



SEE / 2022

Series :

A**303093**Question Booklet No.
प्रश्न पुस्तिका क्रम संख्या**Agricultural Engineering**अनुक्रमांक
Roll No.

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← परीक्षार्थी अपना अनुक्रमांक दिए गए खानों में लिखें
Candidate should write his/her
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मुद्रित पृष्ठों की संख्या/No. of Printed Pages : 32

कुल प्रश्नों की संख्या/Total No. of Questions : 150

समय/Time : 3 घण्टे/Hours

पूर्णांक/Total Marks : 450

परीक्षार्थियों के लिए निर्देश

1. परीक्षा प्रारम्भ होने के तुरन्त बाद, आप इस प्रश्न-पुस्तिका की पड़ताल अवश्य कर लें, कि इसमें कोई बिना छपा, फटा या छूटा हुआ पृष्ठ अथवा प्रश्नांश आदि न हो। यदि ऐसा है, तो बीक्षक से तत्काल संपर्क कर प्रश्न-पुस्तिका बदल लेवें।
2. यह प्रश्न-पुस्तिका सम्मिलित रूप से दो खण्डों में विभाजित हैं, खण्ड - 'अ' तथा खण्ड - 'ब'।
3. खण्ड - 'अ' सामान्य अध्ययन से संबंधित है, जिसमें कुल 50 प्रश्न हैं। ये प्रश्न हिन्दी तथा अंग्रेज़ी भाषा में हैं। सभी प्रश्न अनिवार्य हैं।
4. खण्ड - 'ब' संबंधित कृषि इंजीनियरिंग के विषय से है, जिसमें कुल 100 प्रश्न हैं। सभी प्रश्न अंग्रेज़ी भाषा में हैं। सभी प्रश्न अनिवार्य हैं।
5. सभी प्रश्नों के अंक समान हैं। प्रत्येक सही उत्तर के लिए 03 अंक प्रदान किए जाएंगे। ऋणात्मक मूल्यांकन का प्रावधान है। प्रत्येक गलत उत्तर के लिए 01 अंक काटा जाएगा।
6. प्रदत्त उत्तर-पत्र (ओ.एम.आर. शीट) पर दिए गए निर्देशों को ध्यानपूर्वक पढ़ें तथा अपने उत्तर तदनुसार अंकित करें।
7. कृपया उत्तर-पत्र (ओ.एम.आर. शीट) पर निर्धारित स्थानों पर आवश्यक प्रविष्टियाँ करें, अन्य स्थानों पर नहीं।
8. परीक्षार्थी सभी रफ़ कार्य प्रश्न-पुस्तिका के अंतिम पृष्ठों पर निर्धारित स्थान पर ही करें, अन्यत्र कहीं नहीं तथा उत्तर-पत्र (ओ.एम.आर. शीट) पर भी नहीं।
9. यदि खण्ड - 'अ' के किसी प्रश्न में किसी प्रकार की कोई मुद्रण या तथ्यात्मक प्रकार की त्रुटि हो, तो प्रश्न के हिन्दी तथा अंग्रेज़ी रूपांतरों में से हिन्दी रूपांतर को मानक माना जाएगा।

INSTRUCTIONS TO THE CANDIDATES

1. Immediately after the commencement of the examination, you should check that this Question Booklet **does not** have any unprinted or torn or missing pages or question part etc. If so, immediately contact the Invigilator and get it replaced with another Question Booklet.
2. This combined Question Booklet is divided in two Sections, Section—'A' and Section—'B'.
3. Section—'A' contains 50 questions related to General Studies. These questions are in Hindi and English languages. All questions are compulsory.
4. Section—'B' contains 100 questions of concerned **Agricultural Engineering** subject. All questions are in English language. All questions are compulsory.
5. All questions carry equal marks. 03 marks will be given for each **correct** answer. There is a provision of **Negative Marking**. For each wrong answer, 01 mark will be deducted.
6. Read carefully the instructions given on the Answer Sheet (OMR Sheet) supplied and indicate your answers accordingly.
7. Kindly make necessary entries on the Answer Sheet (OMR Sheet) at the places indicated and nowhere else.
8. Examinee should do all rough works on the space meant for rough work on pages given at the end of the Question Booklet and nowhere else, not even on the Answer Sheet (OMR Sheet).
9. If there is any sort of mistake either of printing or of factual nature in any question of Section—'A', then out of the Hindi and English versions of the question, the Hindi version will be treated as standard.

SEAL



खण्ड - अ

सामान्य अध्ययन

1. मित्र से तुरंत रीयल टाईम संचार के लिए किसका उपयोग करना चाहिए?
[A] ई-मेल (E-mail)
[B] आई०आर०सी० (IRC)
[C] यूजनेट (Usenet)
[D] इंस्टेंट मैसेजिंग (Instant messaging)
2. निम्न में से कौन, एक ई-कॉमर्स ऐक्टिविटी नहीं है?
[A] बी टू बी (B2B)
[B] सी टू बी (C2B)
[C] बी टू ए (B2A)
[D] उपर्युक्त में से कोई नहीं
3. ट्यूरिंग टेस्ट में सहभागियों की संख्या _____ होती है।
[A] एक
[B] तीन
[C] चार
[D] उपर्युक्त में से कोई नहीं
4. फजी लॉजिक का _____ में बहुत सफल उपयोग हो रहा है।
[A] वार्शिंग मशीन
[B] एयर कंडीशनर
[C] डिसवाशर
[D] उपर्युक्त सभी
5. निम्न में से किस प्रतीक एवं नियम का उपयोग FOPL में होता है?
[A] प्रेडीकेट
[B] लॉजिक क्वांटिफायर्स
[C] [A] एवं [B] दोनों
[D] उपर्युक्त में से कोई नहीं
6. निम्नलिखित विकल्पों में से संचार में उपयोगी गाइडेड मीडिया का उदाहरण कौन-सा है?
[A] USB-तरंग
[B] रेडियो तरंग
[C] इन्फ्रारेड
[D] फाइबर ऑप्टिक केबल
7. भारत सरकार के द्वारा NMEICT परियोजना किस विभाग के लिए प्रारंभ किया गया है?
[A] प्रशासनिक विभाग
[B] वित्त विभाग
[C] शिक्षण विभाग
[D] संरक्षण विभाग
8. निम्न में से कौन-सा बस, कम्प्यूटर उपयोगकर्ता को 'प्लग एण्ड प्ले' ऑपरेशन का साधन देता है?
[A] PCI
[B] SCSI
[C] USB
[D] INT
9. आर्टिफिशियल इन्टेलीजेन्स में कम्प्यूटर, मानव के समकक्ष सोचने के लिए काबिल है या नहीं, ये जानने के लिए कौन-सी पद्धति उपयोग होती है?
[A] Alpha Test
[B] A* Algorithm
[C] Turing Test
[D] Beta Test
10. एनालॉग सिग्नल को डिजिटल सिग्नल में रूपांतरित करने की प्रक्रिया का नाम है
[A] कांटाइजेशन
[B] पल्स कोड मॉड्युलेशन
[C] B8ZS
[D] HDB3

**SECTION—A****General Studies**

1. What would you use for immediate real time communication with a friend?
[A] E-mail
[B] IRC
[C] Usenet
[D] Instant messaging
2. Which of the following is **not** an E-commerce activity?
[A] B2B
[B] C2B
[C] B2A
[D] None of the above
3. In Turing test, the number of participants is
[A] one
[B] three
[C] four
[D] None of the above
4. Fuzzy logic has been very successful in ____ application.
[A] washing machine
[B] air conditioner
[C] dishwasher
[D] All of the above
5. Which of the following symbols and rules are used in FOPL?
[A] Predicate
[B] Logic Quantifiers
[C] Both [A] and [B]
[D] None of the above
6. Which of the following is an example of guided media in communication?
[A] USB-waves
[B] Radio waves
[C] Infrared
[D] Fibre optic cable
7. Government of India has launched NMEICT project for which sector?
[A] Administration sector
[B] Finance sector
[C] Education sector
[D] Conservation sector
8. Which of the following bus provides 'Plug and play' mode of operation to computer user?
[A] PCI
[B] SCSI
[C] USB
[D] INT
9. The method used in Artificial Intelligence, for determining whether a computer is capable of thinking like a human being or **not**, is called
[A] Alpha Test
[B] A* Algorithm
[C] Turing Test
[D] Beta Test
10. Which technique is used to convert an analog signal to digital signal?
[A] Quantization
[B] Pulse Code Modulation
[C] B8ZS
[D] HDB3



11. निम्न में से किस अभिलेख में तन्तुवाय श्रेणी का विवरण मिलता है?

- [A] समुद्रगुप्त की प्रयाग प्रशस्ति
- [B] चन्द्रगुप्त द्वितीय का सांची अभिलेख
- [C] कुमारगुप्त का मन्दसौर अभिलेख
- [D] स्कन्दगुप्त का भितरी अभिलेख

12. प्राचीन नाम मैकल से निम्न में से किस क्षेत्र का बोध होता है?

- [A] अमरकंटक
- [B] उज्जैन
- [C] मालवा
- [D] बुन्देलखंड

13. किस चंदेल शासक ने प्रयाग के संगम में जलसमाधि ली थी?

- [A] हर्ष
- [B] यशोवर्मन
- [C] धंग
- [D] विद्याधर

14. धार में शारदा सदन की स्थापना किसने करवाई थी?

- [A] राजा भोज
- [B] विद्याधर
- [C] वाक्पति मुंज
- [D] सिन्धुराज

15. उस यूनानी राजदूत का नाम बताइये, जिसने बेसनगर में गरुड़ स्तम्भ की प्रतिष्ठा की।

- [A] मेगस्थनीज
- [B] हेलियोडोरस
- [C] एरियन
- [D] मिनाण्डर

16. 'विद्वशालभंजिका' के लेखक कौन थे?

- [A] बिल्हण
- [B] सोमदेव
- [C] भास
- [D] राजशेखर

17. 'राम रसायन' के लेखक कौन हैं?

- [A] पद्माकर
- [B] ईसुरी
- [C] राजशेखर
- [D] बिल्हण

18. बघेली को उत्तर प्रदेश के किस बोली के निकट माना जाता है?

- [A] भोजपुरी
- [B] अवधी
- [C] खड़ी हिन्दी
- [D] ब्रज

19. बुन्देलखंड में लोक देवता के रूप में मान्य हैं

- [A] पाबूजी राठौड़
- [B] लाला हरदोल
- [C] वीर लोरिक
- [D] गोगाजी



11. Which of the following inscriptions gives an account of a guild of weavers?

- [A] Prayag Prashasti of Samudragupta
- [B] Sanchi inscription of Chandragupta II
- [C] Mandsaur inscription of Kumaragupta
- [D] Bhitari inscription of Skandagupta

12. Ancient name Maikal denotes which of the following areas?

- [A] Amarkantak
- [B] Ujjain
- [C] Malwa
- [D] Bundelkhand

13. Which Chandela king died by abandoning his body at the confluence of Prayag?

- [A] Harsha
- [B] Yashovarman
- [C] Dhanga
- [D] Vidyadhara

14. Who established Sarada Sadan in Dhar?

- [A] King Bhoja
- [B] Vidyadhara
- [C] Vakpati Munja
- [D] Sindhuraja

15. Name the Greek ambassador who established the Garuda Pillar at Besnagar.

- [A] Megasthenes
- [B] Heliodorus
- [C] Arrian
- [D] Menander

16. Who was the author of *Viddhasalabhanjika*?

- [A] Bilhana
- [B] Somadeva
- [C] Bhasa
- [D] Rajashekhara

17. Who is the author of *Ram Rasayan*?

- [A] Padmakar
- [B] Ishuri
- [C] Rajashekhara
- [D] Bilhana

18. Bagheli is closer to which dialect of Uttar Pradesh?

- [A] Bhojpuri
- [B] Avadhi
- [C] Khadi Hindi
- [D] Braj

19. Who is accredited as the folk deity at Bundelkhand?

- [A] Pabuji Rathore
- [B] Lala Hardaul
- [C] Veer Lorik
- [D] Gogaji



20. खजुराहो मन्दिर समूह के निर्माता कौन थे?

- [A] पाल
- [B] प्रतिहार
- [C] चन्देल
- [D] परमार

21. निम्नलिखित में से मध्य प्रदेश के किस क्षेत्र में सघनतम वन पाये जाते हैं?

- [A] दुदवारा - नरसिंहपुर - हवेली
- [B] गिर्द - ग्वालियर
- [C] सतपुड़ा - मैकल क्षेत्र
- [D] उपर्युक्त में से कोई नहीं

22. निम्नलिखित में से कौन-से कथन, मालवा के पठार की सही अवस्थिति दर्शाते हैं?

- (a) यह मध्य-अधित्यका के पश्चिमी भाग में स्थित है।
- (b) यह बेतवा एवं जोहिला की घाटी में स्थित है।
- (c) यह बुन्देलखंड अधित्यका के पूर्व में स्थित है।
- (d) यह नर्मदा नदी के उत्तर में स्थित है।

- [A] (a) एवं (d)
- [B] (a) एवं (c)
- [C] (b) एवं (d)
- [D] (c) एवं (b)

23. निम्नलिखित कथनों में से कौन-सा कथन मध्य प्रदेश की जलवायु के संदर्भ में असत्य है?

- [A] सर्दियों में औसत न्यूनतम तापमान 10°C एवं औसत अधिकतम तापमान 25°C होता है
- [B] औसत वार्षिक वर्षा 200 mm से कम होती है
- [C] दक्षिण-पूर्वी क्षेत्र में सर्वाधिक वर्षा एवं उत्तर-पश्चिम में उत्तरोत्तर कम वर्षा होती है
- [D] उपर्युक्त में से कोई नहीं

24. जोहिला, सोहागपुर, पेंच, कन्हान एवं सिंगरौली क्षेत्रों में कौन-सा ऊर्जा संसाधन सर्वाधिक पाया जाता है?

- [A] लौह अयस्क
- [B] खनिज तेल
- [C] प्राकृतिक गैस
- [D] कोयला

25. मैंगनीज अयस्क की प्रमुख पेटी किन जिला क्षेत्रों में पायी जाती है?

- [A] श्योपुर, मुरैना, शिवपुरी
- [B] बालाघाट, छिंदवाड़ा, झाबुआ
- [C] सीधी, कटनी, मंदसौर
- [D] ग्वालियर, खण्डवा, भोपाल



20. Who was the builder of the Khajuraho group of temple?

- [A] Pala
- [B] Pratihara
- [C] Chandela
- [D] Paramara

21. Which of the following regions of Madhya Pradesh are densely forested?

- [A] Dudhara - Narsinghpur - Haveli
- [B] Gird - Gwalior
- [C] Satpura - Maikal area
- [D] None of the above

22. Which of the following statements represents the **correct** location of the Malwa Plateau?

- (a) It lies on the western part of central highland.
- (b) It lies between Betwa and Johilla valley.
- (c) It lies to the east of Bundelkhand highland.
- (d) It lies to the north of river Narmada.

- [A] (a) and (d)
- [B] (a) and (c)
- [C] (b) and (d)
- [D] (c) and (b)

23. Which of the following statements is **incorrect** regarding the climate of Madhya Pradesh?

- [A] In winter, the mean minimum temperature is 10 °C and the mean maximum temperature is 25 °C
- [B] Average rainfall is less than 200 mm
- [C] The heaviest rainfall is in the south-eastern part and gradually decreases in north-west
- [D] None of the above

24. Which of the following energy resources is found abundantly in Johila, Sohagpur, Pench, Kanhan and Singrauli?

- [A] Iron ore
- [B] Mineral oil
- [C] Natural gas
- [D] Coal

25. The most important manganese producing belt lies in which of the following district regions?

- [A] Sheopur, Morena, Shivpuri
- [B] Balaghat, Chhindwara, Jabua
- [C] Sidhi, Katni, Mandsaur
- [D] Gwalior, Khandwa, Bhopal



26. निम्नलिखित कथनों का अध्ययन करें।

- (a) यह मध्य प्रदेश और उत्तर प्रदेश की बहुउद्देशीय परियोजना है।
- (b) इस परियोजना के अंतर्गत बेतवा नदी पर अशोक नगर एवं ललितपुर की सीमा पर बांध बनाया गया है।
- (c) इस बांध की ऊँचाई 43.80 मीटर एवं लम्बाई 562.50 मीटर है।

निम्न में से कौन-सी सिंचाई परियोजना, ऊपर के कथनों को दर्शाती है?

- [A] हरसी
- [B] राजघाट
- [C] गांधीसागर
- [D] बाणसागर

27. छतरपुर जिले में पाया जाने वाला हीरा, निम्नलिखित में से किस विकास खण्ड में अवस्थित है?

- [A] बंदर
- [B] पिछोर
- [C] पिपरिया
- [D] उपर्युक्त में से कोई नहीं

28. मध्य प्रदेश सरकार द्वारा किस वर्ष नवीन एवं नवीकरणीय ऊर्जा विभाग का अलग से गठन किया गया?

- [A] अप्रैल, 2008
- [B] अप्रैल, 2009
- [C] अप्रैल, 2010
- [D] अप्रैल, 2011

29. मध्य प्रदेश में सिंचाई का प्रमुख संसाधन क्या है?

- [A] नदी
- [B] नहर
- [C] कुँआ एवं ट्यूबवेल
- [D] तालाब

30. पचमढ़ी में तापमान कम रहने का प्रमुख कारण क्या है?

- [A] ऊँचाई एवं वनस्पति
- [B] कम जनसंख्या एवं वर्षा
- [C] वनस्पति एवं नदियाँ
- [D] नदियाँ एवं झरने

31. निम्नलिखित में से कौन, मध्य प्रदेश के राज्यपाल नहीं थे?

- [A] लालजी टंडन
- [B] कुंवर महमूद अली खाँ
- [C] कैलाश नाथ काटजू
- [D] सरला ग्रेवाल

32. निम्नलिखित में से कौन मध्य प्रदेश के मुख्यमंत्री थे?

- [A] सत्यनारायण सिंह
- [B] रामनरेश यादव
- [C] भगवत दयाल शर्मा
- [D] सुन्दरलाल पटवा

33. मध्य प्रदेश में पंचायती राज व्यवस्था है

- [A] एक स्तरीय
- [B] द्वि स्तरीय
- [C] तीन स्तरीय
- [D] उपर्युक्त में से कोई नहीं



26. Study the following statements.

- (a) It is a multipurpose project of Madhya Pradesh and Uttar Pradesh.
- (b) The dam is constructed on Betwa river on the boundary of Ashoknagar and Lalitpur.
- (c) The height of the dam is 43.80 meters and length is 562.50 meters.

Which of the following irrigation projects represents the above statements?

- [A] Harsi
- [B] Rajghat
- [C] Gandhi Sagar
- [D] Bansagar

27. Diamond, which is found in Chhatarpur district is located in which of the following development blocks?

- [A] Bunder
- [B] Picchore
- [C] Pipariya
- [D] None of the above

28. In which year did the Madhya Pradesh Government constitute a separate department of new and renewable energy?

- [A] April, 2008
- [B] April, 2009
- [C] April, 2010
- [D] April, 2011

29. What is the major source of irrigation in Madhya Pradesh?

- [A] River
- [B] Canal
- [C] Well and Tubewell
- [D] Pond

30. What is the main cause of low temperature in Pachmarhi?

- [A] Height and vegetation
- [B] Low population and rain
- [C] Vegetation and rivers
- [D] Rivers and waterfalls

31. Who among the following was **not** the Governor of Madhya Pradesh?

- [A] Lalji Tandon
- [B] Kunwar Mahmood Ali Khan
- [C] Kailash Nath Katju
- [D] Sarla Grewal

32. Who among the following was the Chief Minister of Madhya Pradesh?

- [A] Satyanarayan Singh
- [B] Ram Naresh Yadav
- [C] Bhagwat Dayal Sharma
- [D] Sunder Lal Patwa

33. The Panchayati Raj system in Madhya Pradesh is

- [A] one tier
- [B] two tier
- [C] three tier
- [D] None of the above



34. भगोरिया पर्व मध्य प्रदेश के किस जिले में मनाया जाता है?

- [A] झाबुआ
- [B] भोपाल
- [C] देवास
- [D] उज्जैन

35. 2011 की जनगणना के अनुसार, मध्य प्रदेश का सबसे कम जनसंख्या घनत्व वाला जिला कौन-सा है?

- [A] डिन्डौरी
- [B] हरदा
- [C] मंडला
- [D] अलीराजपुर

36. 2011 की जनगणना के अनुसार, मध्य प्रदेश का न्यूनतम जनसंख्या वाला जिला कौन-सा है?

- [A] डिन्डौरी
- [B] हरदा
- [C] जबलपुर
- [D] देवास

37. संत शिरोमणि रविदास ग्लोबल स्किल्स पार्क मध्य प्रदेश में कहाँ अवस्थित है?

- [A] भोपाल
- [B] शाजापुर
- [C] छिंदवाड़ा
- [D] नरसिंहपुर

38. आयुध निर्माणी खमरिया, मध्य प्रदेश के किस जिले में अवस्थित है?

- [A] इन्दौर
- [B] भोपाल
- [C] जबलपुर
- [D] सागर

39. मध्य प्रदेश सरकार द्वारा शुरू किया गया 'सौदा-पत्रक मोबाइल एप' किससे संबंधित है?

- [A] कृषि क्षेत्र से
- [B] औद्योगिक क्षेत्र से
- [C] शिक्षा क्षेत्र से
- [D] उपर्युक्त में से कोई नहीं

40. 'एक जिला एक उत्पाद' (ODOP) के तहत मध्य प्रदेश में इन्दौर जिले का उत्पाद है

- [A] बाँस
- [B] प्याज
- [C] लहसुन
- [D] आलू

41. निम्नलिखित में से कौन, वर्ष 2023 में भारतीय गणतंत्र दिवस के अवसर पर मुख्य अतिथि के रूप में सम्मिलित हुए?

- [A] अब्देल फतेह अल-सिसी
- [B] जस्टिन ट्रूडो
- [C] जो बाइडेन
- [D] ऋषि सुनक



34. In which district of Madhya Pradesh is Bhagoria festival celebrated?

- [A] Jhabua
- [B] Bhopal
- [C] Dewas
- [D] Ujjain

35. According to 2011 census, which is the district with the lowest population density in Madhya Pradesh?

- [A] Dindori
- [B] Harda
- [C] Mandla
- [D] Alirajpur

36. According to 2011 census, which is the least populous district of Madhya Pradesh?

- [A] Dindori
- [B] Harda
- [C] Jabalpur
- [D] Dewas

37. Where is Sant Shiromani Ravidas Global Skills Park located in Madhya Pradesh?

- [A] Bhopal
- [B] Shajapur
- [C] Chhindwara
- [D] Narsinghpur

38. In which district of Madhya Pradesh is Ordnance Factory, Khamaria situated?

- [A] Indore
- [B] Bhopal
- [C] Jabalpur
- [D] Sagar

39. 'Souda-Patruk Mobile App' launched by Government of Madhya Pradesh, is related to which of the following?

- [A] Agricultural sector
- [B] Industrial sector
- [C] Educational sector
- [D] None of the above

40. The product of Indore district in Madhya Pradesh under 'One District One Product' (ODOP) is

- [A] bamboo
- [B] onion
- [C] garlic
- [D] potato

41. Who among the following attended the Republic Day of India as the chief guest in the year 2023?

- [A] Abdel Fattah el-Sisi
- [B] Justin Trudeau
- [C] Joe Biden
- [D] Rishi Sunak



42. पी-75 परियोजना के तहत निर्मित कलवरी श्रेणी की किस पनडुब्बी को जनवरी, 2023 में भारतीय नौसेना में सम्मिलित किया गया?

- [A] आई०एन०एस० कलवरी
- [B] आई०एन०एस० दामिनी
- [C] आई०एन०एस० खंडेरी
- [D] आई०एन०एस० वागीर

43. 36वें राष्ट्रीय खेलों का आयोजन किस राज्य में सम्पन्न हुआ?

- [A] गुजरात में
- [B] उत्तर प्रदेश में
- [C] झारखण्ड में
- [D] केरल में

44. फरवरी, 2023 में 'राष्ट्रीय संस्कृति महोत्सव 2023' का आयोजन कहाँ किया गया?

- [A] भोपाल में
- [B] भुवनेश्वर में
- [C] बेंगलुरु में
- [D] मुम्बई में

45. देश का पहला जियोलाॉजिकल पार्क, मध्य प्रदेश में कहाँ स्थापित किया जा रहा है?

- [A] लम्हेटा गाँव
- [B] तामोट
- [C] नागौद
- [D] हथनोरा

46. 17वाँ प्रवासी भारतीय दिवस कहाँ आयोजित किया गया था?

- [A] इन्दौर में
- [B] भोपाल में
- [C] मुम्बई में
- [D] लखनऊ में

47. निम्न में से कौन-सा, मध्य प्रदेश का UNESCO विश्व विरासत स्थल नहीं है?

- [A] खजुराहो स्मारकों का समूह
- [B] भीमबेटका के रॉक शैल्टर
- [C] सांची के बौद्ध स्मारक
- [D] विदिशा की उदयगिरि गुफाएँ

48. निम्नलिखित में से किस खेल को मध्य प्रदेश के राज्य खेल के रूप में घोषित किया गया है?

- [A] टेबल टेनिस
- [B] फुटबॉल
- [C] मलखम्ब
- [D] बैडमिंटन

49. निम्न में से बालिकाओं के स्वास्थ्य एवं शिक्षा की स्थिति में सुधार के लिए, मध्य प्रदेश सरकार की योजना कौन-सी है?

- [A] बेटी बचाओ बेटी पढ़ाओ अभियान
- [B] लाडली लक्ष्मी योजना
- [C] गाँव की बेटी योजना
- [D] बालिका शिक्षा एवं स्वास्थ्य प्रोत्साहन योजना

50. मध्य प्रदेश सरकार की खेत-तालाब योजना के अन्तर्गत किसानों को मिलने वाले अनुदान की अधिकतम सीमा क्या है?

- [A] ₹32,000
- [B] ₹21,350
- [C] ₹16,350
- [D] उपर्युक्त में से कोई नहीं



42. Which Kalvari class submarine, built under the P-75 project, was inducted into the Indian Navy in January, 2023?
- [A] INS Kalvari
[B] INS Damini
[C] INS Khanderi
[D] INS Vagir
43. In which State was the 36th National Games organised?
- [A] Gujarat
[B] Uttar Pradesh
[C] Jharkhand
[D] Kerala
44. In February 2023, 'Rashtriya Sanskriti Mahotsav 2023' was organized in
- [A] Bhopal
[B] Bhubaneswar
[C] Bengaluru
[D] Mumbai
45. Where in Madhya Pradesh, is the country's first Geological Park being set up?
- [A] Lamheta Village
[B] Tamot
[C] Nagaud
[D] Hathnora
46. Where was the 17th Pravasi Bharatiya Divas organized?
- [A] Indore
[B] Bhopal
[C] Mumbai
[D] Lucknow
47. Which of the following is **not** a UNESCO world heritage site of Madhya Pradesh?
- [A] Khajuraho group of monuments
[B] Rock shelters of Bhimbetka
[C] Buddhist monuments at Sanchi
[D] Udayagiri caves of Vidisha
48. Which of the following sports has been declared as the State sport of Madhya Pradesh?
- [A] Table Tennis
[B] Football
[C] Mallakhamb
[D] Badminton
49. Which of the following is the scheme of Madhya Pradesh Government for improving the health and education status of the girls?
- [A] Beti Bachao Beti Padhao Abhiyan
[B] Ladli Laxmi Yojana
[C] Gaon ki Beti Yojana
[D] Balika Shiksha and Health Protsahan Yojana
50. What is the upper limit of the subsidy given to the farmers under Khet-Talab Yojana of the Madhya Pradesh Government?
- [A] ₹32,000
[B] ₹21,350
[C] ₹16,350
[D] None of the above



खण्ड - ब / SECTION—B

कृषि इंजीनियरिंग / Agricultural Engineering

51. During testing (cold test) of braking performance of a tractor, the tractor is operated at a travelling speed of
- [A] 25 km/h
 - [B] 35 km/h or maximum attainable speed, whichever is less
 - [C] 45 km/h
 - [D] 61 km/h
52. Precision agriculture is also known as
- [A] special farming
 - [B] crop specific farming
 - [C] conservation farming
 - [D] satellite farming
53. Which of the following is **not** a part of the fixed cost of farm machinery operation?
- [A] Depreciation
 - [B] Insurance and taxes
 - [C] Repair and maintenance
 - [D] Interest on investment
54. Which is **not** a real-world spatial feature in Geographical Information System?
- [A] Points
 - [B] Polygons
 - [C] Lines
 - [D] Circles
55. Which is **not** an essential part of GPS?
- [A] Location or space segment
 - [B] Sensor or transducer segment
 - [C] Management or control segment
 - [D] Receiver or user's segment
56. Which resolutions explain the technical capabilities of the sensor systems?
- (i) Normal resolution
 - (ii) Spatial resolution
 - (iii) Spectral resolution
 - (iv) Temporal resolution
- Select the **correct** option from the following :
- [A] (i), (ii) and (iii) only
 - [B] (i), (iii) and (iv) only
 - [C] (ii), (iii) and (iv) only
 - [D] (ii), (i) and (iv) only
57. Which of the following implements is **not** used for conservation tillage?
- [A] Zero-till drill
 - [B] Seed cum fertilizer drill
 - [C] Slit-till drill
 - [D] Happy seeder



58. Power sprayers are operated at a pressure from
- [A] 20 to 35 kg/cm²
 - [B] 20 to 45 kg/cm²
 - [C] 20 to 55 kg/cm²
 - [D] 20 to 65 kg/cm²
59. Which of the following is **not** a type of rotary encoder used in precision agriculture?
- [A] Capacitive
 - [B] Magnetic
 - [C] Inductive
 - [D] Optical
60. Which of the following statements is **true** for the laser land leveller?
- [A] It helps in saving 25-30% of water
 - [B] Its initial cost is low
 - [C] It levels the fields having any degree of slope
 - [D] It is a primary tillage implement
61. Combine harvester is **not** designed for
- [A] cutting the standing crops
 - [B] windrowing the harvested crops
 - [C] threshing the harvested crops
 - [D] cleaning the grains from straw
62. _____ is the moisture content of residual oil in the deoiled cake.
- [A] 9-10%
 - [B] 5-6%
 - [C] 7-10%
 - [D] 4-5%
63. _____ states that the work required in crushing is proportional to the new surface created.
- [A] Kick's law
 - [B] Rittinger's law
 - [C] Bond's law
 - [D] None of the above
64. _____ is defined as ability of a screen for closely separating the feed into overflow and underflow to its size.
- [A] Efficiency of machine
 - [B] Effectiveness of screen
 - [C] Underflow of screen
 - [D] Overflow of screen
65. _____ is the process where the filtrate passes across the thickness of a porous sheet while the suspended solids are retained on the surface of the sheet.
- [A] Nano filtration
 - [B] Bottom filtration
 - [C] Surface filtration
 - [D] Depth filtration



66. The capacity of bucket elevators may vary between

- [A] 2 to 4000 tonnes/hour
- [B] 3 to 5000 tonnes/hour
- [C] 2 to 1000 tonnes/hour
- [D] 3 to 3000 tonnes/hour

67. The moisture content attained by a grain with respect to a set of atmospheric temperature and relative humidity is called

- [A] bound water
- [B] EMC
- [C] ERH
- [D] critical moisture content

68. To carry out freeze drying successfully, the absolute pressure in the drying chamber must be maintained at an absolute pressure of at least

- [A] 620 Pa
- [B] 540 Pa
- [C] 720 Pa
- [D] 600 Pa

69. Which of the following trays are used when the plenum chamber is at the bottom of drying chamber?

- [A] Pan trays
- [B] Perforated trays
- [C] Flat bottom trays
- [D] None of the above

70. The average size of dust particles as determined by sieving is

- [A] 20 μm to 40 μm
- [B] 15 μm to 120 μm
- [C] 25 μm to 150 μm
- [D] 50 μm to 180 μm

71. In CA storage, the O_2 and CO_2 concentrations are generally lowered to about

- [A] O_2 - 2% to 3% and CO_2 - 5%
- [B] O_2 - 5% to 6% and CO_2 - 2%
- [C] O_2 - 7% to 8% and CO_2 - 1%
- [D] None of the above



72. Shelterbelts located at _____ to the prevailing wind, help reduce wind erosion.

- [A] 30°
- [B] 45°
- [C] 90°
- [D] None of the above

73. Most common method used to compute the peak runoff rate from the small watershed is

- [A] $Q_{\text{peak}} = \frac{1}{360} CA$
- [B] $Q_{\text{peak}} = \frac{1}{360} CI$
- [C] $Q_{\text{peak}} = \frac{1}{360} CIA$
- [D] $Q_{\text{peak}} = \frac{1}{160} CIA$

74. The **correct** sequence of soil erosion process will be

- [A] detachment – deposition – transportation
- [B] detachment – transportation – deposition
- [C] deposition – transportation – detachment
- [D] transportation – deposition – detachment

75. If the rate of rainfall exceeds the infiltration rate, then the excess rainwater is converted into

- [A] base flow
- [B] overland flow
- [C] subsurface flow
- [D] channel flow

76. The first form of gulling is

- [A] tunnelling
- [B] U-shaped
- [C] V-shaped
- [D] Both [B] and [C]

77. Land capability classes from class I to class IV are

- [A] suitable for cultivation
- [B] unsuitable for cultivation
- [C] Both [A] and [B]
- [D] None of the above

78. The permissible flow velocity in the grassed waterway (good grass cover) is recommended as

- [A] 0.9 to 1.2 m/s
- [B] 2.0 to 2.5 m/s
- [C] 3.0 to 3.5 m/s
- [D] 1.5 to 1.8 m/s



79. Contour bunding is suitable for those areas, which receive the annual rainfall up to _____ and soil has greater permeability.

- [A] 1300 mm
- [B] 1200 mm
- [C] 600 mm
- [D] 400 mm

80. Broad base level terraces are suitably used at the locations, where land slope is

- [A] less than 3%
- [B] more than 3%
- [C] 4% to 10%
- [D] more than 10%

81. The method(s) widely used for computing the rainfall erosivity is/ are

- [A] $KE > 25$ Index method
- [B] EI_{30} Index method
- [C] Both [A] and [B]
- [D] None of the above

82. Which of the following is **not** a short-term water harvesting method?

- [A] Contour bund
- [B] Trapezoidal bund
- [C] Graded bund
- [D] Reservoir

83. Based on the water source, a dugout farm pond may be

- [A] spring or creek fed type
- [B] off-stream type
- [C] silt detention type
- [D] Both [A] and [B]

84. _____ is **not** a component of farm pond.

- [A] Earthen embankment
- [B] Storage area
- [C] Mechanical spillway
- [D] Spur zone

85. Which pond is constructed exclusively for groundwater recharge?

- [A] Irrigation pond
- [B] Fish pond
- [C] Percolation tank
- [D] Biological pond

86. The check dams are used for controlling

- [A] gully erosion
- [B] rill erosion
- [C] splash erosion
- [D] sheet erosion



87. In case of pipe spillway, design of the discharge capacity is computed by using

- [A] weir flow curve
- [B] pipe flow curve
- [C] Rankine formula
- [D] Both [A] and [B]

88. In which condition, the formation of hydraulic jump **does not** happen?

- [A] $F = 1$
- [B] $F = 1.0$ to 1.7
- [C] $F = 1.7$ to 2.5
- [D] $F = 2.5$ to 4.5

89. The drop spillway is an efficient structure for controlling relatively low heads, normally up to _____ metre.

- [A] 2
- [B] 3
- [C] 4
- [D] 5

90. In Saint Antony Falls (SAF) stilling basin, the spacing of floor blocks from its upstream end is

- [A] $\frac{L_B}{3}$
- [B] $1.5 d_1$
- [C] $2.5 d_1$
- [D] $\frac{L_B}{2}$

91. In drop inlet structure, the pipe spillway has vertical section towards upstream face of the dam, which is called as

- [A] riser
- [B] anti-seep collar
- [C] conduit
- [D] None of the above

92. The discharge distributed over a long period and concentration time is more in _____ shaped watershed.

- [A] FAN
- [B] FERN
- [C] SQUARE
- [D] TRIANGULAR



93. In-situ rainwater harvesting method is described by

- [A] conservation tillage
- [B] underground dam
- [C] roof water harvesting
- [D] retardation dam

94. In flat areas, for dugout type farm ponds, the ratio of storage to earthwork is generally around

- [A] 2
- [B] 3
- [C] 1
- [D] 4

95. Watershed Development Programme for rainfed areas operating under the Ministry of Agriculture was radically restructured for implementation during the ____ under the name Watershed Areas for Rainfed Agricultural System Approach (WARSA).

- [A] 7th Five-Year Plan
- [B] 8th Five-Year Plan
- [C] 9th Five-Year Plan
- [D] 10th Five-Year Plan

96. The components of the watershed management are described by

- [A] water management
- [B] land management
- [C] biomass management
- [D] All of the above

97. Landslip, landslide, torrents, highway erosion etc. are connected as ____ for preparation of watershed work plan.

- [A] water management problem
- [B] special problem
- [C] flood damage problem
- [D] erosion damage problem

98. Which one of the following is a periodic assessment of the relevance, efficiency, performance and impact of the project in relation to its objectives?

- [A] Evaluation
- [B] Execution
- [C] Monitoring
- [D] Maintenance



- 99.** The function of Watershed Committee (WC) is
- [A] to carry out day-to-day activities
 - [B] implementation of certain control measures
 - [C] overall supervision and control of Watershed Association
 - [D] Both [B] and [C]
- 100.** The concept of _____ can be advantageously applied for soil and water conservation.
- [A] subsoiling
 - [B] primary tillage
 - [C] deep tillage
 - [D] minimum tillage
- 101.** Which one of the following is the key to success of any watershed development programme?
- [A] Vegetative cover
 - [B] People's participation
 - [C] Soil conservation
 - [D] Water conservation
- 102.** The discharge through a 90° V-notch weir is computed by which of the following formulas?
- [A] $Q = 0.0186 LH^{3/2}$
 - [B] $Q = 0.0138 H^{5/2}$
 - [C] $Q = 0.0184 LH^{3/2}$
 - [D] $Q = 0.0$
- 103.** The plane method of land grading calculation is also known as
- [A] method of least squares
 - [B] profile method
 - [C] Both [A] and [B]
 - [D] None of the above
- 104.** Matric potential (ψ_m) per unit mass can be expressed as
- [A] $\psi_m = at^x$
 - [B] $\psi_m = gh$
 - [C] $\psi_m = P$
 - [D] $\psi_m = Z$



105. According to Penman (1947), The Evapotranspiration (ET) from an actively growing short green vegetation completely shading the ground and never short of moisture availability is known as

- [A] ET_O (Reference Evapotranspiration)
- [B] ET_C (Crop Evapotranspiration)
- [C] PET (Potential Evapotranspiration)
- [D] consumptive use

106. The specific surface of clay soil is _____ than silt and sand.

- [A] several time smaller
- [B] several time equal
- [C] several time larger
- [D] None of the above

107. For moderate land slopes and small to moderate size irrigation streams, which of the following border lengths under surface irrigation are suggested for clay loam and clay soils?

- [A] 60 metres to 120 metres
- [B] 100 metres to 180 metres
- [C] 150 metres to 300 metres
- [D] 30 metres to 250 metres

108. The maximum spacing between ditch system for water table control and surface drainage in sandy soil is

- [A] 50 m
- [B] 100 m
- [C] 200 m
- [D] 300 m

109. The bedding field drainage system most practicable for slope is less than

- [A] 1.5%
- [B] 4%
- [C] 5%
- [D] 7%

110. The spacing between two tiles can be calculated using which of the following formulas?

- [A] $S = \frac{4k}{q}(b^2 - a^2)$
- [B] $S = \frac{4}{Q}(b^2 + a^2)$
- [C] $S = \frac{4k}{q}(b^2 + a^2)$
- [D] $S = (b^2 - a^2)\frac{4}{g}$



111. If $EC > 10$ mmhos/cm of irrigation drainage water, then it is considered under _____ class.

- [A] moderate saline water
- [B] highly saline water
- [C] low saline water
- [D] very low saline water

112. Perched water table is a special case of

- [A] phreatic aquifer
- [B] artesian aquifer
- [C] leaky aquifer
- [D] confined aquifer

113. Which of the following techniques involves in recording the characteristic properties of sub-surface material obtained during drilling?

- [A] Well casing
- [B] Well logging
- [C] Well development
- [D] Well pumping

114. Darcy's law for groundwater flow through porous media states that the velocity of flow is proportional to

- [A] tangent on the surface of water table
- [B] hydraulic gradient
- [C] reciprocal of hydraulic head
- [D] Both [A] and [B]

115. The basic objectives of well development is to

- (i) increase specific capacity of well.
- (ii) stabilize the sand formation around well screen.
- (iii) obtain maximum economic life.
- (iv) remove organic and inorganic material from the formations surrounding the perforated sections of the casing.

Select the **correct** alternatives :

- [A] (i) and (ii)
- [B] (i), (ii) and (iii)
- [C] (ii) and (iv)
- [D] All of the above



116. The volume of water discharged from a well per unit time is called as

- [A] well yield
- [B] specific yield
- [C] specific capacity
- [D] drawdown

117. A reciprocating pump is an example of

- [A] variable displacement pump
- [B] mixed flow pump
- [C] positive displacement pump
- [D] rotary pump

118. When the speed of a pump is changed, the head of the pump changes as

- [A] directly as the speed
- [B] square of the speed
- [C] cube of the speed
- [D] fourth power of the speed

119. A Persian wheel is a water lifting device which is suitable to lift water over a height of up to

- [A] 10 m
- [B] 5 m
- [C] 1.2 m
- [D] 0.5 m

120. In which conditions, a mixed flow pump is suitable?

- [A] High discharge low head
- [B] High discharge high head
- [C] High discharge medium head
- [D] Low discharge high head

121. Among the following statements, which is/are **correct**?

- (i) In submersible pump, the pump element and the motor operate while entirely submerged.
- (ii) Changing the impeller diameter have not given the same effect on the pump performance as changing the speed.
- (iii) Hydraulic ram works on the principle of water hammer.

- [A] (i) only
- [B] (i) and (iii) only
- [C] (iii) only
- [D] (i), (ii) and (iii)

122. The term 'Artificial Intelligence' was coined by

- [A] John McCarthy
- [B] Alan Turing
- [C] Marvin Minsky
- [D] Herbert A. Simon



123. In LISP, the addition of 5, 6 and 9 is entered as

[A] (5 + 8 =)

[B] (+ 5 + 6 + 9)

[C] (+ 5 6 9)

[D] (5 add 6 add 9)

124. What is the time complexity of breadth - first search with 'b' nodes and 'd' depth?

[A] $O(b^d)$

[B] $O(b^{d+1})$

[C] $O(b^{d-1})$

[D] $O(b^{d+2})$

125. For two events H and E with the probability $P(E) > 0$, the conditional probability of event H , given that event E has occurred, is defined as

[A] $P(E | H) = P(H) / P(E)$

[B] $P(H | E) = P(H \& E) / P(E)$

[C] $P(H | E) = P(H \& E) / P(H)$

[D] $P(E | H) = P(E) / P(H)$

126. The reasoning method, in which the axioms and/or the rules of inference are extended to make it possible to reason with incomplete information, is called as

[A] monotonic reasoning

[B] statistical reasoning

[C] non-monotonic reasoning

[D] None of the above

127. Partially ordered plans are created by a search through the

[A] state space

[B] space of plans

[C] partial space

[D] combined space

128. The process of converting a flat input sentence into a hierarchical structure that corresponds to the units of meaning in the sentence is called as

[A] patch-up

[B] syntactic processing

[C] backtracking

[D] None of the above



129. A manipulator is composed of a series of links and joints, usually terminating in the

- [A] robotic arm
- [B] rover
- [C] end effector
- [D] joint

130. The ____ are capable of representing individual objects, categories of objects and relations among objects.

- [A] canal networks
- [B] fuzzy networks
- [C] neural networks
- [D] semantic networks

131. Variables in probability theory are called

- [A] constant variables
- [B] complex variables
- [C] random variables
- [D] All of the above

132. Which of the following is expressed as the ratio of effective field capacity to theoretical field capacity?

- [A] Field efficiency
- [B] Performance efficiency
- [C] Operating efficiency
- [D] None of the above

133. Rotary tillers have ____ draft requirements.

- [A] low or negative
- [B] high or positive
- [C] low or positive
- [D] high or negative

134. In a field having heavy trash, it is recommended to use

- [A] plain coulter
- [B] notched coulter
- [C] fluted edge coulter
- [D] plain coulter with serrations on the edge

135. Which one of the following is the method in which spacing between the rows is same as that between the plants?

- [A] Hill dropping
- [B] Transplanting
- [C] Check rowing
- [D] None of the above



- 136.** _____ is/are the sum of the seed into the seed tank plus the losses from the rear of the machine per unit time.
- [A] Total feed rate
 - [B] Seed feed rate
 - [C] Both [A] and [B]
 - [D] None of the above
- 137.** Which of the following thresher(s) is/are quite successful and recommended for paddy threshing?
- [A] Chaff culter type thresher
 - [B] Hammer mill thresher
 - [C] Axial flow thresher
 - [D] All of the above
- 138.** What is/are the function(s) of the flywheel of the thresher?
- [A] To store energy and supply it continuously
 - [B] To impart oscillation motion to the screens
 - [C] Separation by the top sieve
 - [D] All of the above
- 139.** What is the average blade depth of two-row harvester?
- [A] 8 cm
 - [B] 10 cm
 - [C] 12 cm
 - [D] 14 cm
- 140.** Digger-windrowers and harvesters are mostly
- [A] 2-row machines
 - [B] 3-row machines
 - [C] 4-row machines
 - [D] All of the above
- 141.** Which one of the following is most commonly used for primary tillage?
- [A] Disc plough
 - [B] Moldboard plow
 - [C] Chisel type tools
 - [D] Rotary tillers
- 142.** The range of engine power for power tiller is
- [A] 1-4 kW
 - [B] 5-12 kW
 - [C] 15-20 kW
 - [D] 20-25 kW



143. Engine cycle that assumes constant volume heat addition as well as heat rejection at constant volume is known as

- [A] diesel cycle
- [B] Otto cycle
- [C] thermodynamic cycle
- [D] circulation cycle

144. The governor of tractor may have speed droops in the range of

- [A] 1-3%
- [B] 3-10%
- [C] 10-14%
- [D] 14-20%

145. A set of bevel gears that allows power to be transmitted to each axle of a tractor at different speeds to allow satisfactory steering of tractor is known as

- [A] final drive
- [B] rear axle
- [C] differential unit
- [D] differential lock

146. The standard Power Take Off (PTO) speed for a 6 splined PTO shaft of a tractor is

- [A] 540 ± 10
- [B] 540 ± 40
- [C] 1000 ± 25
- [D] 1000 ± 50

147. _____ is the ratio of output vibration intensity to input vibration intensity in context of seat design of a tractor.

- [A] Permissibility
- [B] Damping ratio
- [C] Rolling resistance
- [D] Transmissibility

148. The ratio of rolling resistance force to normal load on traction device is known as

- [A] motion resistance ratio
- [B] gross tractive coefficient
- [C] tractive efficiency
- [D] None of the above

149. Which method is commonly used for locating centre of gravity of a four-wheel tractor?

- [A] Suspension method
- [B] Balancing method
- [C] Weighing method
- [D] Declining method

150. The comfortable zone for relative humidity for humans is in the range of

- [A] 0-50%
- [B] 50-100%
- [C] 30-70%
- [D] 70-100%



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