

# **BPSC AE (Civil)**

**Previous Year Paper  
(GS) Paper-III  
10 Nov, 2022**

**Adda247**

# Test Prime

**ALL EXAMS,  
ONE SUBSCRIPTION**



**70,000+**  
Mock Tests



Personalised  
Report Card



Unlimited  
Re-Attempt



**600+**  
Exam Covered



Previous Year  
Papers



**500%**  
Refund



**ATTEMPT FREE MOCK NOW**



27/AE/C/M-2022-3

Booklet Series

Candidate's Roll Number

D

Serial No.

404681

Question Booklet

Paper—III

**GENERAL STUDIES**

( Objective )

Time Allowed : 1 Hour

Maximum Marks : 100

Read the following instructions carefully before you begin to answer the questions.

**IMPORTANT INSTRUCTIONS**

B.P.S.C. AE (CIVIL)

Advt. No. - 07/2020

Exam date:- 10/11/2022

1. This Question Booklet contains 50 questions in all.
2. All questions carry equal marks.
3. Attempt all questions.
4. Immediately after commencement of the examination, you should check up your Question Booklet and ensure that the Question Booklet Series is printed on the top right-hand corner of the Booklet and the Booklet contains 8 printed pages and no page or question is missing or unprinted or torn or repeated. If you find any defect in this Booklet, get it replaced immediately by a complete Booklet of the same series.
5. You must write your Roll Number in the space provided on the top of this page. Do not write anything else on the Question Booklet.
6. An Answer Sheet will be supplied to you separately by the Invigilator to mark the answers. You must write your Name, Roll No. and other particulars on the first page of the Answer Sheet provided, failing which your Answer Sheet will not be evaluated.
7. You will encode your Roll Number and the Question Booklet Series A, B, C or D as it is printed on the top right-hand corner of this Question Booklet with Black/Blue ballpoint pen in the space provided on Page-2 of your Answer Sheet. If you do not encode or fail to encode the correct series of your Question Booklet, your Answer Sheet will not be evaluated correctly.
8. Questions and their responses are printed in English only in this Booklet. Each question comprises four responses—(A), (B), (C) and (D). You are to select ONLY ONE correct response and mark in your Answer Sheet. In case you feel that there are more than one correct response, mark the response which you consider the best. In any case, choose ONLY ONE response for each question. Your total marks will depend on the number of correct responses marked by you in the Answer Sheet.
9. In the Answer Sheet, there are four brackets—(A), (B), (C) and (D) against each question. To answer the questions you are to mark with Black/Blue ballpoint pen ONLY ONE bracket of your choice for each question. Select one response for each question in the Question Booklet and mark in the Answer Sheet. If you mark more than one answer for one question, the answer will be treated as wrong. Any erasure or change is not allowed.
10. You should not remove or tear off any sheet from the Question Booklet. You are not allowed to take this Question Booklet and the Answer Sheet out of the Examination Hall during the examination. After the examination has concluded, you must hand over your Answer Sheet to the Invigilator. Thereafter, you are permitted to take away the Question Booklet with you.
11. Failure to comply with any of the above instructions will render you liable to such action or penalty as the Commission may decide at their discretion.

SEAL



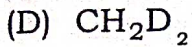
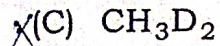
1. We have two eyes because of the perception of the objects in the dimension of
- (A) height  
 (B) depth  
 (C) area  
 (D) length
2. Over the palms and fingers, we have line grooves for the
- (A) future prediction  
 (B) gripping power  
 (C) static friction  
 (D) palmistry
3. In information technology (IT), most secret messages are sent by
- (A) frequency modulation  
 (B) phase modulation  
 (C) phase-frequency modulation  
 (D) amplitude modulation
4. The moon sky is dark compared to blue sky of the earth because
- (A) moon shines bright  
 (B) moon is the satellite of the earth  
 (C) moon has less escape velocity  
 (D) moon is smaller in size
5. Black hole eats all stars because
- (A) it has large mass and small size  
 (B) it has small mass and large size  
 (C) it has large mass and large size  
 (D) it has small mass and small size
6. Satellites are
- (A) man-made objects in the sky  
 (B) time- and fuel-less objects  
 (C) never geostationary objects  
 (D) free-falling objects under gravity
7. Superfast computation is done through
- (A) binary bits  
 (B) ternary bits  
 (C) Q-bits  
 (D) unitary bits
8. In reasonable hydrogen-oxygen chain reaction
- $$\text{H}_2 + \text{O}_2 \rightarrow \text{HO}_2 + \text{H}$$
- $$\text{H}_2 + \text{HO}_2 \rightarrow \text{OH} + \text{H}_2\text{O}$$
- $$\text{OH} + \text{H}_2 \rightarrow \text{H}_2\text{O} + \text{H}$$
- $$\text{O}_2 + \text{H} \rightarrow \text{OH} + \text{O}$$
- $$\text{H}_2 + \text{O} \rightarrow \text{OH} + \text{H}$$
- which are chain branching propagators?
- (A) OH, H  
 (B) O, H  
 (C) OH, H, O  
 (D) OH, O



9. When we heat the mixture of  $\text{CH}_3\text{CHO}$  and  $\text{CD}_3\text{CDO}$ , we get



but radical mechanism indicates that we should obtain



10. Sucrose concentration  $C_0$  decreases with time and with rate constant  $k$  as

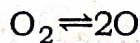
(A)  $C = -C_0 kt^2$

(B)  $C = C_0 \log kt$

(C)  $C = C_0 e^{-kt}$

(D)  $C = -C_0 kt$

11. The equilibrium constant of dissociation reaction of oxygen



at temperature 1000 K is obtained to be

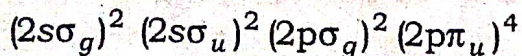
(A)  $3.3 \times 10^{-20}$

(B)  $2.5 \times 10^{-10}$

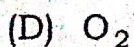
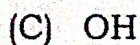
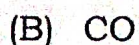
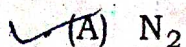
(C)  $5.2 \times 10^{-7}$

(D)  $1.4 \times 10^{-37}$

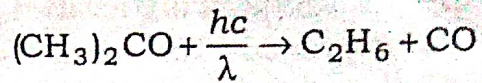
12. The given molecular orbital configuration of diatomic molecule



stands for



13. Photolysis of acetone



needs photon of wavelength ( $\lambda$ )

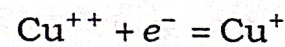
(A) 3130 Å

(B) 2950 Å

(C) 2200 Å

(D) 3300 Å

14. In acid solution, the electrode reaction



has electrode standard potential

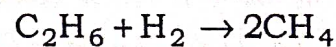
(A) 0.306 V

(B) 0.459 V

(C) 0.612 V

(D) 0.153 V

15. Cracking reaction



heats up at

(A) 41745 cal

(B) 40110 cal

(C) 30213 cal

(D) 15540 cal

16. A chemical reaction is 20% complete in 15 min at 40 °C and in 3 min at 60 °C, then how much activation energy is required?

(A) 14.4 kcal

(B) 16.4 kcal

(C) 18.4 kcal

(D) 12.4 kcal



17. The conductivity of a saturated AgCl solution is higher in H<sub>2</sub>O at 20 °C by  $1.26 \times 10^{-6} \text{ ohm}^{-1} \text{ cm}^{-1}$  than for the water used. Now the solubility of AgCl in H<sub>2</sub>O is

- (A)  $9.14 \times 10^{-6} \text{ moles liter}^{-1}$
- (B)  $6.28 \times 10^{-6} \text{ moles liter}^{-1}$
- (C)  $4.21 \times 10^{-6} \text{ moles liter}^{-1}$
- (D)  $13.6 \times 10^{-6} \text{ moles liter}^{-1}$

18. Ctrl, Shift and Alt keys are

- (A) functions
- (B) alphanumeric
- (C) adjustments
- (D) modifiers

19. A computer cannot 'boot' unless it has

- (A) loader
- (B) operating system
- (C) assēmbler
- (D) compiler



20. Junk e-mail is also known as

- (A) spoof
- (B) sniffer script
- (C) spool
- (D) spam

21. Several computers linked to a server to share programs and storage space are called

- (A) grouping
- (B) library
- (C) integrated
- (D) network

22. Which software program is used to view Web pages?

- (A) Host
- (B) Link
- (C) Browser
- (D) Site

23. USB is which type of storage device?

- (A) Secondary
- (B) Primary
- (C) Auxiliary
- (D) Tertiary

24. In MICR, C stands for

- (A) Colour
- (B) Computer
- (C) Character
- (D) Code



25. Which of the following refers to a small single-site network?  
 (A) DSL  
 (B) RAM  
 (C) USB  
 ✓(D) LAN
26. LINUX operating system is superior because of its  
 (A) strong compilers  
 ✓(B) strong security kernel  
 (C) automation character  
 ✗(D) compact-code system
27. In Delhi election held on February 8, 2020, AAP and BJP have won seats, respectively  
 ✓(A) 62 and 8  
 (B) 66 and 4  
 (C) 63 and 7  
 ✗(D) 67 and 3
28. During the period 7-10 February, 2020, Prime Minister of which country visited India?  
 ✓(A) Sri Lanka  
 (B) Nepal  
 (C) Britain  
 ✗(D) Bangladesh
29. In the 2019 Report of the Transparency International, the least and the most corrupt countries of the world are found to be  
 (A) Denmark and Bangladesh  
 (B) Denmark and Somalia  
 ✓(C) New Zealand and Somalia  
 (D) New Zealand and Pakistan
30. What was the name of the Chief Justice who dealt with the case of impeachment against President Trump of the USA?  
 (A) John Wilson  
 (B) John Hilton  
 ✗(C) John Richard  
 ✓(D) John Roberts
31. Who was the Prime Minister of India, when USA President Jimmy Carter visited India?  
 ✓(A) Morarji Desai  
 (B) Atal Bihari Vajpayee  
 (C) Manmohan Singh  
 (D) Indira Gandhi
32. The total Indian steel production 109.3 million tons in 2018 has gone up in 2019 to a record of  
 (A) 121.2 million tons  
 ✗(B) 131.2 million tons  
 (C) 141.2 million tons  
 ✓(D) 111.2 million tons
33. The population density (per square kilometer) in India has been registered in last report is about  
 ✓(A) 420  
 ✗(B) 430  
 (C) 440  
 (D) 410



34. The number of awards received by the films, *Gully Boy* (Filmfare) and *Parasite* (Oscar) were respectively
- (A) 13 and 4  
 (B) 13 and 6  
 (C) 13 and 8  
 (D) 13 and 2
35. Safer Internet Day is celebrated on
- (A) 9th February  
 (B) 10th February  
 (C) 11th February  
 (D) 7th February
36. On 25th February, 2020, the minister Sushil Modi submitted a budget of Bihar State which was in serial order of the list
- (A) 10th  
 (B) 11th  
 (C) 12th  
 (D) 9th
37. In ISRO projet 'Chandrayaan-3', what is the name of 'half-humanoid' robot for artificial intelligence?
- (A) Vyom-chitra  
 (B) Vyom-putra  
 (C) Vyom-pitra  
 (D) Vyommitra
38. What is the serial number of GSAT-30 of ISRO in the list of communication satellites?
- (A) 41st  
 (B) 42nd  
 (C) 43rd  
 (D) 40th
39. According to climate monitoring agency 'Copernicus Climate Change Service', which year was the hottest year?
- (A) 2017  
 (B) 2018  
 (C) 2019  
 (D) 2016
40. What is the name of the Oscar Award winner short Indian film?
- (A) *Piper*  
 (B) *Kamera*  
 (C) *India's Daughter*  
 (D) *Period-End of Sentence*
41. Which of the following waterfalls is not on the river Narmada?
- (A) Bhalkunda  
 (B) Dugdhdhara  
 (C) Bheraghat  
 (D) Kapildhara
42. Who is the author of *Tarikh-i-Firoz Shahi*?
- (A) Ziauddin Barani  
 (B) Khwaja Abdus Samad Isami  
 (C) Shirajuddin Ali Yazdi  
 (D) Shams-i Siraj Afif



43. Rainbow is formed in the sky by the physical phenomenon of
- (A) reflection—dispersion—refraction
- (B) total internal reflection—dispersion—refraction
- (C) total internal reflection—interference
- (D) reflection—dispersion
44. Technically the thickness of stable metal coating on another metal should be of the order of
- (A) micrometer
- (B) millimeter
- (C) centimeter
- (D) nanometer
45. Most of the engineering tools and machines are made up of steel because of their
- (A) heavy weight
- (B) easy availability and cheapness
- (C) more durability
- (D) high elasticity
46. Heat is conducted in solids by
- (A) phonons
- (B) protons
- (C) electrons
- (D) photons
47. Technically metals get expansions due to heat in dimensions because of the energies of
- (A) phonons
- (B) heat
- (C) electrons
- (D) photons
48. Detergents clean cloths in washing machine because water solution has
- (A) low temperature
- (B) low surface tension
- (C) low weight
- (D) low density
49. Trees pull water from deep ground according to the property of
- (A) mineral water
- (B) capillary action
- (C) photosynthesis
- (D) wood nature
50. In the state of our tiredness we either sit down or sleep flat for the sake of the
- (A) body center of gravity
- (B) body low gravity potential
- (C) body low temperature
- (D) body relaxation