\text{N}_3\text{H}_6$
(C) Si_6
(D) Si_3N_4

41. Pyramid of numbers deals with number of
(A) species in an area
(B) individuals in a community
(C) individuals in a tropic-level
(D) subspecies in a community
42. Which one of the following is an example of an emerging disease?
(A) Malaria
(B) Ebola
(C) Cancer
(D) Heart disease
43. Which university was sought to be converted into Gati Shakti Vishwa Vidyalaya as per a recent bill passed in the Lok Sabha?
(A) National Rail and Transportation Institute (NRTI)
(B) BITS Pilani
(C) Indira Gandhi Institute of Development Research
(D) IIT Hyderabad
44. Thick paste of cement, sand, stone chips and water is
(A) Mortar
(B) Concrete
(C) Reinforced Cement Concrete
(D) Monoliths
45. The process of zone refining is used for ultra purification of
(A) Si
(B) Ge
(C) Ga
(D) All of the above
46. Zener diode is used as
(A) Coupler
(B) Rectifier
(C) Amplifier
(D) Voltage regulator
47. Which one of the following describes the use of organisms to control pests?
(A) Bioremediation
(B) Biological control
(C) Species niche partitioning
(D) Vector control
48. On which date, Constituent Assembly of India met for the first time?
(A) June 3, 1946
(B) July 6, 1946
(C) July 25, 1946
(D) December 9, 1946
49. Water soluble Vitamin is
(A) Vitamin A
(B) Vitamin D
(C) Vitamin E
(D) Vitamin B complex
50. Mention the organisation which released the 'State of Global Climate 2021' report:
(A) Niti Aayog
(B) NABARD
(C) World Meteorological Organisation
(D) Food and Agriculture Organisation

51. A micro-organism is viewed through a microscope and is determined to be made of a single cell that lacks organelles. From this information, which one of the following can you conclude?

- (A) The organism belongs to Domain Bacteria.
- (B) The organism belongs to Domain Eukarya.
- (C) The organism belongs to Domain Archaea.
- (D) The cell is prokaryotic.

52. Bacteria that feed upon decaying organic matter in the soil would best be described as which one of the following?

- (A) Heterotrophic
- (B) Autotrophic
- (C) Fungi
- (D) Cyanobacteria

53. An endocrinologist deals with

- (A) Teeth
- (B) Glands
- (C) Epidemics
- (D) Heart

54. Which country has the largest muslim population in the world?

- (A) Pakistan
- (B) Indonesia
- (C) Iran
- (D) Morocco

55. In which one among the following categories of protected areas in India are local people not allowed to collect and use the biomass?

- (A) Biosphere Reserves
- (B) National Parks
- (C) Wetlands declared under Ramsar Convention
- (D) Wildlife Sanctuaries

56. In what rate the temperature of earth's atmosphere is increasing per year due to Green house effect?

- (A) 1°C
- (B) 0.05°C
- (C) 0.5°C
- (D) 0.8°C

57. Anticancer drug is

- (A) Captopril
- (B) Salicilin
- (C) Aspirin
- (D) Compothecin

58. A bicycle in motion does not fall because one of the following is conserved.

- (A) Linear momentum
- (B) Angular momentum
- (C) Kinetic energy
- (D) All of the above

59. For individuals living in areas where no freshwater is available, which one of the following would produce water that could be used for drinking?

- (A) Desalination
- (B) Groundwater mining
- (C) Sublimation
- (D) Transpiration

60. Under how many themes, the Nadi Utsav 2021 is being celebrated in India?

- (A) Two
- (B) Four
- (C) Six
- (D) Seven

61. Which of the following is a branded narcotic drug?

- (A) Diazepam
- (B) Morphine
- (C) Ibuprofen
- (D) Mestranol

62. How many items are there in the 11th Schedule of the constitution of India?

- (A) 27
- (B) 28
- (C) 29
- (D) 33

63. Which state tableau was voted as the best among the States/UTs in the 'popular choice' category in Republic Day, 2022?

- (A) Uttar Pradesh
- (B) Assam
- (C) Maharashtra
- (D) Karnataka

64. Use of polished rice in human diet causes the following disease

- (A) Night blindness
- (B) Color blindness
- (C) Goitre blindness
- (D) Beriberi blindness

65. The optimum temperature for sludge digestion is

- (A) 10°C
- (B) 25°C
- (C) 37°C
- (D) 50°C

66. Metallic bond is not characterised by

- (A) Opacity
- (B) Ductility
- (C) High conductivity
- (D) Directionality

67. What type of noise can be abated by providing lining on walls and ceiling with sound absorbing material?

- (A) Source noise
- (B) Air borne noise
- (C) Structural noise
- (D) Reflection noise

68. Bleeding is stopped by applying FeCl_3 solution because

- (A) blood starts flowing in opposite direction.
- (B) reacts with blood and forms solid which seals the blood vessels.
- (C) blood is coagulated and seals blood vessel.
- (D) None of the above

69. Brass is the alloy of

- (A) Cu & Zn
- (B) Cu & Sn
- (C) Cu & Al
- (D) Zinc and Tin

70. Who has been appointed as the President of the Confederation of Indian Industry (CII) for the year 2022-2023?

- (A) Sanjib Bajaj
- (B) R.K. Dinesh
- (C) Alka Mittal
- (D) Pawan Munjal

71. In which year India International Science Festival was held?

- (A) 2016
- (B) 2017
- (C) 2018
- (D) 2019

72. The biggest ship building yard of India is

- (A) Garden Reach Workshop, Kolkata
- (B) Hindustan Ship yard, Visakhapatnam
- (C) Mazagaon Dock, Mumbai
- (D) Cochin Ship yard, Kochi

73. In Minamata Bay Japan the animals which remained free from Minamata disease, are

- (A) dogs
- (B) cats
- (C) pigs
- (D) rabbits

74. The study of the distribution of the world's species both in the past and in the present is known by what term?

- (A) Geology
- (B) Biogeography
- (C) Biodiversity
- (D) Biogeomorphology

75. Which one of the following processes would remove nitrates from contaminated water by converting it into nitrogen gas?

- (A) Nitrification
- (B) Nitrogen fixation
- (C) Denitrification
- (D) Assimilation

76. "Satyajit Ray Lifetime Achievement" is associated with

- (A) Physics
- (B) Film and Entertainment
- (C) Cricket
- (D) Theatre

77. Arrack Movement or Anti-liquor Movement was led by women in which state of India?

- (A) Manipur
- (B) Punjab
- (C) Rajasthan
- (D) Andhar Pradesh

78. 2.0% solution of mercurochrome is used as

- (A) Insecticide
- (B) Fungicide
- (C) Herbicide
- (D) Strong antiseptic

79. Which country topped the Sustainable Development Report 2021?

- (A) UK
- (B) USA
- (C) Germany
- (D) Finland

80. The formation of ozone hole in the Antarctic region has been a cause of concern. What could be the reason for the formation of this hole?

- (A) Presence of prominent tropospheric turbulence; and inflow of CFCs.
- (B) Presence of prominent polar front and stratospheric clouds; and inflow of CFCs.
- (C) Absence of polar front and stratospheric clouds; and inflow of methane and CFCs.
- (D) Increased temperature at polar region due to global warming.

Please Turn Over

81. Polarisation of light proves the
(A) longitudinal nature of light
(B) quantum nature of light
(C) corpuscular nature of light
(D) transverse nature of light
82. If you are concerned about bio magnification of toxins, which one of the following would you most want to avoid eating?
(A) Tuna (tertiary consumer)
(B) Seaweed (producer)
(C) Urchin (primary consumer)
(D) Sculpin (secondary consumer)
83. Which one of the following is not a site for in-situ method of conservation of flora?
(A) Biosphere Reserves
(B) Botanical Garden
(C) National Park
(D) Wildlife Sanctuary
84. Which one of the following is a biodiversity hotspot in India?
(A) Western Ghats
(B) Nandadevi
(C) Easter Ghats
(D) Aravalli
85. Which one of the following is more indicative of conventional agriculture, and not sustainable agriculture?
(A) Biological control
(B) Intercropping
(C) Minimal tillage
(D) Integrated pest management
86. Contact angle of mercury with respect to glass is
(A) 0°
(B) 90°
(C) $<90^\circ$
(D) $>90^\circ$
87. World Pulses Day is observed globally on
(A) 8 February
(B) 9 February
(C) 10 February
(D) 11 February
88. Which article of the Constitution of India states that 'no Citizen shall be denied admission into any educational institution maintained by the State or receiving aid out of State funds on grounds only of religion, race, caste, language or any of them'?
(A) Article 26
(B) Article 27
(C) Article 28
(D) Article 29
89. People and their culture that have existed continuously dating back to a time before their land was invaded or colonized by other societies are known as
(A) Endemic
(B) Indigenous
(C) Exotic
(D) Incurable
90. The Paracin Open 'A' Chess Tournament held in July 2022 in Serbia has been won by
(A) R. Praggnanandhaa
(B) Alexander Predke
(C) Al Muthaiah
(D) Alisher Suleymenov

91. 'RADAR' stands for;
(A) Radio Detection and Ranging
(B) Ready Advanced Appliance for Ranging
(C) Range Detection Appliance for Airplane Ranging
(D) Ready Advanced Airplane Ranging
92. Human ear is most sensitive to the sound of frequencies in between
(A) 100 – 500 Hz
(B) 500 – 5000 Hz
(C) 5000 – 10000 Hz
(D) 10000 – 20000 Hz
93. Which one of the following is not a renewable source of energy?
(A) Nuclear
(B) Wind
(C) Solar
(D) Hydropower
94. Which one of the following is not consumed as an edible oil?
(A) Sesame oil
(B) Ricebran oil
(C) Palm oil
(D) Castor oil
95. Which country is set to host the first tribal nation's summit since 2016?
(A) USA
(B) India
(C) Russia
(D) Japan
96. Which of the following functions as primary standard?
(A) KMnO_4
(B) $\text{K}_2\text{Cr}_2\text{O}_7$
(C) Sodium Thiosulphate
(D) EDTA
97. Renewable source of energy is
(A) biomass
(B) coal
(C) petroleum
(D) kerosene
98. What is the meaning of coral bleaching?
(A) Paling of coral color or decline in zooxanthellae due to climate change
(B) Impacts of excessive sea trade on fishing industry
(C) Both (A) and (B)
(D) None of the above
99. Oxygen binding protein in body is
(A) Hemoglobin
(B) Myoglobin
(C) Hemery Thrin
(D) All of the above
100. Which institution released a report entitled, "Reforms in Urban Planning Capacity in India"?
(A) World Bank
(B) Niti Aayog
(C) UNICEF
(D) UniFem

101. Pollavaram Project is associated with the river:

- (A) Cauvery
- (B) Penner
- (C) Krishna
- (D) Godavari

102. Acid rains are produced by

- (A) excess NO_2 and SO_2 from burning fossil fuels
- (B) excess production of NH_3 by industry and coal gas
- (C) excess release of carbon monoxide by incomplete combustion
- (D) excess formation of CO_2 by combustion and animal respiration

103. Which Indian city has prepared a Draft Regional Plan (DRP-2041)?

- (A) Mumbai
- (B) Kochi
- (C) Chennai
- (D) New Delhi

104. Mohan Veena is associated with

- (A) Pt. Vishwa Mohan Bhatt
- (B) Doraiswamy Iyengar
- (C) Ayyagani Swamasundaram
- (D) Zia Mohinuddin Dagar

105. Alzheimer's disease is caused by

- (A) interaction of Al with internal organs of the body.
- (B) interaction of Cu with internal organs of the body.
- (C) interaction of Ag with internal organs of the body.
- (D) interaction of Sn with internal organs of the body.

106. Which of the following amendments of the Indian Constitution is related to reservation of SC's and ST's and representation of Anglo Indians in the Lok Sabha and State Assembly?

- (A) 54th Amendment
- (B) 63th Amendment
- (C) 111th Amendment
- (D) 79th Amendment

107. An endobiotic fungus is

- (A) Agaricus
- (B) Morchella
- (C) Synchytrium
- (D) Polyporus

108. Ultraviolet radiations from sunlight causes a reaction that produces

- (A) fluorides
- (B) carbon monoxide
- (C) sulphur dioxide
- (D) ozone

109. The equal sharing of Earth's resources is specifically known as

- (A) Environmental justices
- (B) Sustainability
- (C) Environmental equity
- (D) Ecological foot printing

110. C-dating application of radio isotope ^{14}C emits

- (A) α particle
- (B) β particle
- (C) γ -ray
- (D) positrons

111. Depletion of the stratospheric ozone layer occurs when molecules of ozone are destroyed by chemicals such as
- (A) CFC
 - (B) DDT
 - (C) O_3
 - (D) PCB
112. Thermit welding uses Al powder because of
- (A) its lightness
 - (B) its lower melting point
 - (C) its greater affinity for O_2
 - (D) All of the above
113. A diet high in saturated fats can be linked to which of the following disorder
- (A) Kidney Failure
 - (B) Bulimia
 - (C) Anorexia
 - (D) Cardiovascular diseases
114. Which one of the following is not a major cause of biodiversity loss?
- (A) Habitat loss
 - (B) Climate change
 - (C) Invasive Species
 - (D) Zoonotic diseases
115. The term PVC in the plastic industry stands for
- (A) Phospho Vinyl Chloride
 - (B) Poly Vinyl Carbonate
 - (C) Poly Vinyl Chloride
 - (D) Phospho Vanadium Chloride
116. If you analyzed waste water directly after primary treatment, what would you notice?
- (A) Harmful bacteria and other biological agents have been killed or removed
 - (B) The water is potable
 - (C) Much of the dissolved solids have been removed
 - (D) Many suspended solids have been removed
117. The blueness of the sky is mainly due to
- (A) the scattering of sunlight by air molecules.
 - (B) the presence of water vapor.
 - (C) absorption of blue light by the air.
 - (D) emission of blue light by the atmosphere.
118. What is the urban population percentage to the total population of India as per the Census 2011?
- (A) 31
 - (B) 34
 - (C) 36
 - (D) 40
119. Carbon mono oxide is a pollutant because
- (A) reacts with hemoglobin
 - (B) makes nervous system inactive
 - (C) it reacts with O_2
 - (D) it inhibits glycolysis
120. Which of the following is a polysaccharide?
- (A) Glucose
 - (B) Starch
 - (C) Glycogen
 - (D) Sucrose

121. Water is essential to life because it has many special properties. Which one of the following is a special property of water?

- (A) It is able to covalently bond to other water molecules
- (B) It is good at dissolving other substances
- (C) It easily heats up
- (D) It easily cools

122. The pressure gauge required for measuring high pressure of the order of 10^5 Psi

- (A) U-Tube manometer
- (B) Bourdon pressure gauge
- (C) Mc Cleod gauge
- (D) Pirani gauge

123. pH of the blood in human body around 7 is maintained by buffering action of

- (A) H_2CO_3 and Na_2CO_3
- (B) H_2CO_3 and NaHCO_3
- (C) CH_3COOH and CH_3COONa
- (D) Na_2HPO_4 and NaH_2PO_4

124. The increasing amount of carbon dioxide in the air is slowly raising the temperature of the atmosphere, because it absorbs

- (A) the water vapour of the air and retains its heat.
- (B) the ultraviolet part of the solar radiation.
- (C) all the solar radiations.
- (D) the infrared part of the solar radiation.

125. Samvidhan Divas or Constitution Day is celebrated on

- (A) 3rd December
- (B) 25th October
- (C) 5th January
- (D) 26th November

126. During cell divisions, DNA synthesis takes place in

- (A) Interphase
- (B) Anaphase
- (C) Prophase
- (D) Telophase

127. Gaseous fuel having highest calorific value of the following is

- (A) producer gas
- (B) water gas
- (C) natural gas
- (D) liquified petroleum gas

128. What is the new deadline for implementation of Smart Cities Mission?

- (A) 2023
- (B) 2024
- (C) 2025
- (D) 2026

129. Which of the following reactions is an example of nuclear fusion reaction?

- (A) ${}^2_1\text{H} + {}^3_1\text{H} = {}^4_2\text{He} + {}^1_0\text{n}$
- (B) ${}^{12}_6\text{C} + {}^1_1\text{H} = {}^{14}_7\text{N} + \gamma$
- (C) ${}^{235}_{92}\text{U} + {}^1_0\text{n} = {}^{142}_{56}\text{Ba} + {}^{91}_{36}\text{Kr} + 3{}^1_0\text{n}$
- (D) ${}^{14}_7\text{N} + {}^1_0\text{n} = {}^{12}_6\text{C} + {}^1_1\text{H}$

130. The supersonic jets cause pollution by the thinning of

- (A) O_2 layer
- (B) O_3 layer
- (C) CO_2 layer
- (D) SO_2 layer

131. Super critical CO_2 held at or above its critical temperature and critical pressure, adopts properties
(A) midway of solid and gas
(B) of liquid only
(C) of gas only
(D) midway between liquid and gas
132. In a chemical reaction, catalyst changes
(A) Potential energy of the products
(B) Potential energy of the reactants
(C) Heat of reaction
(D) Activation energy of the reaction
133. Which one of the following is not colloid?
(A) Milk
(B) Smoke
(C) Blood
(D) Urea
134. Which form of symbiosis benefits one member of the interaction, but neither benefits nor harms the other member?
(A) Parasitism
(B) Commensalism
(C) Sequentialism
(D) Mutualism
135. Which of the following is widely used as flavors in food and perfumery?
(A) Carboxy methyl cellulose
(B) Ascorbic acid
(C) Sachharin
(D) Vanillin
136. Little Boy relates to
(A) H-bomb
(B) U-bomb
(C) Pu-bomb
(D) He-bomb
137. Who built the Ibadatkhana at Fatehpur Sikri?
(A) Shahjahan
(B) Aurangzeb
(C) Akbar
(D) Jahangir
138. In N-type semiconductor, ultrapure Si is doped with
(A) Boron
(B) Aluminum
(C) Phosphorous
(D) Indium
139. What practice allows farmers to improve soil fertility, diversify their crops, and reduce pesticide costs by naturally breaking the cycle of weeds, insects, and diseases?
(A) Monoculture
(B) Biological control
(C) Crop sharing
(D) Crop rotation
140. Ultramarine blue pigment is a complex alumino-silicate containing
(A) Sulphur
(B) Phosphorous
(C) Boron
(D) Cobalt

141. Which type of bond is present in superhard material tungsten carbide?

- (A) Ionic
- (B) Covalent
- (C) Metallic
- (D) All of the above

142. The world's longest straight road without any corners is located in

- (A) USA
- (B) Saudi Arabia
- (C) Australia
- (D) China

143. How many countries were participated as Founding Members of United Nations?

- (A) 45
- (B) 48
- (C) 51
- (D) 70

144. Which of the following is absent in polluted water?

- (A) Hydrilla
- (B) Water hyacinth
- (C) Larva of stone fly
- (D) Blue green algae

145. A population has unlimited resources and exhibits rapid and sustained population growth. This type of growth would be best described by which one of the following?

- (A) Exponential
- (B) Logistic
- (C) Sigmoidal
- (D) Parabolic

146. Ashokan inscription in the north-western part of the Mauryan Empire near Peshwar were is:

- (A) Aramaic Script
- (B) Devanagari Script
- (C) Kharoshthi Script
- (D) Brahmi Script

147. Which is the result of damage to relative biological effectiveness?

- (A) High temperature
- (B) Pollution
- (C) Radiation
- (D) Low temperature

148. Cholesterol lowering agent in blood is

- (A) Vitamin K
- (B) Vitamin E
- (C) Vitamin C
- (D) Vitamin B₇

149. The headquarters of the International Court of Justice (ICJ) is situated in

- (A) The Hague
- (B) Vienna
- (C) Washington D.C.
- (D) Paris

150. Point out incorrect statement.

- (A) Detergent works well even with hard water.
- (B) Detergent does not form any precipitate with hard water.
- (C) Detergent is easily soluble in water.
- (D) Detergent is fully biodegradable.

151. The most common indicator organism that represents polluted water is

- (A) *C.vibrio*
- (B) *Entamoeba histolytica*
- (C) *E.coli*
- (D) *P.typhi*

152. Antibiotic resistance in organisms is the result of what process?

- (A) Differentiation
- (B) Evolution
- (C) Emergence
- (D) Succession

153. Myoglobin is

- (A) Tetramer
- (B) Dimer
- (C) Monomer
- (D) Polymer

154. I^{131} is used for

- (A) Cancer therapy
- (B) Geological dating
- (C) Thyroid therapy
- (D) Leukemia therapy

155. Food chain in which microorganisms breakdown the food formed by primary producers is

- (A) parasitic food chain
- (B) detritus food chain
- (C) consumer food chain
- (D) predator food chain

156. The material used as fuel rod in nuclear reactor is

- (A) Graphite
- (B) UO_2
- (C) D_2O
- (D) ZrO_2

157. What is the best pH of the soil for cultivation of plants?

- (A) 3.4 – 5.4
- (B) 6.5 – 7.5
- (C) 4.5 – 8.5
- (D) 5.5 – 6.5

158. A light emitting diode produces light when

- (A) Forward biased
- (B) Reverse biased
- (C) Unbiased
- (D) None of the above

159. Huge solid waste liberated from Iron and Steel industry is

- (A) Red mud
- (B) Fly ash
- (C) Bottom ash
- (D) Granulated slag

160. Major aerosol pollutant in jet plane emission is

- (A) sulphur dioxide
- (B) carbon monoxide
- (C) methane
- (D) fluorocarbon

161. Who won Pulitzer Prize in Journalism in 2021?

- (A) The Statesman
- (B) The Hindu
- (C) The Times of India
- (D) The New York Times

162. Which country has unveiled a National Plan to reduce 80% GHG emissions by 2050?

- (A) China
- (B) Israel
- (C) India
- (D) USA

163. The process of rapid cooling of parts in metallurgical operation is called

- (A) Annealing
- (B) Quenching
- (C) Tempering
- (D) Toughening

164. LED and LASER diodes are made of

- (A) Al
- (B) Ga
- (C) As
- (D) GaAs

165. Most hazardous metal pollutant of automobile exhausts is

- (A) mercury
- (B) cadmium
- (C) lead
- (D) copper

166. In which one of the following States is Pakhui Wildlife Sanctuary located?

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

167. In which country has the Indian Prime Minister Shri Narendra Modi inaugurated the Sardar Patel Statue at Sanatan Mandir Cultural Center?

- (A) India
- (B) Nepal
- (C) Canada
- (D) Afghanistan

168. Which of the following is not a classical dance form of India?

- (A) Kathak
- (B) Odissi
- (C) Bhangra
- (D) Manipuri

169. Kausar Munir has been adjudged as the best lyricist in the International Indian Film Academy (IIFA) Awards 2022 for the film:

- (A) Mimi
- (B) Tadap
- (C) Bunty Aur Babli 2
- (D) 83

170. Gas released during Bhopal tragedy was

- (A) methyl isocyanate
- (B) potassium isothiocyanate
- (C) sodium isothiocyanate
- (D) ethyl isothiocyanate

171. Who was the Governor General during the annulment of 'Sati'?
- (A) Lord Bentinck
 - (B) Lord Hastings
 - (C) Lord Dalhousie
 - (D) Lord Canning
172. The reuse of disposed needles and syringes may cause infections of
- (A) HIV
 - (B) T.B.
 - (C) Typhoid
 - (D) Cancer
173. The presence of nitrogen in waste water is due to alteration of
- (A) carbohydrate
 - (B) protein
 - (C) fat
 - (D) vitamin
174. Which of the following Act provided for communal representation in British India?
- (A) Indian Councils Act, 1892
 - (B) Minto-Morley Reforms, 1909
 - (C) Montague-Chelmsford Reforms, 1919
 - (D) Government of India Act, 1935
175. Who among the following is associated with 'Songs from Prison', a translation of ancient Indian religious lyrics in English?
- (A) Bal Gangadhar Tilak
 - (B) Jawaharlal Nehru
 - (C) Mohandas Karamchand Gandhi
 - (D) Sarojini Naidu
176. Electrical resistivity of a conductor
- (A) increases with temperature
 - (B) decreases with temperature
 - (C) does not change with temperature
 - (D) decreases at lower temperature, then increases with temperature
177. Photochemical smog is a resultant of the reaction among
- (A) NO_2 , O_3 and peroxyacetyl nitrate in the presence of sunlight
 - (B) CO , O_2 and peroxyacetyl nitrate in the presence of sunlight
 - (C) CO , CO_2 and NO_2 at low temperature
 - (D) high concentration of NO_2 , O_3 , and CO in the evening
178. Which of the following is double salt?
- (A) $\text{FeSO}_4 \cdot 6\text{H}_2\text{O}$
 - (B) $\text{Pb}(\text{OH})\text{NO}_3$
 - (C) K_2SO_4 , $\text{Al}_2(\text{SO}_4)_3$, $24\text{H}_2\text{O}$
 - (D) $\text{K}_4[\text{Fe}(\text{CN})_6]$
179. By definition, what are you most likely to find in a biodiversity hotspot?
- (A) A large abundance of endangered species
 - (B) A large number of endemic species
 - (C) Mostly eukaryotic species
 - (D) Extremophiles
180. D.D.T. is
- (A) not a pollutant
 - (B) an antibiotic
 - (C) a non-degradable pollutant
 - (D) a biodegradable pollutant

Please Turn Over

181. Which of the following is the oldest Smriti?

- (A) Narad Smriti
- (B) Yajnavalkya Smriti
- (C) Brihaspati Smriti
- (D) Mann Smriti

182. Which Indian Architect has been awarded the "Royal Gold Medal" 2022?

- (A) Suman Bery
- (B) Chitra Biswanath
- (C) Balkrishna Vithaldas Doshi
- (D) Rajiv Kumar

183. Green house effect is warming due to

- (A) infra-red rays reaching earth
- (B) moisture layer in atmosphere
- (C) increase in temperature due to increase in carbon dioxide concentration of atmosphere
- (D) ozone layer of atmosphere

184. How much air does a man normally inhale in a day?

- (A) 5 kg
- (B) 16 kg
- (C) 20 kg
- (D) 25 kg

185. A disease caused by eating fish contaminated by industrial waste, containing mercury compounds, is called

- (A) Osteosclerosis
- (B) Hashimoto's oxidase
- (C) Bright's disease
- (D) Minamata disease

186. "Effective dose-50%" describes which one of the following?

- (A) The dose that results in 50% mortality
- (B) The dose that results in 50% survival
- (C) The dose that is 50% less than the lethal dose
- (D) The dose that results in a significant response in 50% of subjects

187. What is B.O.D.?

- (A) The amount of O_2 utilized by organisms in water
- (B) The amount of O_2 utilized by micro-organisms for decomposition
- (C) The total amount of P_2 present in water
- (D) All of the above

188. The metal extracted from bauxite ore using Bayer's process is

- (A) Al
- (B) Zn
- (C) Pb
- (D) Ba

189. Which of the following is protected by passivation?

- (A) Mild Steel
- (B) Silver
- (C) Bronze
- (D) Stainless Steel

190. In which year the first environmental conference (Stockholm Conference) was held?

- (A) 1965
- (B) 1968
- (C) 1970
- (D) 1972

191. What is the carbon credit?
- (A) It is the difference between the carbon emission allowed and actually emitted carbon
 - (B) It is the loan amount by IMF for reducing pollution
 - (C) It is loan given to poor people for buying Modern Stoves
 - (D) All of the above
192. Relationship between Pressure (P) and Volume (V) of gas undergoing adiabatic expansion is (γ is ratio of specific heats at constant pressure and constant volume respectively).
- (A) $PV = \text{constant}$
 - (B) $PV^\gamma = \text{constant}$
 - (C) $PV^{\gamma-1} = \text{constant}$
 - (D) $PV^{1/\gamma} = \text{constant}$
193. Coal, oil, and natural gas are created _____ and contain the remains of _____.
- (A) over millions of years; algae and plants
 - (B) over millions of years; dinosaurs and other animals
 - (C) over hundreds of years; algae and plants
 - (D) over hundreds of years; dinosaurs and other animals
194. How carbon monoxide, emitted by automobiles, prevents transport of oxygen in the body tissues?
- (A) By forming a stable compound with hemoglobin
 - (B) By obstructing the reaction of oxygen with hemoglobin
 - (C) By changing oxygen into carbon dioxide
 - (D) By destroying the hemoglobin
195. CO level in the exhaust gas upto 10 ppm can be monitored by
- (A) Non dispersive IR spectroscopy
 - (B) Gas chromatography
 - (C) UV-VIS spectroscopy
 - (D) Flame photometry
196. If there was no CO_2 in the earth's atmosphere, the temperature of earth's surface would be
- (A) higher than the present
 - (B) dependent on the amount of oxygen in atmosphere
 - (C) same as present
 - (D) less than the present
197. Upper part of sea aquatic ecosystem contains
- (A) plankton
 - (B) nekton
 - (C) plankton and nekton
 - (D) benthos
198. When is National Sport Day celebrated in India?
- (A) August 26th
 - (B) August 29th
 - (C) August 25th
 - (D) August 31st
199. Which Financial Institution has launched Rs. 10,000 special refinance facility (SRF) 2021 to support Housing Finance Companies?
- (A) Reserve Bank of India
 - (B) State Bank of India
 - (C) NABARD
 - (D) National Housing Bank
200. The ratio of specific heats at constant pressure and constant volume for diatomic gas is
- (A) 1.66
 - (B) 1.40
 - (C) 1.30
 - (D) 1.25

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

2022

TEST BOOKLET

Paper-V

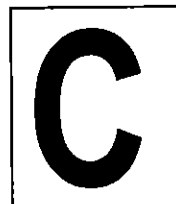
Time allowed : 3 hours

Full marks : 200

Answer *all* the questions.

Questions are of equal value.

TEST BOOKLET SERIES



5907

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INSTRUCTIONS

Candidates should read the following instructions carefully before answering the questions:

1. This booklet consists of 24 pages including this front page, containing 200 questions. **Verify the Page Nos. and Test Booklet series on each page and bring at once to the Invigilator's notice any discrepancy.**
2. Answers will have to be given in the OMR Sheet supplied for the purpose.
3. Before you proceed to mark in the OMR Sheet in response to various items in the Test Booklet, you have to fill in some particulars in the OMR Sheet. ***Do not fold the OMR Sheet as this will result in error in your marks.***
4. All questions are of multiple-choice answer-type. You will find ***four*** probable answers (A), (B), (C) and (D) against each question. Find out which of the four answers appears to you to be **correct or the best**. Now darken the circle corresponding to the letter of the selected answer in the Answer-Sheet with **Black Ball Point Pen** as per instructions printed in the reverse of the Admit Card and in the Answer-Sheet.
5. One and only one circle is to be fully blackened for answer. Any spot in any other circle (multiple circle) or in wrong circle will be considered as wrong answer. If more than one circle is encoded for a particular answer, it will be treated as a wrong answer.
6. ***There will be negative marking of 0.25 mark for each wrong answer.***
7. ***There are blank pages at the end of this Booklet for Rough Work.***
8. ***The Special Answer-Sheet should be handed over to the Invigilator before leaving the Examination Hall. You are permitted to take away the used Test Booklet after completion of the examination.***

1. In which of the following cases the Supreme Court of India upheld the right against solitary confinement?

- (A) *Sunil Batra v. Delhi Administration*
- (B) *Romesh Thappar v. State of Madras*
- (C) *M.H. Hoskot v. State of Maharashtra*
- (D) *Govind v. State*

2. A proposal to prefer the charge of impeachment of the President of India has to be moved after prior notice of

- (A) 7 days
- (B) 14 days
- (C) 21 days
- (D) 30 days

3. The Constitution gives the powers of superintendence over all sub-ordinate courts to the High Courts under Article

- (A) 32
- (B) 226
- (C) 227
- (D) 228

4. Judicial Review function of the Supreme Court means the power to

- (A) Review the functioning of judiciary in the country.
- (B) Undertake periodic review of the Constitution.
- (C) Examine the Constitutional validity of the laws.
- (D) Review its own judgment.

5. The maximum number of seats for Lok Sabha may go up to

- (A) 542
- (B) 545
- (C) 552
- (D) 567

6. Which Part of the Constitution of India deals with "Emergency Provisions"?

- (A) Part IX
- (B) Part XVIII
- (C) Part XXII
- (D) Part XVI

7. Who was the advisor of the Constituent Assembly?

- (A) B. R. Ambedkar
- (B) B. N. Rao
- (C) Alladi Krishnaswamy
- (D) T. T. Krishnamachari

8. The number of the Anglo Indians nominated to the House of People is

- (A) 1
- (B) 2
- (C) 3
- (D) 4

9. Article 21A was inserted to Part III of the Constitution by

- (A) 78th Amendment Act
- (B) 84th Amendment Act
- (C) 86th Amendment Act
- (D) 93rd Amendment Act

10. Which of the following Constitutional Amendments equipped President to impose National Emergency on any particular part of India?

- (A) 38th Amendment
- (B) 40th Amendment
- (C) 42nd Amendment
- (D) 62nd Amendment

11. The word "socialist" was added to the Preamble of the Constitution of India by which amendment?

- (A) 44th
- (B) 27th
- (C) 21st
- (D) 42nd

12. Under which Article of the Constitution of India Financial Emergency can be proclaimed?

- (A) Article 323
- (B) Article 356
- (C) Article 352
- (D) Article 360

13. In which of the following cases the Supreme Court of India held "the right to access to drinking water is fundamental to life and it is the duty of the State under Article 21 to provide clean drinking water to its citizen"?

- (A) *Vellore Citizens Welfare Forum v. Union of India*
- (B) *A. P. Pollution Control Board v. M. V. Nayadu*
- (C) *M. C. Mehta v. Union of India*
- (D) *Karnataka Industrial Area Development Board v. Sri C. Kenchappa*

14. How long a person should have practiced in a High Court to be eligible to be appointed as a Judge of Supreme Court of India?

- (A) 7 years
- (B) 10 years
- (C) 12 years
- (D) 15 years

15. Which Schedule of the Constitution of India deals with administration and control of Scheduled Areas as well as Scheduled Tribes?

- (A) Third Schedule
- (B) Fifth Schedule
- (C) Seventh Schedule.
- (D) Ninth Schedule

16. Who can legislate on those residual matters which are not mentioned in union/ state/ concurrent list?

- (A) State Legislature exclusively
- (B) Parliament alone
- (C) Parliament after consultation with state legislatures
- (D) Parliament or state legislature as adjudicated by the Supreme Court of India

17. Which of the following Articles was introduced by the Constitution (93rd Amendment) Act, 2005?

- (A) 15(2)
- (B) 15(3)
- (C) 15(4)
- (D) 15(5)

18. Directive Principles of State Policy is

- (A) Justifiable
- (B) Non-justifiable
- (C) Mandatory
- (D) None of the above

19. With reference to election of the President under Article 55 of the Constitution of India, every elected member of the legislative assembly shall have as many votes as there are multiples of one thousand in the quotient obtained by dividing the population of the State by

- (A) Total number of the elected members of the assembly
- (B) Total number of nominated members of the Rajya Sabha
- (C) Total number of the elected members of both the Houses
- (D) None of the above

20. How many fundamental duties are there under Article 51-A of the Constitution of India?

- (A) 9
- (B) 10
- (C) 11
- (D) 12

21. The word "secularism" was added to the Preamble of the Constitution of India by which amendment?

- (A) 40th
- (B) 42nd
- (C) 44th
- (D) 46th

22. How many members were there in the Constituent Assembly?

- (A) 389
- (B) 192
- (C) 289
- (D) 292

23. When was the word "armed rebellion" added to the Constitution to declare a National Emergency?

- (A) By 44th Constitution (Amendment) Act
- (B) By 42nd Constitution (Amendment) Act
- (C) By 40th Constitution (Amendment) Act
- (D) By 38th Constitution (Amendment) Act

24. In which of the following cases the Supreme Court of India issued direction on playing national anthem in theatres and cinema halls?

- (A) *Navtej Singh Johar v. Union of India*
- (B) *Kedar Nath v. State of Bihar*
- (C) *Ram Singh v. Union of India*
- (D) *Shreya Vidyarthi v. Ashok Vidyarthi*

25. Which of the following doctrines means "to stand by precedent and not to disturb the settled point of law"?

- (A) Doctrine of *stare decisis*
- (B) Doctrine of pith and substance
- (C) Doctrine of prospective overruling
- (D) Doctrine of colourable legislation

26. How many sanctioned judges are there in the Supreme Court of India?

- (A) 25
- (B) 28
- (C) 30
- (D) 31

27. The Constituent Assembly was set according to the proposals of

- (A) The Cripps Mission
- (B) The Cabinet Mission
- (C) The Mountbatten Plan
- (D) None of the above

28. Supreme Court of India is a court of record under

- (A) Article 32
- (B) Article 129
- (C) Article 136
- (D) Article 141

29. Which committee recommended the 27% reservation of the OBCs in the government jobs in 1991?

- (A) Jogendra Nath Mandal committee
- (B) B. P. Mandal committee
- (C) Dilip Singh Bhuria committee
- (D) U. N. Debar committee

30. The word "procedure established by law" in the Constitution of India have been borrowed from

- (A) The Constitution of UK
- (B) The Constitution of USA
- (C) The French Constitution
- (D) The Constitution of Japan

31. Who presides over the joint sitting of the Parliament?

- (A) President
- (B) Speaker
- (C) Vice-President
- (D) Chief Justice of Supreme Court

32. Under which Constitutional Amendment, provision for minimum age as 18 years for the Indian Citizen was made to become eligible to vote?

- (A) 59th Amendment Act, 1988
- (B) 60th Amendment Act, 1988
- (C) 61st Amendment Act, 1989
- (D) 62nd Amendment Act, 1989

33. The ideals of "liberty, equality and fraternity" in the Preamble of the Constitution of India is inspired by

- (A) Russian revolution
- (B) French revolution
- (C) Marxian thoughts
- (D) Gandhian thoughts

34. Which of the following Indian States does not have a Bicameral Legislature?

- (A) Uttar Pradesh
- (B) Bihar
- (C) Chattisgarh
- (D) Jammu and Kashmir

35. A Money Bill can originate

- (A) only in Lok Sabha
- (B) only in Rajya Sabha
- (C) in both the Houses simultaneously
- (D) at the joint session of both the Houses

36. In which of the following cases the Supreme Court held that, "if a body is an agency or instrumentality of government, it may be an authority under Article 12?"

- (A) *Ujjambai v. State of Uttar Pradesh*
- (B) *R.D. Shetty v. The International Airport Authority of India*
- (C) *Ajay Hasia v. Khalid Mujib*
- (D) *Som Prakash v. Union of India*

37. "Power of Parliament to amend the Constitution and procedure therefore" is laid down in the Constitution in—

- (A) Part XX
- (B) Part XXI
- (C) Part XXII
- (D) Part XXIII

38. A proclamation of National Emergency automatically suspends

- (A) All fundamental rights
- (B) Right to freedom
- (C) Right to constitutional remedies
- (D) No fundamental rights

39. The Constitution of India describes India as a

- (A) Federation of independent States
- (B) Union of States
- (C) Quasi Federation
- (D) Dominion of States

40. In which of the following cases it was held that "Right to Life does not include Right to Die"?

- (A) *Deena v. Union of India*
- (B) *M.C. Mehta v. Union of India*
- (C) *Gian Kaur v. State of Punjab*
- (D) *State of U.P. v. Sanjay Kumar Bhatia*

41. Who has the right to decide that who will be included in the list of Scheduled Caste and Scheduled Tribes?

- (A) Parliament
- (B) President
- (C) Governor of the State
- (D) Supreme Court

42. The Council of States in India has how many elected members?

- (A) 250
- (B) 238
- (C) 245
- (D) 230

43. Right against double jeopardy is enshrined under

- (A) Article 20(1)
- (B) Article 20(2)
- (C) Article 20(3)
- (D) Article 20(4)

44. Which is the correct sequence in the Preamble of the Constitution of India?

- (A) Sovereign, Secular, Socialist, Democratic Republic
- (B) Sovereign, Socialist, Secular, Republic, Democratic
- (C) Sovereign, Secular, Socialist, Republic, Democratic
- (D) Sovereign, Socialist, Secular, Democratic Republic

45. Which of the following Fundamental Rights do not get abolished automatically during National Emergency?

- (A) Articles 14 and 19
- (B) Articles 19 and 20
- (C) Articles 20 and 21
- (D) Articles 32 and 226

46. The Parliament of India consists of

- (A) President, House of the People and Council of States
- (B) House of the People and Council of States
- (C) Vice-President, House of the People and Council of States
- (D) President, Vice-President, House of the People and Council of States

47. How many High Courts are there at present in India?

- (A) 21
- (B) 23
- (C) 25
- (D) 27

48. Which one of the following items/subjects belongs to the Concurrent List of the VIIth schedule of the Indian Constitution?

- (A) Public Health and Sanitation
- (B) Forests
- (C) Stock Exchanges
- (D) Agriculture

49. In which of the following cases the Supreme Court emphasized on right to Shelter as one of the fundamental human rights?

- (A) *R. S. Verma v. State of Rajasthan*
- (B) *Chameli Singh v. State of Uttar Pradesh*
- (C) *Olga Tellis v. Bombay Municipal Corporation*
- (D) *Virender Gaur v. State of Haryana*

50. Duty of the state to raise the level of nutrition and the standard of living and to promote public health is Directive Principle under

- (A) Article 47
- (B) Article 48
- (C) Article 49
- (D) Article 50

51. Freedom of Conscience is subject to

- (A) Public Order
- (B) Morality
- (C) Health
- (D) All of the Above

52. In which Landmark case the Supreme Court held that the Second marriage of Hindu man is invalid even if he converts to Islam before marriage?

- (A) *Daniel Latiffi v. Union of India*
- (B) *Sarala Mudgal v. Union of India*
- (C) *Roopa Hurrah v. Ashok Hurrah*
- (D) *Ramachandra Saraswati v. Neena Bajpai*

53. Who was the Chief Justice of India when the Public Interest Litigation is introduced to the Indian judicial system?

- (A) Justice M. Hidayatullah
- (B) Justice A. H. Ahmadi
- (C) Justice P. N. Bhagwati
- (D) Justice V. R. Krishna Iyer

54. Which of the following is known as Judges Transfer case?

- (A) *Supreme Court Advocates on Record Association v. Union of India*
- (B) *S. P. Gupta v. Union of India*
- (C) *In re Presidential Reference*
- (D) None of the above

55. Under Article 15 of the Constitution of India, States shall not discriminate against any citizen only on the ground of

- (A) Religion, race, caste, sex, residence
- (B) Religion, caste, sex, place of birth, residence
- (C) Religion, race, caste, sex, place of birth
- (D) Religion, race, caste, sex, place of birth, descent, residence

56. How many times have the Financial Emergency imposed in India?

- (A) Only once
- (B) Twice
- (C) Thrice
- (D) Never

57. The maximum age prescribed for election of President in India is

- (A) 35 years
- (B) 60 years
- (C) 65 years
- (D) No such limit

58. Reasonable restriction to right to assemble peacefully is placed under

- (A) Article 19(2)
- (B) Article 19(3)
- (C) Article 19(4)
- (D) Article 19(5)

59. The number of nominated members to the Council of States is

- (A) 18
- (B) 12
- (C) 20
- (D) 16

60. Which Constitutional Amendment Act, provided reservation in admissions in private unaided educational institutions for students belonging to scheduled castes/tribes and other backward classes?

- (A) 92nd Amendment
- (B) 93rd Amendment
- (C) 94th Amendment
- (D) 95th Amendment

61. "Equal justice and free legal aid" is incorporated in the Constitution of India in

- (A) Article 21A
- (B) Article 39A
- (C) Article 43A
- (D) Article 48A

Please Turn Over

62. Which Indian State has the largest number of seats reserved for the Scheduled Tribes in the Lok Sabha?
- (A) Madhya Pradesh
 - (B) Rajasthan
 - (C) Andhra Pradesh
 - (D) Arunachal Pradesh
63. Which of the following Article is repealed?
- (A) Article 31A
 - (B) Article 31B
 - (C) Article 31C
 - (D) Article 31D
64. How many scheduled languages are there in the Eighth Schedule of the Constitution of India?
- (A) 12
 - (B) 17
 - (C) 22
 - (D) 24
65. Reservations in promotion in favour of SCs and STs are dealt under
- (A) Article 16(3)
 - (B) Article 16(4)
 - (C) Article 16(4A)
 - (D) Article 16(4B)
66. Minimum age required to become a member of Council of States is
- (A) 18 years
 - (B) 25 Years
 - (C) 30 years
 - (D) 35 years
67. Which of the following Article deals with the election of the Vice-President?
- (A) 62
 - (B) 64
 - (C) 66
 - (D) 68
68. Joint sitting of the Lok Sabha and Rajya Sabha is provided in the Constitution of India under
- (A) Article 101
 - (B) Article 108
 - (C) Article 133
 - (D) Article 102
69. The directive of separation of judiciary from executive is mentioned under
- (A) Article 48
 - (B) Article 49
 - (C) Article 50
 - (D) Article 51
70. Which of the following is not a basic structure of the Constitution of India?
- (A) Supremacy of the Constitution
 - (B) Separation of powers between the legislature, the executive and the judiciary.
 - (C) Harmony and balance between Fundamental Rights and Directive Principles
 - (D) Absolute power of the Parliament to amend the Constitution
71. Who was the Chairman of the Constitution Drafting Committee?
- (A) Jawaharlal Nehru
 - (B) Dr. B. R. Ambedkar
 - (C) Dr. Rajendra Prasad
 - (D) Sardar Vallabhai Patel
72. In India Right to Property is a
- (A) Moral Right
 - (B) Legal Right
 - (C) Fundamental Right
 - (D) Personal Right

73. If the announcement of the National Emergency has been approved by both Houses of Parliament, how long will it be effective?

- (A) 1 month
- (B) 2 months
- (C) 3 months
- (D) 6 months

74. Which of the following is not a feature of the Constitution of India?

- (A) It is democratic
- (B) It is republic
- (C) It is federal
- (D) It is presidential

75. The Fundamental Rights of the Indian citizens have enumerated in the Constitution of India in

- (A) Articles 12-35
- (B) Articles 13-36
- (C) Articles 14-36
- (D) Articles 14-51

76. In which Landmark case Fundamental Rights were considered as Inviolable part of the Indian Constitution?

- (A) *Goloknath v. State of Punjab*
- (B) *Kesavananda Bharati v. Union of India*
- (C) *S. R. Bommai v. Union of India*
- (D) *Prem Singh v. State of Haryana*

77. The Constitution of India adopted the federal system from the Act of

- (A) 1919
- (B) 1935
- (C) 1947
- (D) 1909

78. Kaka Kalelkar Commission is related to

- (A) The National Commission for Scheduled Castes
- (B) The National Scheduled Tribes Commission
- (C) The Backward Class Commission
- (D) The Anglo Indian community

79. The Objective Resolution in the Constituent Assembly was moved by

- (A) Pandit Jawaharlal Nehru
- (B) Dr. B. R. Ambedkar
- (C) Dr. Rajendra Prasad
- (D) Lord Mountbatten

80. The President can issue proclamation of emergency

- (A) on the advice of the Prime Minister
- (B) on the advice of Council of Ministers
- (C) on the request of the Vice-President
- (D) when the decision of the Union Cabinet for the issuance of such proclamation is communicated to the President in writing

81. The resolution to remove the Vice-President of India can be moved by

- (A) Lok Sabha
- (B) Rajya Sabha
- (C) Any State Legislature
- (D) Either House of the Parliament

82. The members of the Council of Ministers are collectively responsible to

- (A) Judiciary
- (B) House of the People
- (C) Council of States
- (D) The President

83. The Fundamental Duties in the Constitution of India were adopted from

- (A) American Constitution
- (B) Russian Constitution
- (C) Canadian Constitution
- (D) French Constitution

84. Which of the following case is known as the "Fundamental Right" case?

- (A) *Golaknath v. State of Punjab*
- (B) *Indira Gandhi v. Raj Narain*
- (C) *Kesavananda Bharati v. State of Kerala*
- (D) *D. K. Basu v. State of West Bengal*

85. In which of the following cases the Supreme Court of India held that forcing husband to get separated from his parents, amounts to cruelty?

- (A) *Narendra v. K. Meena*
- (B) *Zubeda Ahmed v. Fazlia Begum*
- (C) *Suleha Julekha v. Md. Bismillah*
- (D) *Anita Kushwaha v. Pushpa Sudan*

86. Clause 4 of the Article 15 of the Constitution of India has been added to the Constitution by

- (A) The Constitution Fourth Amendment Act
- (B) The Constitution Third Amendment Act
- (C) The Constitution Second Amendment Act
- (D) The Constitution First Amendment Act

87. Disqualification of membership of either House of the Parliament is provided under

- (A) Article 100
- (B) Article 101
- (C) Article 102
- (D) Article 103

88. Which of the following Articles of the Constitution of India guarantees the right to move freely throughout the territory of India?

- (A) Article 19(1)b
- (B) Article 19(1)c
- (C) Article 19(1)d
- (D) Article 19(1)e

89. The Concurrent list in the Constitution of India was adopted from

- (A) Australia
- (B) Canada
- (C) Russia
- (D) UK

90. "Economic Justice" as one of the objectives of the Constitution of India has been provided in

- (A) Preamble and Fundamental Rights
- (B) Preamble and Directive Principles
- (C) Fundamental Rights and Directive Principles
- (D) Preamble, Fundamental Rights and Directive Principles

91. The concept of Complete Justice is enshrined under

- (A) Article 21
- (B) Article 32
- (C) Article 142
- (D) Article 143

92. How soon imposition of National Emergency should be approved by the Parliament?

- (A) 1 month
- (B) 2 months
- (C) 3 months
- (D) 6 months

93. Article 32 stands suspended during an emergency under Article

- (A) 352
- (B) 356
- (C) 260
- (D) 362

94. The age of retirement of the Judges of the High Court is

- (A) 60 years
- (B) 62 years
- (C) 65 years
- (D) 70 years

95. Power of the President to consult Supreme Court has been stated under

- (A) Article 144
- (B) Article 142
- (C) Article 143
- (D) Article 141

96. The appropriate writ issued by the court to quash the appointment of a person to a public office is that of

- (A) Mandamus
- (B) Certiorari
- (C) Quo Warranto
- (D) Prohibition

97. Who can enact a law on abolition of Untouchability?

- (A) The Parliament of India vide Article 17
- (B) The Parliament of India vide Article 35(a)(ii)
- (C) State Legislatures vide Article 17 and 21
- (D) All of the above

98. Fundamental Duty to uphold and protect the sovereignty, unity and integrity of India is enshrined in

- (A) Article 51A (a)
- (B) Article 51A (b)
- (C) Article 51A (c)
- (D) Article 51A (d)

99. In which of the following cases the Apex court held that, "Where there is a clash of two fundamental rights, the right which would advance the public morality or public interest, would alone be enforced through the process of court..."?

- (A) *Nandini v. Dani*
- (B) *Sher Singh v. State of Punjab*
- (C) *Kharak Singh v. State of Uttar Pradesh*
- (D) *Mr. X v. Hospital Z.*

100. Which of the following is a part of the electoral college for the Election of the President but does not participate in the proceedings for his/her impeachment?

- (A) Lok Sabha
- (B) Rajya Sabha
- (C) State Legislative Assemblies
- (D) State Legislative Councils

101. Consider the following statements regarding Bharatmala Programme:

- (A) It includes development of State Road along coastal areas.
- (B) It includes backward areas, religious, Tourist Places Connectivity Programme.
- (C) It includes Setubharatam Pariyojana which is for the construction of about 1500 major bridges.
- (D) (B) and (C) only

102. In the second Nationalization of Commercial Banks, _____ banks were nationalized.

- (A) 8
- (B) 6
- (C) 5
- (D) 4

103. India's Fourth Plan could not be launched on time due to

- (A) Chinese aggression.
- (B) conflict with Pakistan.
- (C) both Chinese aggression in 1962 and conflict with Pakistan in 1965
- (D) None of the above

104. Which of the following statements is correct? 'Impossible Trinity' disallows the simultaneous achievement of

- (A) exchange rate variability, monetary dependence and capital market integration.
- (B) fixed exchange rate, monetary independence and capital account opening.
- (C) exchange rate stability, monetary independence and capital market integration.
- (D) monetary independence, pegged exchange rate and capital control.

105. "The Third Pillar: How Markets and the State Leave the Community Behind"—the book was written by

- (A) Raja Chelliah
- (B) Raghuram G. Rajan
- (C) Amartya Sen
- (D) Urjit Patel

106. All of the following are international reserves except

- (A) SDRs
- (B) Gold
- (C) Foreign credits not yet received
- (D) Foreign Currency Assets

107. Under which Article of the Constitution of India is the Finance Commission appointed by President of India?

- (A) 279
- (B) 280
- (C) 281
- (D) 282

108. Which Industrial Policy is known as the 'Economic Constitution of India'?

- (A) 1948
- (B) 1956
- (C) 1977
- (D) 1991

109. As of end-November 2021, India was the fourth largest foreign exchange reserves holder in the world after China, Japan and Switzerland. Reserves stand at US \$634 billion on 31st December 2021. This is equivalent to

- (A) 13.2 months of import cover.
- (B) 12.1 months of import cover.
- (C) 9 months of import cover.
- (D) 5 months of import cover.

110. What is the third tier of government known as?

- (A) Village Panchayats
- (B) State Government
- (C) Local self-government
- (D) Zilla Parishad

111. Which of the following Five Year Plan has laid emphasis on 'faster, sustainable and inclusive growth'?

- (A) Eleventh Five Year Plan
- (B) Twelfth Five Year Plan
- (C) Tenth Five Year Plan
- (D) Ninth Five Year Plan

112. Guidotti Rule is associated with

- (A) reserve management
- (B) exchange rate management
- (C) inflation management
- (D) stagflation management

113. Which one of the following represents capital adequacy ratio for Commercial Banks?

- (A) Ratio of bank's available capital to risk-weighted assets
- (B) Ratio of capital to short-term deposits
- (C) Ratio of capital to non-performing assets
- (D) Ratio of capital to advances

114. Special Economic Zones in India was established in India following

- (A) Japanese model
- (B) American model
- (C) Russian model
- (D) China model

115. The Reserve Bank of India (RBI) acts as the "banker's bank" in the sense that

- (A) The scheduled banks can borrow from the RBI in time of need.
- (B) The RBI fixes the conditions of cash reserve requirement which the scheduled banks have to follow.
- (C) The RBI controls the credit operation of the scheduled banks.
- (D) The RBI controls the banking system through the system of licensing.

116. In POW camps during the Vietnam War, cigarettes were used as money. This is an example of a

- (A) commodity money standard.
- (B) gold standard.
- (C) gold exchange standard.
- (D) Bretton Woods Institution

117. Which one of the following is generally regarded as the true index of economic growth?

- (A) An increase in national income at constant prices during a year.
- (B) A sustained increase in real per capita income.
- (C) An increase in national income at current prices over time.
- (D) An increase in national income along with increase in population.

118. Rate of interest rate is being reduced in India

- (A) to reduce the burden of public debt.
- (B) to create easy credit facilities.
- (C) to align the interest rate structure with world interest rates.
- (D) to control the inside trading of share.

119. The most striking feature of the structural change in the Indian economy as the major contributor to growth, raising its share rather sharply in national output in the recent decades has been

- (A) pre-eminence of agricultural sector.
- (B) pre-eminence of services sector.
- (C) pre-eminence of industrial sector.
- (D) pre-eminence of external sector.

120. Which one among the following sectors was the least impacted by the COVID-19 pandemic-related disruptions?

- (A) Agriculture
- (B) Industry
- (C) Infrastructure
- (D) External sector

121. Fiscal policy refers to
- (A) tax and expenditure policy used by the government to influence the size of the economy.
 - (B) the government's regulation of financial intermediaries.
 - (C) the actions of the central bank in controlling money supply.
 - (D) None of the above.
122. Which Plan in India is called a plan for managing the transition from a centrally planned economy to a marketed economy?
- (A) Fifth Plan
 - (B) Eighth Plan
 - (C) Sixth Plan
 - (D) Second Plan
123. 'High Powered Money' is also known as
- (A) Narrow money.
 - (B) Reserve money.
 - (C) Broad money.
 - (D) Both (B) and (C)
124. To achieve a high rate of growth of capital formation, P.C. Mahalanobis suggested that allocation of investment to capital goods sector should be
- (A) 40%
 - (B) 33.3%
 - (C) 66.6%
 - (D) 50%
125. PMSVANidhi Scheme is a Scheme recently in light to
- (A) provide concessional credit to farmers.
 - (B) reduce poverty by organizing the rural poor women into Self Help Groups.
 - (C) provide working capital loan to urban street vendors to resume their businesses.
 - (D) provide loan to COVID-affected people.
126. First three decades of development planning observed
- (A) High growth rate of GDP
 - (B) Hindu rate of growth of GDP
 - (C) Very high agricultural growth rate
 - (D) All of the above
127. In the Indian context, which one of the following pairs is NOT correctly matched?
- (A) Tax Evasion : Parallel economy
 - (B) High-Powered : RBI money
 - (C) Female work : Disinvestment participation rate
 - (D) Liberalization : 1991 Economic Policy
128. Against the backdrop of Disinvestment Policy of the Government of India, New Public Sector Enterprise (PSE) Policy for Atmanirbhar Bharat was notified on
- (A) 5th January, 2021
 - (B) 4th February, 2021.
 - (C) 5th March, 2022.
 - (D) 10th March, 2022.
129. What is another name given to outsourcing?
- (A) Multilateralism
 - (B) Mercantilism
 - (C) Offshoring
 - (D) Dumping
130. Which of the following is not a monetary policy arrangement?
- (A) Exchange rate anchor
 - (B) Monetary aggregate target
 - (C) Inflation targeting framework
 - (D) Sterilization rate control

131. When power is taken away from state governments and is given to local government, it is called

- (A) Decentralization
- (B) Centralization
- (C) Panchayat Samiti
- (D) Federalism

132. 'Open market operations' by the RBI implies

- (A) control of lending operation by the RBI.
- (B) closure of banks on the directions of the RBI.
- (C) sale and purchase of government securities by the RBI.
- (D) inspection of commercial banks by the RBI.

133. In the past, Planners announced the Plan Holiday for three years. They were as follows:

- (A) 1951-52, 1952-53, 1953-54
- (B) 1961-62, 1962-63, 1963-64
- (C) 1966-67, 1967-68, 1968-69
- (D) 1971-72, 1972-73, 1973-74

134. M_4 Money in India is defined as

- (A) M_3 + Total Post office deposits.
- (B) Time deposits of the public with the banks.
- (C) Currency with the public.
- (D) Total Post office deposits.

135. In order to reduce the impact of the shock caused by the COVID-19 second wave and support the recovering economy, Government of India announced additional relief measures in 2021-22. Find out which one among the following is NOT the stimulus package for COVID-19 reliefs.

- (A) Extension of Atmanirbhar Bharat Rozgar Yojana
- (B) Credit Guarantee Scheme for Micro Finance institutions
- (C) Non-Release of climate resilient special traits varieties
- (D) Free food grains under PMGKY (May to November, 2021)

136. The power of the RBI to fix the CRR has been given under

- (A) Banking Regulation Act
- (B) Companies Act
- (C) RBI Act
- (D) Finance Act

137. Budget deficit does NOT take into account

- (A) revenue deficit.
- (B) capital budget deficit.
- (C) balance of payments deficit.
- (D) interest payments on public debt.

138. Which one of the following items is included in the capital account of the balance of payments?

- (A) Invisibles
- (B) Investment income
- (C) Commercial borrowings
- (D) Private transfers

139. Which of the following regarding the activities of the RBI is NOT correct?

- (A) The RBI now accords substantial freedom to banks in optimizing their portfolios as well as pricing their products.
- (B) Prudential norms have been instituted and the supervisory framework strengthened.
- (C) The RBI now offers incentives to banks in the areas of infrastructure financing and housing loans.
- (D) Statutory pre-emptions have been progressively increased by the RBI.

140. FEMA was introduced in which year?

- (A) 1999
- (B) 2000
- (C) 2002
- (D) 2004

141. In India, the main source of national income is

- (A) Primary sector
- (B) Secondary sector
- (C) Tertiary sector
- (D) Foreign-sector

142. Which one is the Apex institution as a source for providing rural credit in India?

- (A) Regional Rural Banks
- (B) State Cooperative Bank
- (C) Central Cooperative Bank
- (D) NABARD

143. Find the odd one in the following list:

- (A) The Finance Commission reviews the state of finances of the Union and the States.
- (B) It suggests a plan for restructuring public finances.
- (C) It maintains macroeconomic stability.
- (D) It looks into the growing disparity between the urban and rural population.

144. When the RBI announces an increase in CRR, it means

- (A) The Union Government will have less money to lend.
- (B) The RBI will have less money to lend.
- (C) The Commercial banks will have less money to lend.
- (D) All of the above

145. The fiscal policy is weakened by the presence of

- (A) Public debt
- (B) Fear of capital flight
- (C) Interest sensitiveness of investment
- (D) All of the above

146. Strategically the open market operations (OMPs) is more effective than the bank rate policy to control money supply and inflationary pressure since

- (A) OMPs are done by the commercial banks.
- (B) OMPs are not used to make bank rate policy effective.
- (C) OMPs are done exclusively by the central bank and no association or consultation with the commercial banks is required.
- (D) None of the above

147. The Rupee was made convertible on the current account of the balance of payments in

- (A) July, 1991
- (B) April, 1992
- (C) August, 1994
- (D) April, 1995

148. India faced a serious balance of payments problem in

- (A) 1980-81
- (B) 1990-91
- (C) 2000-2001
- (D) 2010-2011

149. The year 2015 witnessed one landmark international event: The Millennium Development Goals that were in place from 2000 to 2015 were replaced by the

- (A) Sustainable Development Goals.
- (B) attaining goals of regional balance and income equality.
- (C) attaining goals of removing global poverty and unemployment.
- (D) attaining goals of Paris Convention, 2015.

150. Demonetization is a part of monetary policy of a country, which means

- (A) increase in supply of money to the public.
- (B) decrease in supply of money to the public.
- (C) Control of inflation.
- (D) All of the above

151. Prior to 1991, the RBI regulated

- (A) Reserve money
- (B) Narrow money
- (C) Broad money
- (D) Arbitrage

152. The system of Panchayati Raj involves

- (A) Village, State and Union levels
- (B) Village, District and State levels
- (C) Village and State levels
- (D) Village, Block and District levels

153. Which of the following pairs is NOT correctly matched?

- (A) Rangarajan : Balance of Payments Committee
- (B) Kelkar : Tax Reforms Committee
- (C) Tarapore : Capital Account Convertibility Committee
- (D) Chakravarty : Power Sector Reforms Committee

154. Which one of the following is NOT a quantitative credit control method?

- (A) Open market operation
- (B) Repo rate and reverse repo rate
- (C) Variable cash reserve ratio
- (D) Margin requirements

155. Which of the following statements is correct?

- (A) Gross non-performing loans of public sector banks have declined.
- (B) Net nonperforming loans as a percentage of total assets have increased.
- (C) Net profits in public sector banks as a percentage of total assets have increased.
- (D) Both (A) and (C) are correct.

156. India's first effort to eradicate poverty was started from

- (A) Second Five Year Plan
- (B) Fourth Five Year Plan
- (C) Fifth Five Year Plan
- (D) Sixth Five Year Plan

Please Turn Over

157. India has been able to resolve, to a large extent, the trilemma of the famed 'Impossible Trinity' by

- (A) altering fixed rate.
- (B) the combination of managed flexibility and partial capital account controls.
- (C) altering money supply and removing distortions in the market.
- (D) borrowing from the IMF.

158. In India, which one among the following formulates the fiscal policy?

- (A) NITI Aayog
- (B) Ministry of Finance
- (C) Finance Commission
- (D) The Reserve Bank of India

159. India witnessed first a positive trade balance in the

- (A) 1970s
- (B) 1980s
- (C) 1990s
- (D) None of the above

160. GST was recommended by

- (A) 13th Finance Commission
- (B) 14th Finance Commission
- (C) 15th Finance Commission
- (D) None of the above

161. Which year is considered as 'Golden Year of Fiscal Discipline' during the 2010s?

- (A) 2005-06
- (B) 2006-07
- (C) 2007-08
- (D) 2008-09

162. Banks are required to maintain a certain ratio between their cash in the hand and total assets. This is called

- (A) A Statutory Liquidity Ratio (SLR)
- (B) Central Liquid Reserve (CLR)
- (C) A Statutory Bank Ratio (SBR)
- (D) Central Bank Reserve (CBR)

163. Monetary policy's relative strength in taming business cycles depends on the

- (A) degree of openness of the country.
- (B) degree of flexibility in the forex rate.
- (C) size of the interest elasticity of money demand.
- (D) Both (A) and (B)

164. NITI Aayog was set up by

- (A) resolution by Union Cabinet
- (B) amending the Constitution of India
- (C) Both (A) and (B)
- (D) Neither (A) nor (B)

165. India's exchange rate follows

- (A) fixed exchange rate policy
- (B) flexible exchange rate policy
- (C) managed float
- (D) None of the above

166. The First Five Year Plan was based on

- (A) simple Harrod-Domar model.
- (B) Solow model.
- (C) a simple variant of Harrod-Domar model.
- (D) Leontief model

167. Under MGNREGS, guarantee is provided for

- (A) every person for the whole year.
- (B) one person in the family for the whole year.
- (C) at least 100 days of guaranteed wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work.
- (D) Every person for 100 days in the family in a year.

168. The practice of using fiscal and monetary policy to stabilize the economy is known as

- (A) Laissez-Faire economics.
- (B) Fine tuning of demand
- (C) Supply side economics
- (D) Monetarism

169. Sukhomoy Chakravarty Committee is famous for

- (A) Agricultural reform
- (B) Trade reform
- (C) Tax system
- (D) Reforms of the monetary system

170. Which one of the following is NOT a source of the State tax revenue?

- (A) Land revenue
- (B) Motor Vehicle tax
- (C) Entertainment tax
- (D) Corporate tax

171. NITI Aayog came into operation on

- (A) 1st April, 2014
- (B) 1st April, 2015
- (C) 1st January, 2015
- (D) 1st January, 2016

172. Under a managed float exchange rate system, the RBI can intervene in Foreign Exchange Markets to

- (A) smooth out short-run fluctuations in exchange rates
- (B) control inflation
- (C) increase demand
- (D) decrease the supply of money

173. REPO Rate is always

- (A) greater than Reverse REPO Rate.
- (B) less than Reverse REPO Rate.
- (C) equal to Reverse REPO Rate.
- (D) Only (A) and (C)

174. Mutual funds are regulated in India by which among the following?

- (A) RBI
- (B) SEBI
- (C) Stock exchanges
- (D) RBI and SEBI both

175. Indicate the correct statement.

Early phases of Indian development planning experienced

- (A) Export-led growth
- (B) Import substitution
- (C) Managed float exchange rate
- (D) Hefty amount of foreign exchange reserves

176. The Taylor's rule in monetary policy specifies that if inflation rises by 1 percentage point,

- (A) the nominal interest rate should be increased by 1 percentage point.
- (B) the nominal interest rate should be increased by twice that rate.
- (C) the nominal interest rate should be increased by more than 1 percentage point.
- (D) the nominal interest rate should be brought down by 1 percentage point.

177. Which one of the following is NOT an indicator of Globalization?

- (A) Opening of the economy for unrestricted imports and exports
- (B) Allowing free capital movement among nations
- (C) Free movement of technology among nations
- (D) Achieving exchange rate stability

178. High powered money comprises

- (A) Currency held by the public + cash reserves with banks
- (B) Currency with the public + Demand deposits with the banks + time deposits with the banks + 'Other' deposits with the RBI
- (C) Currency in circulation with the public + Bankers' deposits with RBI + 'Other' deposits with RBI
- (D) Currency held by the public + 'Other' deposits with RBI

179. India's gross fiscal deficits which was 8.3% of GDP in 2008-09 (Global Financial Crisis Period) had reached in 2020-21 (COVID-19 Pandemic period) at.

- (A) 9% of GDP
- (B) 9.5% of GDP
- (C) 10.2% of GDP
- (D) 11% of GDP

180. Deficit financing is akin to

- (A) financing the budgetary deficit through public loans and creation of new money.
- (B) the expenditure which is in excess of current revenue and public borrowing.
- (C) Both (A) and (B)
- (D) None of the above

181. Which one of the following is a qualitative credit control method?

- (A) Open market operation
- (B) Repo rate and reverse repo rate
- (C) Variable cash reserve ratio
- (D) Moral suasion

182. Presently the most common tool with RBI to influence interest rates in the country is

- (A) Bank rate
- (B) Repo rate
- (C) Exchange rate
- (D) Treasury bills rate

183. Which one of the following is NOT included in the foreign exchange reserves of India?

- (A) Foreign currency assets held by the RBI
- (B) Gold holding of the RBI
- (C) Silver holding of the RBI
- (D) SDRs (Special Drawing Rights)

184. Stagflation refers to a situation which is characterized by

- (A) deflation and high unemployment.
- (B) inflation and rising employment.
- (C) inflation and rising unemployment.
- (D) stagnant employment and deflation.

185. Independent India's serious efforts to alleviate poverty began with the famous slogan

- (A) Joy Jawan, Joy Kishan
- (B) 'Garibi Hatao' of the 1970s
- (C) Workers of the World Unite
- (D) None of the above

186. The main foundation of Fifth Five Year Plan was

- (A) Harrod-Domar Model.
- (B) Investment Model.
- (C) Harrod-Domar one sector model, Leontief Input-Output Model and a Consumption sub-model.
- (D) None of the above.

187. The Finance Commission is constituted by the President of India every

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

188. The Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)

- (A) is a youth development program for the urban sector.
- (B) is a placement-linked skill development scheme for rural youth who are poor.
- (C) is a women empowerment scheme.
- (D) poverty eradication scheme.

189. During inflation

- (A) creditors are losers and borrowers are gainers.
- (B) creditors are gainers and borrowers are losers.
- (C) Both are losers.
- (D) Both are gainers.

190. The rate at which Central Bank lends to Commercial Banks is known as

- (A) Open Market Operation
- (B) Reserve Rate
- (C) Discount Rate
- (D) SLR

191. Which of the following represents the most expansionary fiscal policy?

- (A) Rs. 10 billion increase in government spending
- (B) Rs. 10 billion decrease in government spending
- (C) Rs. 10 billion tax cut
- (D) Rs. 10 billion tax increase

192. The act of simultaneously buying a currency in one market and selling in another market is called

- (A) Speculation
- (B) Spotting
- (C) Forwarding
- (D) Arbitrage

193. India's Second Five Year Plan was based on

- (A) Harrod-Domar Model
- (B) Nehruvian-Feldman-Mahalanobis Model
- (C) Romer Growth Model
- (D) Leontief Input-Output Model

194. Arrange the following in the chronological order:

- (a) Mahalanobis model
- (b) Introduction of rolling plan
- (c) Declaration of plan holiday
- (d) Inclusive growth strategy

Select the answer from the code below:

- (A) (b), (a), (c), (d)
- (B) (a), (c), (b), (d)
- (C) (c), (a), (b), (d)
- (D) (a), (c), (d), (b)

195. Dr. M.S. Swaminathan is associated with

- (A) industry
- (B) agriculture
- (C) infrastructure
- (D) foreign trade

196. Which one of the following is NOT the objective of monetary policy of India?

- (A) To accelerate economic development
- (B) To achieve price stability
- (C) To regulate foreign trade
- (D) To stabilize exchange rate

197. Which of the following is dedicated to empowerment of girl students in India?

- (A) Sarva Siksha Abhiyan
- (B) Beti Bachao Beti Padhao
- (C) UDAN
- (D) Mid-day Meals

198. The Employment Guarantee Act underlying the MGNREGS is a

- (A) Demand-driven scheme.
- (B) Supply-driven scheme.
- (C) Both demand as well as supply driven scheme.
- (D) None of the above

199. The Union Government has accepted the recommendations made by the Fifteenth Finance Commission (XV-FC) in its Report for the award period 2021-22 to 2025-26 relating to the grants-in-aid to the States amounting to

- (A) Rs.2,00,000 crore
- (B) Rs.2,33,233 crore
- (C) Rs.2,50,000 crore
- (D) Rs.3,00,000 crore

200. Find the odd one out:

- (A) Income Tax
- (B) Capital Gains Tax
- (C) Goods and Services Tax(GST)
- (D) Securities Transaction Tax(STT)

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

2022

TEST BOOKLET

Paper-VI

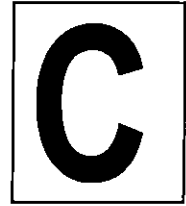
Time allowed : 3 hours

Full marks : 200

Answer *all* the questions.

Questions are of equal value.

TEST BOOKLET SERIES



5907

Serial No.

Roll No.:

Signature of the Candidate:

INSTRUCTIONS

Candidates should read the following instructions carefully before answering the questions:

1. This booklet consists of 28 pages including this front page, containing 200 questions. **Verify the Page Nos. and Test Booklet series on each page and bring at once to the Invigilator's notice any discrepancy.**
2. Answers will have to be given in the Special Answer-Sheets supplied for the purpose.
3. Before you proceed to mark in the Answer-Sheet in response to various items in the Test Booklet, you have to fill in some particulars in the Answer-Sheet as per instructions sent to you in the Admit Card. **Do not fold the Answer-Sheet as this will result in error in your marks.**
4. All questions are of multiple-choice answer-type. You will find **four** probable answers (A), (B), (C) and (D) against each question. Find out which of the four answers appears to you to be **correct or the best**. Now darken the circle corresponding to the letter of the selected answer in the Answer-Sheet with **Black Ball Point Pen** as per instructions printed on the reverse of the **Admit Card** and in the Answer-Sheet.
5. One and only one circle is to be fully blackened for answer. Any spot in any other circle (multiple circle) or in wrong circle will be considered as wrong answer. If more than one circle is encoded for a particular answer, it will be treated as a wrong answer.
6. **There will be negative marking of 0.25 mark for each wrong answer.**
7. **There are blank pages at the end of this Booklet for Rough Work.**
8. **The Special Answer-Sheet should be handed over to the Invigilator before leaving the Examination Hall. You are permitted to take away the used Test Booklet after completion of the examination.**

1. Aarti, Vinita and Kamala became partners in a business by investing money in the ratio 5 : 7 : 6. Next year, they increased their investment by 26%, 20% and 15% respectively. In what ratio profit earned during 2nd year should be distributed?

- (A) 21 : 28 : 23
- (B) 23 : 28 : 21
- (C) 28 : 23 : 21
- (D) 21 : 23 : 28

2. A sum of ₹ 7,000 is divided among A, B and C in such a way that the shares of A and B are in ratio 2 : 3 and that of B and C are in ratio 4 : 5. Then the share of C is

- (A) ₹ 2,600
- (B) ₹ 2,800
- (C) ₹ 3,000
- (D) ₹ 3,900

3. How many times will the hands of a clock cross each other in a day?

- (A) 24
- (B) 23
- (C) 22
- (D) 25

4. Divide ₹ 2,600 in 3 parts in such a way that the interest at 4% of the first part, 6% of the 2nd part and 8% of the 3rd part becomes equal.

- (A) ₹ 1200, ₹ 800, ₹ 600
- (B) ₹ 1100, ₹ 900, ₹ 600
- (C) ₹ 1000, ₹ 900, ₹ 800
- (D) ₹ 1200, ₹ 1000, ₹ 800

5. Two vertices of an equilateral triangle are origin and (4, 0). What is the area of the triangle?

- (A) 4 sq. unit
- (B) $\sqrt{3}$ sq. unit
- (C) $4\sqrt{3}$ sq. unit
- (D) $2\sqrt{3}$ sq. unit

6. At a fair, a boy tries his skill in shooting. He was to receive ₹ 2 for hitting the 'bull's eye' and had to pay ₹ 1 for missing it. He tried 60 shots but received only ₹ 12. Then he hit the bull's eye

- (A) 12 times
- (B) 6 times
- (C) 24 times
- (D) 30 times

7. If $\cot \theta = \frac{24}{7}$ and θ is not in the first quadrant, then find the value of $\tan \theta - \sec \theta$.

- (A) 1
- (B) $\frac{4}{3}$
- (C) $\frac{3}{2}$
- (D) $\frac{5}{4}$

8. $\left(2 - \frac{1}{3}\right)\left(2 - \frac{3}{5}\right)\left(2 - \frac{5}{7}\right) \dots \left(2 - \frac{997}{999}\right)$ is equal to

- (A) $\frac{1001}{999}$
- (B) $\frac{999}{1001}$
- (C) $\frac{1001}{3}$
- (D) $\frac{5}{1001}$

9. In a math lesson Shamali drew some triangles and some quadrilaterals. She drew 27 polygons altogether and a total of 99 vertices. Then total number of triangle she drew—

- (A) 9
- (B) 3
- (C) 27
- (D) 33

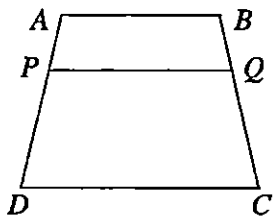
10. A man walking with $\frac{3}{4}$ of his usual speed, reaches office 20 minutes late. His usual time is

- (A) 50 minutes
- (B) 80 minutes
- (C) 70 minutes
- (D) 60 minutes

11. The angles of a triangle are in arithmetic progression. If one of the angles is 75° , then the other two angles are

- (A) $65^\circ, 85^\circ$
- (B) $60^\circ, 90^\circ$
- (C) $45^\circ, 60^\circ$
- (D) $55^\circ, 65^\circ$

12. In the following figure, $ABCD$ is an isosceles trapezium. $AB \parallel CD$, $\overline{AB} = 9$ cm, $\overline{CD} = 12$ cm, $AP : PD = BQ : QC = 1 : 2$. Find PQ .



- (A) 11 cm
- (B) $10\frac{1}{2}$ cm
- (C) 10 cm
- (D) $4\frac{1}{2}$ cm

13. The difference between compound interest and simple interest on a sum for 2 years at 8% p.a. is ₹ 768. Find the sum.

- (A) ₹ 1,10,000
- (B) ₹ 1,20,000
- (C) ₹ 1,00,000
- (D) ₹ 1,70,000

14. The monthly salaries of A and B are in the ratio 3 : 5. Each receives an increment of ₹ 500. If the ratio of their salaries now stands at 7 : 11, then the salary of A, before increment was

- (A) ₹ 2,500
- (B) ₹ 3,000
- (C) ₹ 4,500
- (D) ₹ 4,000

15. A person gets ₹ 3,700 per week plus 2% commission on the sale of goods in excess of ₹ 10,000. If his a-week sales total is ₹ 24,000, then the week's wages earned by the person is

- (A) ₹ 3,840
- (B) ₹ 4,980
- (C) ₹ 5,020
- (D) ₹ 4,280

16. Hospital is 12 km. towards east of Rupin's house. His school is 5 km towards south of Hospital. What is the shortest distance between Rupin's house and school?

- (A) 16 km
- (B) 17 km
- (C) 12 km
- (D) 13 km

17. Mohit purchased a plot of land for ₹ 12,500. After 1 year due to recession the value of his land fell by 5%. In the 2nd year, the value increased by 8%. Then the value of the land after 2 years is.

- (A) ₹ 12,500
- (B) ₹ 12,000
- (C) ₹ 12,800
- (D) ₹ 12,825

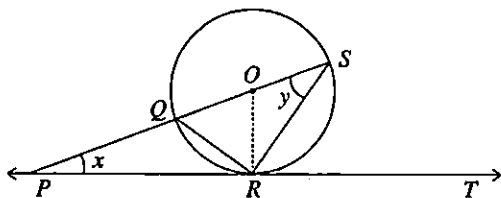
18. A mixture of 40 L of alcohol and water contains 40% water. How much water should be added to the mixture so that new mixture contains 20% water?

- (A) 5 L
- (B) 9 L
- (C) 8 L
- (D) 6 L

19. A cuboid with length 14 cm and breadth 11 cm and a cylinder have the same height and volume. Then the radius of the base of the cylinder is

- (A) 11 cm
- (B) 5 cm
- (C) 7 cm
- (D) 9 cm

20. In the given figure, PT is the tangent of a circle with centre O at point R . If diameter SQ is increased, it meets with PT at point P . If $\angle SPR = x^\circ$ and $\angle QSR = y^\circ$, what is the value of $x^\circ + 2y^\circ$?



- (A) 90°
- (B) 105°
- (C) 135°
- (D) 180°

21. A person was appointed for a 50 day's job on a condition that he will be paid ₹ 12 for every working day but will be fined ₹ 6 for everyday he remains absent. After completion of the work, he got ₹ 420. How many days he did not work?

- (A) 15 days
- (B) 5 days
- (C) 10 days
- (D) 20 days

22. If a man sells two horses for ₹ 9,900 each, gaining 10% on one and losing 10% on the other. His loss is

- (A) ₹ 2
- (B) ₹ 1
- (C) ₹ 3
- (D) ₹ 8

23. The hypotenuse of a right-angled triangle is 41 cm. The sum of the other sides is 49 cm. Then the area of the triangle is

- (A) 360cm^2
- (B) 720cm^2
- (C) 180cm^2
- (D) 120cm^2

24. 5% of $a = b$, then $b\%$ of 20 is same as

- (A) 20% of $a/2$
- (B) 50% of $a/20$
- (C) 50% of $a/2$
- (D) 20% of $a/20$

25. If the market price of a commodity is 32% more than its cost price and if 16% discount is given, then profit percentage is

- (A) profit 9
- (B) profit 10
- (C) profit 10.88
- (D) profit 11

26. In two types of brass, the ratio of copper and zinc are 8 : 3 and 15 : 7 respectively. If these two types of brasses are mixed in the ratio 5 : 2, then in the mixture the ratio of copper and zinc will be

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

27. The capacities of two glasses are same. They are filled with $\frac{2}{3}$ rd part and $\frac{2}{5}$ th part of water respectively. Remaining part of both the glasses are filled with milk. If mixtures of both the glasses are mixed in a big glass, what is the ratio of water and milk in it?

- (A) 8 : 7
- (B) 5 : 7
- (C) 7 : 3
- (D) 9 : 2

28. How much water must be added to 5 liters of a 90% acid solution to make a 75% acid solution?

- (A) 5.5 liters
- (B) 0.5 liter
- (C) 1 liter
- (D) 4.5 liters

29. The 8% simple interest on a certain amount of money for 3 years is half the 10% compound interest on ₹ 8,000 for 2 years. The amount on which simple interest is calculated

- (A) ₹ 3,500
- (B) ₹ 3,600
- (C) ₹ 3,800
- (D) ₹ 4,000

30. When $\frac{5}{7}$ is expressed in decimal form, the digit in the 19th decimal place is

- (A) 5
- (B) 8
- (C) 7
- (D) 1

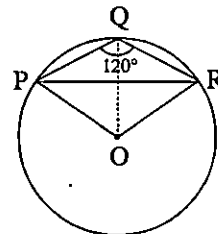
31. The sum of first 102 positive integers is

- (A) 5250
- (B) 5251
- (C) 5252
- (D) 5253

32. If the difference between 62% and 80% of a number is 198, then the difference between 92% and 56% of the number will be

- (A) 396
- (B) 3564
- (C) 1100
- (D) 360

33. In the given figure, $\angle PQR = 120^\circ$, where P, Q and R are points on a circle with centre O. Then $\angle OPR$ is



- (A) 20°
- (B) 10°
- (C) 30°
- (D) 40°

34. How many bullets can be made out of a lead cylinder 56 cm high having a radius of 6 cm, each bullet being 1.5 cm in diameter?

- (A) 4000
- (B) 5000
- (C) 3590
- (D) 3584

35. The product of the digits of a two-digit number is 24. If its unit's digit exceeds twice its ten's digit by 2, then the number is

- (A) 64
- (B) 46
- (C) 38
- (D) 83

36. The smallest number by which 6400 must be multiplied to make a perfect cube is

- (A) 2
- (B) 4
- (C) 8
- (D) 10

37. Find the equation of a line parallel to y-axis and passing through the point $(-3, 4)$.

- (A) $x + 3 = 0$
- (B) $x - 3 = 0$
- (C) $x + 4 = 0$
- (D) $x - 4 = 0$

38. The cost price and the selling price of a bag are in the ratio 4 : 5. The profit is

- (A) 20%
- (B) 25%
- (C) 30%
- (D) 35%

39. Find the wrong number in the following series:

16, 14, 24, 66, 250, 1270

- (A) 250
- (B) 66
- (C) 16
- (D) 1270

40. The ratio in which two sugar solution of the concentrations 15% and 40% are to be mixed to get a solution of concentration 30% is

- (A) 2 : 3
- (B) 3 : 2
- (C) 8 : 9
- (D) 9 : 8

41. If LCM of $f(x)$ and $g(x)$ is $6x^2 + 13x + 6$, then which of the following can not be HCF of $f(x)$ and $g(x)$?

- (A) $2x + 3$
- (B) $3x + 1$
- (C) $(2x + 3)(3x + 2)$
- (D) $3x + 2$

42. If the points $(a, 0)$, $(0, b)$ and $(1, 1)$ are collinear, then which of the following is true?

- (A) $\frac{1}{a} + \frac{1}{b} = 2$
- (B) $\frac{1}{a} - \frac{1}{b} = 1$
- (C) $\frac{1}{a} - \frac{1}{b} = 2$
- (D) $\frac{1}{a} + \frac{1}{b} = 1$

43. In 4 years ₹ 6,000 amounts to ₹ 8,000. In what time at the same rate of interest will ₹ 525 amounts to ₹ 700?

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

44. A 2-digit number is such that the unit's digit is four times the ten's digit and if 54 is added to the number, the digits are reversed. Then the number is

- (A) 14
- (B) 28
- (C) 82
- (D) 41

45. Which of the following numbers has the maximum number of divisors?

- (A) 108
- (B) 99
- (C) 154
- (D) 44

46. What sum of money will amount to ₹ 520 in 5 years and to ₹ 568 in 7 years at simple interest?

- (A) ₹ 400
- (B) ₹ 120
- (C) ₹ 510
- (D) ₹ 220

47. A person was driving a car in fog. He passed a pedestrian who was walking at the speed of 2 km/h in the same direction. The pedestrian could see the car for 6 minutes and up to a distance of 0.6 km. What was the speed of the car?

- (A) 8 km/h
- (B) 10 km/h
- (C) 40 km/h
- (D) 12 km/h

48. The ratio of ladies and gentlemen at a party was 3 : 2. When 20 more gentlemen joined the party, the ratio was reversed. The number of ladies present at the party was

- (A) 18
- (B) 36
- (C) 24
- (D) 30

49. If in a triangle of base 4 cm and height 3 cm, the height is increased by 3 cm, find by how much the base should be decreased, if the new area is twice that of the original triangle.

- (A) $\frac{1}{2}$
- (B) $\frac{1}{4}$
- (C) 2
- (D) 0

50. By selling an article for ₹ 31 a shopkeeper loses 7%. If he sells the article for ₹ 35, then what is gain or loss per cent?

- (A) Loss 3%
- (B) Gain 5%
- (C) Loss 5%
- (D) Gain 3%

51. Find the value of

$$\frac{1}{\sqrt{5}-\sqrt{5}-\sqrt{24}} + \frac{1}{\sqrt{5}-\sqrt{5}+\sqrt{24}}$$

- (A) $\frac{1}{\sqrt{3}}$
- (B) $-\frac{1}{\sqrt{3}}$
- (C) $\frac{1}{3}$
- (D) $-\frac{1}{3}$

52. In an examination, it is required to get 40% marks to qualify. A candidate secured 150 marks and failed by 10 marks. What are the maximum marks of the examination?

- (A) 500
- (B) 400
- (C) 450
- (D) 350

53. The sum of two numbers is 150 and their H.C.F. is 15. The number of possible pairs is

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

54. Railway fares are increased by 50%. To return to the original rates they must be reduced by

- (A) 33%
- (B) $33\frac{1}{2}\%$
- (C) $33\frac{1}{3}\%$
- (D) $33\frac{1}{4}\%$

55. In a $\triangle ABC$, it is given that $\angle C = 90^\circ$ and $\tan A = \frac{1}{\sqrt{3}}$, find the value of

$(\sin A \cos B + \cos A \sin B)$.

- (A) 1
- (B) $\frac{1}{2}$
- (C) 0
- (D) 3

56. If one-third of one-fourth of a number is 20, then one-tenth of that number is

- (A) 24
- (B) 36
- (C) 45
- (D) 54

57. In a restaurant, John has 4 choices for starters, 6 choices for the main course and 5 choices for dessert. Then number of different 3 course meals John can order is

- (A) 100
- (B) 150
- (C) 120
- (D) 200

58. At 12 pm both hands of a wall clock, placed normally on the wall, point to the North. In which direction the hour hand will be point at 3 am?

- (A) East
- (B) West
- (C) South
- (D) North

59. Let $x = \sqrt[3]{9}$, $y = \sqrt[4]{11}$ and $z = \sqrt[5]{17}$; then which of the following relations is true?

- (A) $x < y < z$
- (B) $z < x < y$
- (C) $y < z < x$
- (D) $x > y > z$

60. Two men undertake to do a piece of work for ₹ 200. One alone can do it in 6 days, the other in 8 days. With the help of a boy they finish it in 3 days. How much is the share of the boy?

- (A) ₹ 20
- (B) ₹ 25
- (C) ₹ 30
- (D) ₹ 40

61. In a certain positive fraction, the denominator is greater than the numerator by 3. If 1 is subtracted from the numerator and denominator both, the fraction reduces by $\frac{1}{14}$. Then the fraction is

- (A) $\frac{4}{7}$
- (B) $\frac{8}{14}$
- (C) $\frac{7}{20}$
- (D) $\frac{3}{14}$

62. To cover a distance a man first goes $\frac{3}{8}$ th of the journey by train, 20% of the remaining by bus and still he has 6 km. The total distance is

- (A) 8 km
- (B) 10 km
- (C) 12 km
- (D) 16 km

63. When 50% of one number is added to a second number, the second number increases to its four-third. What is the ratio between the first number and the second number?

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

64. Find the angle between the two hands of a clock at 2:30 pm.

- (A) 100°
- (B) 105°
- (C) 210°
- (D) 70°

65. Study the following alphabetical sequence and answer the question based on it.

Q R A S T T U V X E I I H J K O L M O O C P S

If we drop all the vowels from above series, then the middle position occupied by

- (A) X
- (B) H
- (C) J
- (D) V

66. A man rows a boat 18 km in 4 hours downstream and returns upstream in 12 hours. The speed of the stream (in km/h) is

- (A) 1
- (B) 1.5
- (C) 2
- (D) 1.75

67. A cylindrical pillar of height 7.5 m and diameter 3.5 m is to be painted. At the top and bottom, 25 cm of the pillar is covered by brass plates and the remaining portion is to be painted. Then the area of the pillar which is to be painted, is

- (A) 77 m^2
- (B) 196 m^2
- (C) 86 m^2
- (D) 75 m^2

68. A can with 30 marbles weighed 120 gm. The same can with 15 marbles weighed 95 gm. Then the weight of the can is

- (A) 50 gm
- (B) 60 gm
- (C) 70 gm
- (D) 80 gm

69. A motorboat covers a certain distance downstream in a river in five hours. It covers the same distance upstream in six hours. The speed of water is 2 km/h. Then the speed of the boat in still water is

- (A) 20 km/h
- (B) 22 km/h
- (C) 30 km/h
- (D) 25 km/h

70. A batsman has certain average of runs for 11 innings. In the 12th innings he makes a score of 90 runs, thereby increasing his average by 5. His average after the 12th innings is

- (A) 30
- (B) 35
- (C) 40
- (D) 32

71. A person has deposited some amount in a bank and becomes ₹ 500 in 3 years and ₹ 540 in 5 years. The rate of interest is

- (A) 4%
- (B) $4\frac{6}{11}\%$
- (C) $4\frac{7}{11}\%$
- (D) 5%

72. The value of $\frac{27\frac{2}{3} \times 27\frac{2}{3} - 24\frac{1}{3} \times 24\frac{1}{3}}{27\frac{2}{3} - 24\frac{1}{3}}$ is

- (A) 52
- (B) 53
- (C) 54
- (D) 56

73. An equilateral triangle CDE is constructed on a side of CD of square ABCD. The value of $\angle AEB$ is

- (A) 150°
- (B) 45°
- (C) 30°
- (D) 20°

74. A sum of money is borrowed and paid back in two annual instalments of ₹ 1,764 each allowing 5% compound interest. What was the sum borrowed?

- (A) ₹ 4,000
- (B) ₹ 3,340
- (C) ₹ 3,000
- (D) ₹ 3,280

75. Circle C_1 passes through the centre of circle C_2 and is tangential to it. If the area of C_1 is 4 cm^2 , then the area of C_2 is

- (A) 8 cm^2
 (B) $8\sqrt{\pi} \text{ cm}^2$
 (C) 16 cm^2
 (D) $16\sqrt{\pi} \text{ cm}^2$

76. The difference between the greatest and least numbers formed out of the digits 8, 9, 0, 7 is

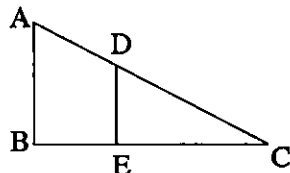
- (A) 9081
 (B) 1809
 (C) 2407
 (D) 2781

77. Find the number which is subtracted from the numbers in the ratio 11 : 23 so that the ratio becomes 1 : 3.

- (A) 5
 (B) 6
 (C) 7
 (D) 8

78. In the given figure AB and DE are perpendiculars to BC. If $AB = 6 \text{ cm}$, $DE = 4 \text{ cm}$ and $AC = 15 \text{ cm}$, then $CD = ?$

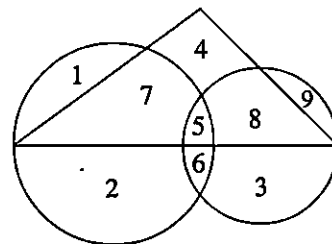
- (A) 5 cm
 (B) 2 cm
 (C) 10 cm
 (D) 4 cm



79. The average of 5 consecutive numbers is 15. The greatest number is

- (A) 17
 (B) 19
 (C) 11
 (D) 15

80. In the given Venn diagram, the triangle represents female graduates, small circle represents self-employed females and the big circle represents self-employed females with bank loan facility. Which number represents non-graduate self-employed females with bank loan facility?

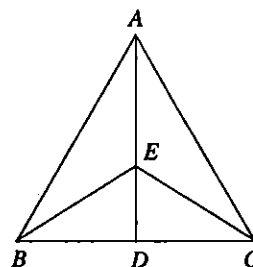


- (A) 2
 (B) 9
 (C) 6
 (D) 1

81. A certain sum of money amounts to ₹ 756 in 2 years and to ₹ 873 in 3 and half years at a certain rate of simple interest. The rate of interest p.a. is

- (A) 10%
 (B) 11%
 (C) 12%
 (D) 13%

82. E is point on median AD of $\triangle ABC$. If area $(\triangle ABE) = 10 \text{ cm}^2$, then area $(\triangle ACE)$ is



- (A) 20 cm^2
 (B) 5 cm^2
 (C) 30 cm^2
 (D) 10 cm^2

83. In a seminar the number of participants in Mathematics, Physics and Biology are 192, 240 and 168 respectively. Find the minimum number of rooms required if in each room same number of participants is to be seated and all of them being of the same subject.

- (A) 20
- (B) 25
- (C) 28
- (D) 30

84. A loan was repaid in two annual instalments of ₹ 3,630 each. If the rate of interest be 10% per annum compounded annually, then find the sum that was borrowed.

- (A) ₹ 5,200
- (B) ₹ 6,100
- (C) ₹ 6,300
- (D) ₹ 5,600

85. If the centroid of the triangle formed by the points (a, b) , (b, c) and (c, a) is the origin, then $a^3 + b^3 + c^3 =$ ____.

- (A) abc
- (B) 0
- (C) $a + b + c$
- (D) $3abc$

86. If 69.5 is the mean of 72, 70, x , 62, 50, 71, 90, 64, 58 and 82, then the value of x is

- (A) 75
- (B) 67
- (C) 72
- (D) 76

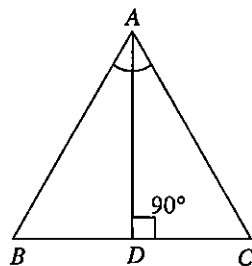
87. The ratio of investments of two partners is 11 : 12 and the ratio of their profits is 2 : 3. If A invests the money for 8 months, find for how much time B invests his money?

- (A) 11 months
- (B) 8 months
- (C) 4 months
- (D) 6 months

88. In a State, each year the number of road accidents is decreased by 5% from the previous year due to road safety campaigns. The number of road accidents in the current year is 2916. 3 years ago this number was

- (A) 4000
- (B) 5100
- (C) 3890
- (D) 5000

89. If AD is bisector of $\angle A$ and AD is perpendicular to BC , then $\triangle ABC$ is _____ triangle.



- (A) Isosceles
- (B) Equilateral
- (C) Scalene
- (D) None of the above

90. Divide ₹ 2,602 between X and Y, so that the amount of X after 7 years is equal to the amount of Y after 9 years, the interest being compounded at 4% per annum.

- (A) ₹ 1352, ₹ 1250
- (B) ₹ 1250, ₹ 1352
- (C) ₹ 1402, ₹ 1200
- (D) ₹ 1400, ₹ 1202

91. A tea seller faces 20% loss selling a certain brand of tea at the rate of ₹ 80 per kg. By selling another brand of tea at the rate of ₹ 200 per kg, he makes a profit of 25%. In what ratio the seller needs to mix the two brands of tea in order to make 25% profit by selling the mixed branded tea at the rate of ₹ 150 per kg?

- (A) 1 : 2
- (B) 2 : 3
- (C) 2 : 1
- (D) 3 : 2

92. A person has money to buy 42 suitcases at the rate of ₹ 500 each. If the cost per suitcase is increased by ₹ 100, then number of suitcases he can buy now is

- (A) 30
- (B) 35
- (C) 38
- (D) 40

93. The roots of the quadratic equation

$$\frac{1}{a+b+x} = \frac{1}{a} + \frac{1}{b} + \frac{1}{x}, \quad a+b \neq 0, \text{ are}$$

- (A) a, b
- (B) $-a, b$
- (C) $a, -b$
- (D) $-a, -b$

94. Two cylinders are such that the ratio of their base radii is 2 : 1 and the ratio of their heights are 3 : 1. Then the ratio of their volumes is

- (A) 6 : 1
- (B) 12 : 1
- (C) 5 : 1
- (D) 1 : 1

95. Equal weights of alloys 'x' and 'y' which contain zinc and tin in the proportion of 8 : 3 and 6 : 5 respectively are melted to form a third alloy 'z', 'z' contains zinc and tin in the proportion of

- (A) 4 : 7
- (B) 3 : 5
- (C) 5 : 3
- (D) 7 : 4

96. A and B start from the same place and travel in the same direction, B starting 2 hours after A. If A travels 40 km/h and B travels at 50 km/h, then the distance they have travelled when B overtakes A is

- (A) 400 km
- (B) 500 km
- (C) 700 km
- (D) 550 km

97. Find the value of x from the following equation.

$$\frac{9x+7}{2} - \left[x - \left(\frac{x-2}{7} \right) \right] = 36$$

- (A) 9
- (B) 18
- (C) 5
- (D) 4

98. After spending 88% of his money, a boy found he still had ₹ 372 left. Initially he had

- (A) ₹ 3,372
- (B) ₹ 4,400
- (C) ₹ 4,100
- (D) ₹ 3,100

99. A survey in a city showed that the probability that a person smokes is $\frac{2}{9}$. If 40 people in a certain sample smoke, then number of people in the sample is

- (A) 180
- (B) 200
- (C) 240
- (D) 120

100. The average of 7 consecutive number is 20. The largest of these numbers is

- (A) 24
- (B) 23
- (C) 22
- (D) 20

101. The average of 8 numbers is 6 and the average of 6 other numbers is 8. What is the average of all 14 numbers?

- (A) 6
- (B) $6\frac{6}{7}$
- (C) $6\frac{5}{7}$
- (D) $7\frac{5}{7}$

102. In a Zoo, there are lions and parrots. If counted, there are 100 heads and 290 legs. How many parrots are there?

- (A) 55
- (B) 65
- (C) 45
- (D) 75

103. Average age of A, B and C is 36 years. If average age of B and C is 30 years and age of B is 22 years, then what is the sum of the ages of A and C?

- (A) 68 years
- (B) 86 years
- (C) 58 years
- (D) 61 years

104. A merchant has 100 kg of sugar. He sells a part of which at 9% profit and the rest at 9% loss. He gains 5% on the whole. The quantity sold at 9% loss is

- (A) 18 kg
- (B) 20 kg
- (C) 22.23 kg
- (D) 25 kg

105. If the ratio between 8 and 11 is the same as the ratio of $(2x-y)$ to $(x+2y)$, find the value of $\frac{7x}{9y}$.

- (A) $\frac{7}{9}$
- (B) $\frac{3}{2}$
- (C) $\frac{5}{7}$
- (D) $\frac{7}{2}$

106. The G.C.M. of two numbers is 17 and their product is 6936. The no. of pairs of such numbers is

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

107. The speed of a bus is 54 km/h excluding stoppages and 45 km/h including stoppages. The bus will stop per hour for

- (A) 8 minutes
- (B) 10 minutes
- (C) 12 minutes
- (D) 15 minutes

108. Due to 25% fall in price of eggs, one can buy 2 dozen eggs more than before by investing ₹ 200. What was original price per dozen?

- (A) ₹ $\frac{200}{6}$
- (B) ₹ $\frac{300}{7}$
- (C) ₹ $\frac{400}{6}$
- (D) ₹ $\frac{700}{5}$

109. If $(2a + 1)(2a + 2)(2a + 3)(2a + 4) + q$ is a perfect square, then $q = ?$

- (A) 24
- (B) 1
- (C) 12
- (D) -8

110. If the first and the third terms of a G. P. are 2 and 8 respectively, then its second term is

- (A) -4
- (B) ± 4
- (C) 4
- (D) 0

111. A student was asked to multiply a number by $\frac{3}{2}$ but he divided the number by $\frac{3}{2}$. His result was therefore 10 less than the correct answer. Find the number.

- (A) 10
- (B) 12
- (C) 15
- (D) 20

112. A dealer sold an article at a loss of 10%. If he had sold for ₹ 125 more, he would have gained 15%. The cost price of the article is

- (A) ₹ 300
- (B) ₹ 500
- (C) ₹ 432
- (D) ₹ 1200

113. The annual increase in the population of a town be 10% and the present population is 13310. The population last two years ago was

- (A) 10000
- (B) 11000
- (C) 10500
- (D) 11500

114. Train A crosses a pole in 25 seconds and train B does the same in 1 minutes 15 seconds. Length of train A is half the length of train B. What is the ratio between the speed of A and B?

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

115. The sum of two numbers is 1400. If the larger number is decreased by 20% and the smaller number is increased by 20%, then the resulting numbers are equal. The two numbers are

- (A) 740, 660
- (B) 840, 560
- (C) 800, 600
- (D) 820, 580

116. Two persons are a metres apart and the height of one is double that of the other. If from the middle point of the line joining their feet, an observer finds the angular evaluation of their tops to be complementary, then the height of the shorter person in metres is

- (A) $\frac{a}{4}$
- (B) $\frac{a}{\sqrt{2}}$
- (C) $a\sqrt{2}$
- (D) $\frac{a}{2\sqrt{2}}$

117. $\left(\frac{m^a}{m^b}\right)^{a+b} \left(\frac{m^b}{m^c}\right)^{b+c} \left(\frac{m^c}{m^a}\right)^{c+a} = ?$

- (A) 0
- (B) 5
- (C) 3
- (D) 1

118. If the number 472573* is completely divisible by 72, then which number should replace the star?

- (A) 4
- (B) 5
- (C) 6
- (D) 7

119. The diameter of a roller is 84 cm and its length 120 cm. It takes 500 complete revolutions to move once over to level a playground. Find the area of the playground in sq. m.

- (A) 1632
- (B) 1584
- (C) 1817
- (D) 1532

120. If a glass holds 275 ml, how many of these glasses can be filled from a 2-liter drink of lemonade?

- (A) 8 full glasses
- (B) 7 full glasses
- (C) 9 full glasses
- (D) 6 full glasses

121. The volume of a cylinder of radius r is $\frac{1}{4}$ of the volume of a rectangular box with a square base of side length x . If the cylinder and the box have equal heights, what is the value of r in terms of x ?

- (A) $\frac{x^2}{2\pi}$
- (B) $\frac{x}{2\sqrt{\pi}}$
- (C) $\frac{\sqrt{2x}}{\pi}$
- (D) $\frac{x}{\sqrt{\pi}}$

122. At the time of wedding, the bride's age was $\frac{3}{4}$ of the groom's age. After 8 years, her age is $\frac{4}{5}$ of her husband's age. Then the age of the bride at the time of her wedding is

- (A) 24 years
- (B) 18 years
- (C) 19 years
- (D) 26 years

123. The hypotenuse of a right-angled triangle is 26 cm and the sum of other two sides is 34 cm. Then the lengths of the two sides are

- (A) 10 cm, 24 cm
- (B) 8 cm, 26 cm
- (C) 12 cm, 22 cm
- (D) 14 cm, 20 cm

124. The average temperature of a city in the first four days of a month was 58 degree. The average of the 2nd, 3rd, 4th and 5th days was 60 degree. If the temperatures of 1st and 5th days were in the ratio 7 : 8, then what is the temperature of 5th day?

- (A) 64 degree
- (B) 62 degree
- (C) 56 degree
- (D) None of the above

125. If the cost of 57 articles is equal to the selling price of 38 articles, then percentage profit is

- (A) 20%
- (B) 30%
- (C) 50%
- (D) 55%

126. In a partnership business, Amal invested capital double the capital of Palash. The ratio of the period of investment is $\frac{1}{2} : \frac{1}{3}$. Then the ratio of their profit is

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

127. A computer depreciates at a rate of 25% p.a. If it was worth ₹ 26,000 new, how many full years must pass, before it worth less than half its original value?

- (A) 2 years
- (B) 3 years
- (C) 4 years
- (D) 1 year

128. The population of a town is 24000. If the number of males is increased by 6% and the number of females by 9%, then there would be 25620. The number of males and females in the town are

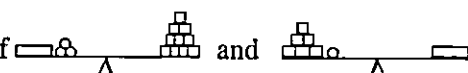
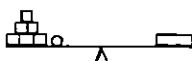


- (A) 18000, 6000
- (B) 16000, 8000
- (C) 14000, 10000
- (D) 17000, 7000

129. A man sold 2 articles at the same price ₹ 2,970 each. On one he made a loss of 10% and on the other a gain of 10%. The overall gain or loss percentage is

- (A) loss 1%
- (B) gain 1%
- (C) No loss or gain
- (D) gain 0.1%

130. A rectangular lawn 80 m × 60 m has two roads each 10 m wide running in the middle of it. One parallel to the length and the other parallel to the breadth. Find the cost of gravelling them at ₹ 20 per sq. m.

- (A) ₹ 35,000
- (B) ₹ 39,000
- (C) ₹ 26,000
- (D) ₹ 41,000

131. If  and  how many  balance one  ?

- (A) 7
- (B) 3
- (C) 6
- (D) 5

132. The angles of a quadrilateral are in A. P. with common difference 20°. Then the smallest angle is

- (A) 100°
- (B) 130°
- (C) 30°
- (D) 60°

133. If 6 men can harvest a field in 60 working hours and a man works three times as fast as a boy. Then 10 boys can harvest a field in

- (A) 60 hours
- (B) 40 hours
- (C) 100 hours
- (D) 108 hours

134. Capacity of tap B is 80% more than that of A. If both the taps are opened simultaneously, they take 45 hours to fill the tank. How long will B take to fill the tank alone?

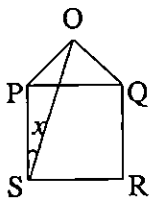
- (A) 72 hours
- (B) 48 hours
- (C) 66 hours
- (D) 70 hours

135. If the radius of a circle is increased by 10%, then the percentage increased in the circumference of a circle is

- (A) 10%
- (B) 20%
- (C) 50%
- (D) 15%

136. In the given figure (not drawn to scale), PQRS is a square, $\triangle OPQ$ is an equilateral triangle, then the value of x is

- (A) 20°
- (B) 25°
- (C) 15°
- (D) 10°



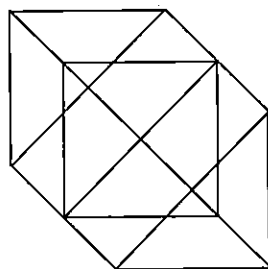
137. The ratio of the areas of a regular hexagon and a square having the same perimeter is

- (A) $2\sqrt{3} : 3$
- (B) $\sqrt{3} : 2$
- (C) $3\sqrt{3} : 2$
- (D) $3 : 2$

138. The 30th term of the sequence $\frac{1}{2}, 1, \frac{3}{2}, \dots$ is

- (A) 15
- (B) 1
- (C) $\frac{29}{2}$
- (D) $\frac{31}{2}$

139. Find the number of triangles in the given figure.



- (A) 18
- (B) 20
- (C) 24
- (D) None of the above

140. If the value of a gold coin is increased by 20% each year, then the percentage increase of the gold coin over three years is

- (A) 80.5%
- (B) 60%
- (C) 72.8%
- (D) 70.1%

141. Which of the following numbers is divisible by 3, 4, 5 and 7?

- (A) 3150
- (B) 1400
- (C) 2940
- (D) 3570

142. A business man marks his good at 20% above the cost price. He allows the customers a discount of 8% on market price. His net percentage of profit is

- (A) 10.4%
- (B) 10%
- (C) 10.2%
- (D) 10.6%

143. In a partnership between A and B, A's capital is $\frac{2}{5}$ th of the total and invested for $\frac{2}{3}$ year. If his share of profit is $\frac{4}{7}$ of the total, then how long is B's capital in the business?

- (A) 6 months
- (B) 4 months
- (C) 8 months
- (D) 3 months

144. A company with 1000 shares of nominal value ₹ 150 declares an annual dividend of 10%. Then the total amount of dividend paid by the company is

- (A) ₹ 15,000
- (B) ₹ 10,000
- (C) ₹ 1,000
- (D) ₹ 1,500

145. $\sqrt{12 + \sqrt{12 + \sqrt{12 + \dots}}}$ is equal to

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

146. If $a = 25\%$ of $b = 10\%$ of c , then $a : b : c = ?$

- (A) 2 : 5 : 6
- (B) 2 : 5 : 7
- (C) 1 : 3 : 11
- (D) 1 : 4 : 10

147. The value of $\frac{\sqrt{64} + \sqrt[3]{-64}}{\sqrt{729} + \sqrt[3]{-729}}$ is

- (A) $\frac{1}{3}$
- (B) $\frac{2}{9}$
- (C) 1
- (D) $\frac{2}{3}$

148. A block of cheese 5 cm by 6 cm by 8 cm is covered with wax. If the cheese is cut into one centimetre cubes, then number of cubes not having wax on them is

- (A) 72
- (B) 240
- (C) 210
- (D) 120

149. Three friends started a partnership business with capitals ₹ 5,000, ₹ 6,000 and ₹ 7,000 respectively. After one year they found a loss of ₹ 1,800. To keep the capital same they decided to share the loss among themselves in the ratio of their capitals. The amount each one has to pay is

- (A) ₹ 490, ₹ 610, ₹ 700
- (B) ₹ 490, ₹ 600, ₹ 710
- (C) ₹ 500, ₹ 580, ₹ 720
- (D) ₹ 500, ₹ 600, ₹ 700

150. At a certain school, there are 320 juniors and 180 seniors. The average absenteeism rate is $6\frac{1}{4}\%$ for juniors and $8\frac{1}{3}\%$ for seniors. Then the average absenteeism rate overall for the school is

- (A) 5%
- (B) 6%
- (C) 7%
- (D) 8%

151. A telegraph post gets broken at a point against a storm and its top touches the ground at a distance 20 m from the base of the post making an angle 30° with the ground. What is the height of the post?

- (A) $\frac{40}{\sqrt{3}}$ m
- (B) $20\sqrt{3}$ m
- (C) $40\sqrt{3}$ m
- (D) 30 m

152. The number of solid spheres, each of diameter 6 cm could be moulded to form a solid metal cylinder of height 45 cm and diameter 4 cm, is

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

153. A plane left 30 minutes later than the scheduled time and in order to reach its destination 1500 km away in time, it has to increase its speed by 250 km/h from its usual speed. Then its usual speed is

- (A) 1000 km/h
- (B) 2500 km/h
- (C) 750 km/h
- (D) 800 km/h

154. The length of the longest thin rod that can fit inside a rectangular box that measures 15 cm by 10 cm by 5 cm is

- (A) 18.7 cm
- (B) 17.2 cm
- (C) 15.8 cm
- (D) 20.2 cm

155. A began a business with ₹ 10,500 and is joined afterwards by B with ₹ 18,000. After how many months did B join, if the profit at the end of the year is divided equally?

- (A) 15 months
- (B) 10 months
- (C) 5 months
- (D) Couldn't be determined

156. A pole of length 12 m casts a shadow of length 15.6 m. Then the length of the shadow cast by another pole of length 18 m is

- (A) 23.4 m
- (B) 24 m
- (C) 46.8 m
- (D) 31.2 m

157. The difference between compound interest and simple interest for 2 years on ₹ 22,500 at 6% p.a. is

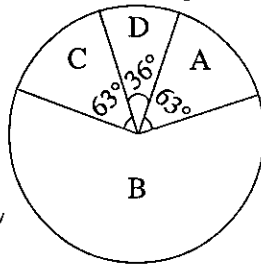
- (A) ₹ 225
- (B) ₹ 181
- (C) ₹ 81
- (D) ₹ 220

158. In what time will simple interest be $\frac{2}{5}$ of the principal at 8% p.a.?

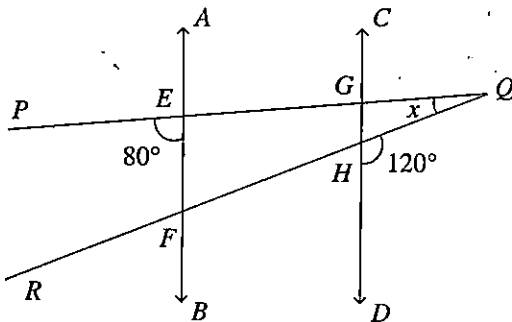
- (A) 8 years
- (B) 7 years
- (C) 5 years
- (D) 6 years

159. The given pie chart (not drawn to scale) represents the annual performance of the students of a class in terms of grades A, B, C and D. The percentage of students who have got B grade is

- (A) 40%
(B) 55%
(C) 60%
(D) 65%



160. In the given figure, $AB \parallel CD$ and PQ , QR intersect AB and CD both at E , F and G , H respectively. Find the value of x .



- (A) 40°
(B) 20°
(C) 30°
(D) 10°

161. Successive discounts of 10% and 30% are equivalent to a single discount of

- (A) 73%
(B) 36%
(C) 38%
(D) 37%

162. X is 20% heavier than Y and Z is 20% lighter than Y. The weight of Z is equal to

- (A) $\frac{4}{5}$ of X
(B) $\frac{3}{5}$ of X
(C) $\frac{3}{2}$ of X
(D) $\frac{2}{3}$ of X

163. Amal can do a piece of work in 12 days. Mihir is found to be 50% more efficient than Amal. If Mihir is given the piece of work, then he will complete it by

- (A) 6 days
(B) 8 days
(C) 4 days
(D) 10 days

164. The hundreds digit of the square root of the square number 3, 15, 844 is

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

165. The population of a town increases 5% annually, if its present population is 74970, what it was two years ago?

- (A) 64200
(B) 68000
(C) 63155
(D) 72000

166. 40 men complete $\frac{1}{3}$ rd of a work in 40 days. How many more men should be employed to finish the rest of the work in 50 more days?

- (A) 12
(B) 20
(C) 18
(D) 24

167. The radius of a wheel is 14 m. How many revolution will it make in travelling 880 m?

- (A) 10
- (B) 12
- (C) 14
- (D) 16

168. The difference between the squares of two consecutive numbers is 65. The greatest number is

- (A) 33
- (B) 34
- (C) 35
- (D) 36

169. A train leaves place A at 5 am and reaches place B at 9 am. Another train leaves place B at 7 am and reaches place A at 10:30 am. At what time do they cross each other?

- (A) 6:56 am
- (B) 7:56 am
- (C) 8 am
- (D) 8:30 am

170. Cost of coffee A and B are ₹ 64 and ₹ 80 per 100 gm respectively. A blend of two is sold at ₹ 86 per 100 gm. If a profit of 25% is to be earned on this blend, what should be the proportion of A and B in its composition?

- (A) 8 : 5
- (B) 9 : 2
- (C) 7 : 3
- (D) 3 : 2

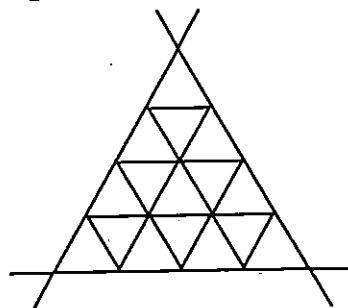
171. A peon has a salary of ₹ 1,000 per month and a carpenter earns ₹ 30 per day, but he is idle for 65 days in the year. The ratio of their income is

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

172. A hotel bill for a number of people for overnight stay is ₹ 4,800. If there were 4 more people, the bill each person had to pay, would have reduced by ₹ 200. Then the number of people staying overnight is

- (A) 8
- (B) 6
- (C) 10
- (D) 12

173. How many triangles are there in the following figure?



- (A) 19
- (B) 21
- (C) 27
- (D) 30

174. A certain amount of money is kept for 2 years at certain simple interest. If the interest rate is 3% higher, then it will bring ₹ 300 more. The amount of money is

- (A) ₹ 2,000
- (B) ₹ 2,500
- (C) ₹ 3,500
- (D) ₹ 5,000

175. If $x = \sqrt{2 + \sqrt{2 + \sqrt{2 + \dots}}}$, then the value of x is

- (A) 1
- (B) 2
- (C) 3
- (D) 4

176. Value of $\frac{7^{23} + 7^{24} + 7^{25} + 7^{26}}{16}$ is

- (A) $7^{23} \times 5$
- (B) $7^{23} \times 175$
- (C) $7^{22} \times 175$
- (D) $7^{23} \times 35$

177. A shopkeeper buys a number of books for ₹ 80. If he had bought 4 more books for the same amount, each book would have cost ₹ 1 less. How many books did he buy?

- (A) 16
- (B) 20
- (C) 18
- (D) 22

178. In a multiple choice exam of 30 questions, a correct answer earns 2 marks, an incorrect answer loses 3 marks and an unanswered question scores 0 marks. If Raj left out 6 questions and his score was 28, then number of questions he gets correct is

- (A) 22
- (B) 20
- (C) 25
- (D) 15

179. Vandana bought a watch for ₹ 600 and sold it on the same day for ₹ 688.50 at a credit of 9 months and this way she gained 2%. Find the rate of interest per annum.

- (A) $16\frac{2}{3}\%$
- (B) $15\frac{2}{3}\%$
- (C) $11\frac{2}{3}\%$
- (D) $5\frac{2}{3}\%$

180. What should come in place of the question mark?

7, 8, 18, ?, 232, 1165

- (A) 84
- (B) 42
- (C) 57
- (D) 36

181. The smallest number which is being divided by 8, 9, 12 and 15 always leaves 1 as a remainder is

- (A) 361
- (B) 359
- (C) 181
- (D) 197

182. Two cyclists start from the same place in opposite direction and goes towards north at 18 km/h and the other goes towards south at 20 km/h. What time will they need to apart 47.5 km?

- (A) 2 hours
- (B) $1\frac{1}{4}$ hours
- (C) 3 hours
- (D) $2\frac{1}{2}$ hours

183. A takes as much time to do a piece of work as B and C take to do it working together. If A and B together can do the same work in 10 days and C alone can do it in 20 days, find the time in which B will finish this work.

- (A) 40 days
- (B) 60 days
- (C) 80 days
- (D) 20 days

184. A square lawn is bounded on three sides by a path 4 m wide. If the area of the path is $\frac{7}{8}$ that of the lawn, then each side of the lawn is

- (A) 10 m
- (B) 12 m
- (C) 16 m
- (D) 18 m

185. All students of a class like Horlicks, Maltova or Viva. Number of students who like only Horlicks and Maltova, only Maltova and Viva and only Horlicks and Viva are equal to twice the number of students who like all the three health drinks. Number of students who like only Horlicks, only Maltova and only Viva are all equal to thrice the number of students who like all three. If four students like all the three health drinks, then find the number of students in the class.

- (A) 64
- (B) 48
- (C) 68
- (D) 52

186. A bus maintains an average speed of 60 km/h while going from P to Q and maintains an average speed of 90 km/h while coming back. The average speed of bus is

- (A) 75 km/h
- (B) 72 km/h
- (C) 70 km/h
- (D) 80 km/h

187. A solid spherical ball of radius 4 cm is melted and recast into 64 identical spherical marbles. Then the radius of each marble is

- (A) 1 cm
- (B) 1.5 cm
- (C) 0.2 cm
- (D) 1.2 cm

188. The numerator of a fraction is 6 less than its denominator. If 3 is added to the numerator, the fraction becomes equal to $\frac{2}{3}$. Then the original fraction is

- (A) $\frac{7}{13}$
- (B) $\frac{1}{7}$
- (C) $\frac{3}{9}$
- (D) $\frac{5}{11}$

189. Rima has ₹ 1000 in denominations of ₹ 5 and ₹ 2 coins. If the number of two-rupee coins Rima has is five-eighths of the number of five-rupee coins, then five-rupee coins Rima has

- (A) 100
- (B) 120
- (C) 160
- (D) 200

190. A keeps 10 ships for 3 weeks and B keeps 15 ships for 4 weeks. Find the ratio of the rent paid by them.

- (A) 1 : 2
- (B) 2 : 1
- (C) 3 : 1
- (D) 1 : 3

191. If $\sqrt{34596} = 186$, then $\sqrt{3459600} = ?$

- (A) 18.6
- (B) 1860
- (C) 186
- (D) 1.86

192. If the value of the letter A is 1, B is 2 and so on and the word BAT = 23, then the value of the word DISCIPLINE is

- (A) 100
- (B) 110
- (C) 250
- (D) 150

193. A point P divides the line joining the points $(2, 1)$ and $(5, -8)$ in ratio $1 : 2$. Also, the point P lies on the line $2x - y + k = 0$. Find the value of k .

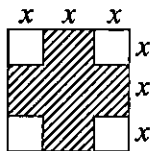
- (A) 6
(B) -8
(C) -6
(D) 8

194. A runs $1\frac{2}{3}$ times as fast as B. If A gives B a start of 40 m, how far must the winning post be so that A and B might reach it at the same time?

- (A) 75 m
(B) 200 m
(C) 100 m
(D) 125 m

195. Four equal squares are cut out of a square as shown in the diagram. If the perimeter of the original square was 36 cm, then the perimeter of the shaded region is

- (A) 30 cm
(B) 36 cm
(C) 32 cm
(D) 40 cm



196. The area of a circle is increased by 22 sq. m. when its radius is increased by 1 m. Find the original radius of the circle.

- (A) 6 m
(B) 3 m
(C) $3\frac{1}{2}$ m
(D) $3\frac{1}{5}$ m

197. In $\triangle ABC$, $\angle B = 90^\circ$, $AB = 12$ cm, $BC = 16$ cm. The area of semicircle drawn on diameter AC is

- (A) 157 cm^2
(B) 314 cm^2
(C) 150 cm^2
(D) 328 cm^2

198. A loan amount ₹ 11,000 is to be paid in two equal annual installments. If the rate of interest be 20% compounded annually, then the value of each installment is

- (A) ₹ 7,200
(B) ₹ 7,100
(C) ₹ 7,000
(D) ₹ 7,500

199. A boy was asked to find $3\frac{1}{2}\%$ of a sum of money. He misread the question and found $5\frac{1}{2}\%$ of it. His answer was ₹ 247.50. The correct answer is

- (A) ₹ 100
(B) ₹ 157.50
(C) ₹ 159.50
(D) ₹ 160

200. The perimeter of an isosceles triangle is 32 cm. Each equal side is $1\frac{1}{2}$ times the base. Then the length of the equal side is

- (A) 8 cm
(B) 10 cm
(C) 12 cm
(D) 14 cm