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O. M. R. Serial No. | | | | | | | | |

Question Booklet Number
416982

B. C. A. (Fourth Semester) EXAMINATION, 2022-23

MATHEMATICS–III

Paper Code						
B	C	A	4	0	0	5

Questions Booklet Series
B

Time : 1:30 Hours]

[*Maximum Marks : 75*

Instructions to the Examinee :

1. Do not open the booklet unless you are asked to do so.
2. The booklet contains 100 questions. Examinee is required to answer 75 questions in the OMR Answer-Sheet provided and not in the question booklet. All questions carry equal marks.
3. Examine the Booklet and the OMR Answer-Sheet very carefully before you proceed. Faulty question booklet due to missing or duplicate pages/questions or having any other discrepancy should be got immediately replaced.

(Remaining instructions on the last page)

परीक्षार्थियों के लिए निर्देश :

1. प्रश्न-पुस्तिका को तब तक न खोलें जब तक आपसे कहा न जाए।
2. प्रश्न-पुस्तिका में 100 प्रश्न हैं। परीक्षार्थी को 75 प्रश्नों को केवल दी गई OMR आन्सर-शीट पर ही हल करना है, प्रश्न-पुस्तिका पर नहीं। सभी प्रश्नों के अंक समान हैं।
3. प्रश्नों के उत्तर अंकित करने से पूर्व प्रश्न-पुस्तिका तथा OMR आन्सर-शीट को सावधानीपूर्वक देख लें। दोषपूर्ण प्रश्न-पुस्तिका जिसमें कुछ भाग छपने से छूट गए हों या प्रश्न एक से अधिक बार छप गए हों या उसमें किसी अन्य प्रकार की कमी हो, तो उसे तुरन्त बदल लें।

(शेष निर्देश अन्तिम पृष्ठ पर)

(Only for Rough Work)

1. If $f(x)=x$ is periodic in $[0,2\pi]$, then Fourier coefficient a_0 is :

(A) 3π

(B) $\frac{3\pi}{2}$

(C) 2π

(D) $\frac{\pi}{4}$

2. ODE $\frac{dy}{dx}+Qy=Py^n$ is Bernoulli equation, if :

(A) $n=1$

(B) $n=0$

(C) $n\neq 0$

(D) $n=3$

3. Conjugate of $z=-3+2i$ is :

(A) $-3-2i$

(B) $3-2i$

(C) $3+2i$

(D) None of the above

4. What is polar form of $z=1+i$?

(A) $\sqrt{2}\left[\cos\frac{\pi}{4}+i\sin\frac{\pi}{4}\right]$

(B) $2\left[\cos\frac{\pi}{4}+i\sin\frac{\pi}{4}\right]$

(C) $\sqrt{2}\left[\cos\frac{3\pi}{4}+i\sin\frac{3\pi}{4}\right]$

(D) $\sqrt{2}\left[\cos\frac{\pi}{4}-i\sin\frac{\pi}{4}\right]$

5. Real part of e^{iz} is :

(A) $e^y\cos x$

(B) $e^y\sin x$

(C) $e^{-y}\cos x$

(D) $e^{-y}\sin x$

6. If $f(x)=\begin{cases}x+1, & -1<x<0\\ x-1, & 0<x<1\end{cases}$ in $(-1,1)$, then find Fourier coefficient a_0:

(A) $a_0=-1$

(B) $a_0=1$

(C) $a_0=0$

(D) $a_0=2$

7. Which of the following is well known first order ODE ?

(A) Euler's equation

(B) Bernoulli's equation

(C) Laplace's equation

(D) Poisson's equation

8. Which of the following is equation of first order ODE ?

(A) $\frac{dy}{dx}=y^2$

(B) $y\frac{dy}{dx}=\sin x$

(C) $\frac{dy}{dx}+x^2y=x$

(D) $\frac{d^2y}{dx^2}=x^2$

9. What is general solution of first order linear ODE ?

(A) $\frac{dy}{dx}+Py^2=Q$

(B) $\frac{dy}{dx}+Py=Q$

(C) $\frac{dy}{dx}+Py=Qy^n$

(D) None of the above

10. If $\left|\frac{z-1}{z+1}\right|=2$, then locus of z is :

(A) circle

(B) parabola

(C) ellipse

(D) hyperbola

11. Which of the following is true ?

(A) $\arg(z_1z_2)=\arg z_1+\arg z_2$

(B) $\arg(z_1z_2)=\arg z_1-\arg z_2$

(C) $\arg(z_1z_2)=(\arg z_1)(\arg z_2)$

(D) $\arg\left(\frac{z_1}{z_2}\right)=\arg z_1+\arg z_2$

12. A vector field $\vec{F}$ is conservative if for scalar potential ϕ :

(A) $\vec{F}=\nabla\phi$

(B) $\vec{F}=\nabla^2\phi$

(C) $\vec{F}=\nabla.\vec{F}$

(D) $\vec{F}=\nabla\times\vec{F}$

13. If $f(x,y,z)=x^2yz+4xz^2$ at (1, 2, −1), then ∇f is :

(A) $8i+j-10k$

(B) $8i-j-10k$

(C) $8i+j+10k$

(D) $-8i+k-10k$

14. Degree of ODE $\frac{d^2y}{dx^2}+\sqrt{1+\left(\frac{dy}{dx}\right)^3}=0$ is :

(A) 3

(B) 2

(C) 1

(D) 0

15. General solution of $\frac{dy}{dx}=y$ is :

(A) $y=ce^x$ y

(B) $y=ce^{2x}$

(C) $y=\log x$

(D) $y=x^2$

16. If $2x\frac{dy}{dx}=y+\tan x$, then integrating factor is :

(A) $\tan x$

(B) $\sqrt{\tan x}$

(C) $\frac{1}{\tan x}$

(D) $\frac{1}{\sqrt{\tan x}}$

17. Complementary function for ODE $\left(D^2-4D+4\right)y=0$ is :

(A) $c_1+c_2xe^{2x}$

(B) $(c_1+c_2x)e^{2x}$

(C) $(c_1+c_2)e^{2x}$

(D) ce^{2x}

18. Integrating factor of $\frac{dx}{dy}+4Px=Q$ is :

(A) $e^{\int 4P\,dx}$

(B) $e^{\int 4Q\,dx}$

(C) $e^{\int 4P\,dy}$

(D) $e^{\int 4Q\,dy}$

19. Curl of a vector field represents :

(A) Irrotational field

(B) Magnetic field

(C) Rotational field

(D) Laurent field

20. If divergence of vector field $\vec{F}$ is positive, then :

(A) $\vec{F}$ is not converging.

(B) $\vec{F}$ is spreading out.

(C) $\vec{F}$ is not spreading out.

(D) None of the above

21. What is divergence of vector field $\vec{F}$?

(A) rate at which $\vec{F}$ is spreading out or converging.

(B) rate of rotation of $\vec{F}$.

(C) flow of $\vec{F}$ along its streamline.

(D) $\vec{F}$ is changing w. r. t. time.

22. What is curl of $\vec{F}$?

(A) A scalar representing rate at which $\vec{F}$ is converging.

(B) A vector representing flow of $\vec{F}$ along its streamlines.

(C) Both (A) and (B)

(D) A vector representing the rotational behaviour of $\vec{F}$.

23. Which of the following can be represented using Fourier series ?

(A) Only periodic functions

(B) Only non-periodic functions

(C) Both periodic and non-periodic

(D) Only continuous functions

24. What is modulus of a complex number z in polar form ?

(A) The real part of complex number

(B) The magnitude on absolute real value of z

(C) The angle of z

(D) Imaginary part of z

25. Which trigonometric function is used to convert a complex number from Cartesian to polar :

(A) Sine

(B) Cosine

(C) Tangent

(D) Arc tangent

26. What is gradient of scalar field ?

(A) A vector representing divergence of scalar

(B) A vector perpendicular to level curves of scalar field

(C) A vector pointing maximum rate of increase

(D) None of the above

27. For given ODE $x\frac{dy}{dx}+y=(\log x)y^2$ suitable transformation to reduce it into linear is :

(A) $\frac{1}{y}=t$

(B) $\frac{1}{y^2}=t^3$

(C) $y^3=t$

(D) $y^2=t$

28. Divergence of $\vec{a}\times\vec{r}$ is :

(A) $\vec{a}$

(B) $\vec{r}$

(C) 0

(D) 1

29. If :

$\vec{F}=(x+3y)i+(y-2z)\hat{j}+(x+az)\hat{k}$

is solenoidal vector, then the value of $\vec{a}$ is :

(A) $a=1$

(B) $a=-1$

(C) $a=-2$

(D) $a=2$

30. What is curl of $\hat{r}$?

(A) 1

(B) $\vec{r}$

(C) $\hat{r}$

(D) 0

31. If $f(x)=\sin x$ in $[-l,l]$, then Fourier coefficient a_n is :

(A) $a_n=0$

(B) $a_n=2l$

(C) $a_n=\frac{1}{l}$

(D) $a_n=\frac{1}{2l}$

32. Euler's coefficients in Fourier series are obtained by :

(A) Laplace form

(B) Jacobian formula

(C) Euler's formula

(D) Maclaurin's formula

33. If $f(x)=\sin^2 x\cos x$ in $[-l,l]$, then $f(x)$ is :

(A) Odd function

(B) Even function

(C) Neither odd nor even

(D) Both odd and even

34. Fourier series is defined for :

(A) continuous functions only

(B) discontinuous functions only

(C) Both continuous and discontinuous functions

(D) None of the above

35. What are the conditions for Fourier series expansion ?

(A) Leibnitz condition

(B) Abel's condition

(C) Dirichlet condition

(D) Fourier condition

36. What is the value of $(i)^{100}$?

(A) 1

(B) i

(C) $-i$

(D) -1

37. What is the value of $(1+i)^4$?

(A) -4

(B) $4i$

(C) $-4+4i$

(D) 4

38. $y^2\frac{dy}{dx}=\sin x$ is :

(A) linear in x

(B) linear in y

(C) non-linear in x

(D) None of the above

39. If $f(x)$ is odd function in $[-a,a]$, then $a_n(n \neq 1)$ is :

(A) non-zero
(B) zero
(C) may or may not be zero
(D) Never be zero

40. If $f(x)$ is even function in $[-\pi,\pi]$, then b_n is :

(A) always 0
(B) may be 0
(C) never be 0
(D) None of the above

41. If $\phi(x,y,z)=x+z$, then directional derivative in the direction of $\vec{a}=i+j$ is :

(A) 1
(B) $\sqrt{2}$
(C) $\frac{1}{\sqrt{2}}$
(D) $\frac{1}{2}$

42. A vector field is solenoidal, if :

(A) curl $\vec{F}=0$
(B) grad $\vec{F}=0$
(C) div $\vec{F}=0$
(D) None of the above

43. If $\vec{V}=\vec{\omega}\times\vec{r}$, then curl $\vec{V}$ is :

(A) $\vec{\omega}$
(B) $\vec{\omega}\times\vec{r}$
(C) $2\vec{\omega}$
(D) None of the above

44. Particular integral of

$$(D^2+1)y=\sin 2x$$

is :

(A) $\frac{1}{3}\sin 2x$
(B) $-\frac{1}{3}\sin 2x$
(C) $\frac{1}{2}\sin 2x$
(D) $-\frac{1}{2}\sin 2x$

45. ODE $\frac{dy}{dx}+Qy=Py^n$ is Bernoulli, if :

(A) $n \neq 1$
(B) $n=0,1$
(C) $n=8$
(D) $n \neq 0$

46. Particular integral of $\frac{1}{D-1}e^x$ is :

(A) $\frac{1}{2}e^x$
(B) xe^x
(C) x^2e^x
(D) None of the above

47. Complementary function of $(D^2+1)\,y=0$ is :

(A) $c_1\cos x+c_2\sin x$
(B) $c\sin x$
(C) $c_1\cos x$
(D) $c_1e^x+c_2e^{-x}$

48. ODE $y\frac{dy}{dx}=x$ is :

(A) non-linear in y

(B) linear in x

(C) order = 2

(D) degree = 2

49. Degree of homogeneity of ODE :

$$\left(x^{\frac{3}{2}}-y^{\frac{3}{2}}\right)dx+3x^{\frac{1}{2}}y\,dy=0$$

is :

(A) $\frac{3}{2}$

(B) $\frac{2}{3}$

(C) 3

(D) $\frac{1}{2}$

50. $\left(1+2x+3y^2\right)dx+\left(3+4xy+5x^2\right)dy=0$

is :

(A) linear in x

(B) linear in y

(C) both non-linear in x and y

(D) both linear in x and y

51. Solution of $\frac{dy}{dx}=\frac{y}{x}$ is :

(A) $\frac{y}{x}=c$

(B) $xy=c$

(C) $\log y=\log x+c$

(D) Both (A) and (C)

52. ODE $\frac{dy}{dx}=\frac{x^3+y^3}{x^2y}$ is :

(A) homogeneous ODE of degree 3

(B) non-homogeneous ODE

(C) linear in y

(D) linear in x

53. $\frac{dy}{dx}+Py=Qy^n$ is variable separable for :

(A) $n=2$

(B) $n=1$

(C) $n=-1$

(D) $n=3$

54. $\frac{dy}{dx}=\frac{2x+3y+5}{3x+5y+7}$ can be transformed to homogeneous by :

(A) $x=X-4,\ y=Y+1$

(B) $x=X+4,\ y=Y-1$

(C) $x=X-4,\ y=Y-1$

(D) $x=X+4,\ y=Y+1$

55. Imaginary part of $f(z)=z\bar{z}$ is :

(A) x^2+y

(B) x^2+y^2

(C) x^2-y^2

(D) 0

56. Locus of $|z-1|\geq 1$ is :

(A) $(x-1)^2+y^2>1$

(B) $(x-1)^2+y^2\geq 1$

(C) $(x-1)^2+y^2=1$

(D) $(x-1)^2+y^2\leq 1$

57. Polar form of $z=-1$ is :

(A) $z=e^{i\pi}$

(B) $z=e^{-i\pi}$

(C) $z=e^{\frac{i\pi}{2}}$

(D) Both (A) and (B)

58. If $x+iy=\frac{2-3i}{4+7i}$, then :

(A) $y=\frac{2}{5}$

(B) $y=-\frac{2}{5}$

(C) $y=-\frac{1}{5}$

(D) $y=\frac{1}{5}$

59. Arg $\left(\frac{z-1}{z+1}\right)$ is equal to :

(A) $\tan^{-1}\left(\frac{2y}{x^2+y^2-1}\right)+2n\pi,\ n\in Z$

(B) $\tan^{-1}\left(\frac{2x}{3}\right)$

(C) $\tan^{-1}\left(x^2+y^2-1\right)$

(D) None of the above

60. If $z=\frac{a+ib}{c+id}$, then real (z) is :

(A) $\frac{ca+bd}{c^2-d^2}$

(B) $\frac{ca+ab}{c^2+d^2}$

(C) $\frac{ca+bd}{c^2+d^2}$

(D) $\frac{ca+bd}{a^2+b^2}$

61. If $z_1=2+i$ and $z_2=3+2i$, then :

(A) $z_1 z_2=13$

(B) $z_1 z_2=13i$

(C) $z_1 z_2=12+13i$

(D) $-13i=z_1 z_2$

62. Modulus amplitude form of $z=-\sqrt{3i}$ is :

(A) $\sqrt{3}e^{\frac{\pi}{2}}$

(B) $\sqrt{3}e^{\frac{i\pi}{2}}$

(C) $\sqrt{3}e^{\frac{-i\pi}{2}}$

(D) $\sqrt{3}e^{\frac{i\pi}{4}}$

63. $\frac{e^z+e^{-z}}{2}$ is equal to :

(A) $\cos z$

(B) $\cosh z$

(C) $\sin z$

(D) $\sinh z$

64. Locus of $|z|=1$ is :

(A) $|z|>1$

(B) $|z|<1$

(C) $x^2+y^2=1$

(D) $x^2-y^2=1$

65. If $f=\sin r, r=\sqrt{x^2+y^2+z^2}$, then grad (r) is :

(A) $\cos r$

(B) $\cos \hat{r}$

(C) $\sin r \nabla r$

(D) $\cos r \nabla r$

66. If $\vec{a}$ is constant vector and $\vec{r}=xi+yj+zk$, then $\nabla\left(\vec{a}.\vec{r}\right)$ is :

(A) 0

(B) $\vec{r}$

(C) $\vec{a}$

(D) $2\vec{a}$

67. If $\phi=x^2y+y^2x+z^2$, then $\nabla\phi$ at (1, 1, 1) is :

(A) $i+j+k$

(B) $i-j+k$

(C) $3i+3j+3k$

(D) $3i+j+k$

68. $f(x)=\cos x$ is periodic with period T is :

(A) $T=2\pi$

(B) $T=\pi$

(C) $T=\frac{\pi}{2}$

(D) $T=-\pi$

69. If $z=-1+i\sqrt{3}$, then $|z|$ is :

(A) $\sqrt{2}$

(B) 2

(C) –2

(D) $\frac{1}{\sqrt{2}}$

70. $|z_1+z_2|^2=|z_1|^2+|z_2|^2$ if and only if :

(A) $z_1\bar{z}_2$ is purely real.

(B) $z_1\bar{z}_2$ is zero.

(C) $z_1\bar{z}_2$ is purely imaginary.

(D) None of the above

71. If $|z-3i|=5$, then center of circle is :

(A) $-3i$

(B) 5

(C) $\frac{3}{2}i$

(D) $(0,-3)$

72. If $f(x)=|\cos x|$ in $(-\pi,\pi)$, then Fourier series is :

(A) $f(x)=a_0+\Sigma a_n\cos nx$

(B) $f(x)=a_0+\Sigma b_n\sin nx$

(C) $f(x)=a_0$

(D) None of the above

73. Solution of ODE $\frac{dy}{dx}+\frac{\sqrt{1-y^2}}{\sqrt{1-x^2}}=0$ is :

(A) $\sin x-\sin^{-1}y=c$

(B) $\sin^{-1}x-\sin^{-1}y=c$

(C) $\sin^{-1}x+\sin^{-1}y=c$

(D) None of the above

74. Complementary function of

$$\left(D^2-1\right)y-x^2\cos x$$

is :

(A) $c_1+c_2e^x$

(B) c_1e^x

(C) $c_1\cos x+c_2\sin x$

(D) $c_1e^x+c_2e^{-x}$

75. Integrating factor in $\frac{dv}{dx}+\frac{2}{x+1}v=x^3$ is :

(A) $(x+1)^2$

(B) $(x-1)^2$

(C) x^2+1

(D) x^2-1

76. If curve $x^2=c^2\left(1+y^2\right)$ passes through (1, 0), then the value of c is :

(A) $c=\pm1$

(B) $c=2$

(C) $c=3$

(D) $c=4$

77. Locus of $|z|>1$ is :

(A) $x^2+y^2=1$

(B) $x^2+y^2>1$

(C) $x^2+y^2<1$

(D) $x^2+y^2\geq 1$

78. Argument of $\left(\frac{z-1}{z+1}\right)$ is equal to :

(A) $\tan^{-1}\left(\frac{2y}{x^2+y^2-1}\right)$

(B) $\tan^{-1}\left(\frac{2x}{x^2+y^2-1}\right)$

(C) $\tan\left(\frac{2y}{x^2+y^2-1}\right)$

(D) None of the above

79. If $z=3+4i$, then modulus of z is :

(A) 5

(B) 7

(C) 25

(D) 34

80. ODE $M dx + N dy$ is exact ODE, if :

(A) $\frac{\partial M}{\partial y}\neq\frac{\partial N}{\partial x}$

(B) $\frac{\partial M}{\partial y}=\frac{\partial N}{\partial x}$

(C) $\frac{\partial M}{\partial x}=\frac{\partial N}{\partial y}$

(D) $\frac{\partial M}{\partial x}\neq\frac{\partial N}{\partial y}$

81. ODE $\frac{dy}{dx}+Py=Qy^n$ is linear, if :

(A) $n=1$

(B) $n=2$

(C) $n=3$

(D) $n=0$

82. Conjugate of complex number $z=-3+i$ is :

(A) $-3-i$

(B) $3-i$

(C) $-3+i$

(D) $3+i$

83. Roots of $z^4=1$ are :

(A) $1, 1, i, i$

(B) $1, -1, i, -i$

(C) i, i, i, i

(D) $1, 1, 1, 1$

84. Amplitude of $z=\frac{5}{12}i$ is :

(A) $\frac{\pi}{4}$

(B) $\frac{\pi}{2}$

(C) $-\frac{\pi}{2}$

(D) $-\frac{\pi}{4}$

85. If $f(z)=\log z$, then real of $f(z)$ is :

(A) $\log|z|$

(B) $|z|$

(C) θ

(D) r

86. Particular integral of ODE $\left(D^2+1\right)y=e^{2x}$ is :

(A) $\frac{1}{5}e^{x}$

(B) $\frac{1}{4}e^{2x}$

(C) $\frac{1}{5}e^{2x}$

(D) $\frac{1}{5}$

87. If $f(x)=\sin x$ is periodic function, then period of $f(x)$ is :

(A) π

(B) $-\pi$

(C) 2π

(D) $\frac{\pi}{2}$

88. $\int_C^{c+2\pi}\cos nx\,dx$ is equal to :

(A) c

(B) 0

(C) $2\pi c$

(D) πc

89. Degree of ODE $\log\left(\frac{d^2y}{dx^2}\right)=5x$ is :

(A) 2

(B) 3

(C) 0

(D) 1

90. Integrating factor of $\frac{dx}{dy}+Px=Q$ is :

(A) $e^{\int P dy}$

(B) $e^{\int P dx}$

(C) $e^{\int P dx+c}$

(D) None of the above

91. Cube roots of unity are :

(A) $1,\omega,\omega^2$, where $\omega=\frac{-1}{2}+\frac{\sqrt{3}}{2}i$

(B) 1, 1, 1

(C) 1, 2, 3

(D) $1,\omega,\omega^2$, where $\omega=\frac{\sqrt{3}}{2}+\frac{1}{2}$

92. ODE $y+x\frac{dy}{dx}=x-y\frac{dy}{dx}$ is :

(A) homogeneous ODE of degree 2

(B) homogeneous ODE of degree 0

(C) homogeneous ODE of degree 1

(D) None of the above

93. Divergence of a vector point function is :

(A) scalar

(B) vector

(C) Both (A) and (B)

(D) None of the above

94. Complementary function of ODE for 3 repeated real roots :

(A) $(c_1 + c_2 + c_3)e^{mx}$

(B) $(c_1 + c_2x + c_3x^2)e^{mx}$

(C) $(c_1 + c_2x)e^{mx}$

(D) $c_1e^{m_1x} + c_2e^{m_2x} + c_3e^{m_3x}$

95. Degree of ODE $(y''')^3 + (y''')^2 + y = 0$ is :

(A) 3

(B) 2

(C) 1

(D) 0

96. Order of ODE $\frac{d^3y}{dx^3} + y = \sin x$ is :

(A) 1

(B) 2

(C) 3

(D) None of the above

97. Gradient of function $f(r)$ is :

(A) $f'(r)$

(B) $f'(r)\frac{\partial r}{\partial x}$

(C) $f''(r)$

(D) $f'(r)\nabla r$

98. If $\vec{F} = xi + yj + zk$, then curl $\vec{F}$ is :

(A) 1

(B) 0

(C) $\vec{r}$

(D) $i + j + k$

99. If $\vec{F} = 2xy\hat{i} + x^2\hat{j} + 2yz\hat{k}$, then divergence of $\vec{F}$ is :

(A) $4xy$

(B) $4x$

(C) 4

(D) $4y$

100. A vector field $\vec{F}$ is irrotational, if :

(A) grad $f = 0$

(B) V = grad f

(C) $\nabla \times \vec{F} = 0$

(D) $\nabla . \vec{F} = 0$

4. Four alternative answers are mentioned for each question as—A, B, C & D in the booklet. The candidate has to choose the correct answer and mark the same in the OMR Answer-Sheet as per the direction :

Example :

Question :

Q. 1 (A) ● (C) (D)
Q. 2 (A) (B) ● (D)
Q. 3 (A) ● (C) (D)

Illegible answers with cutting and over-writing or half filled circle will be cancelled.

5. Each question carries equal marks. Marks will be awarded according to the number of correct answers you have.

6. All answers are to be given on OMR Answer sheet only. Answers given anywhere other than the place specified in the answer sheet will not be considered valid.

7. Before writing anything on the OMR Answer Sheet, all the instructions given in it should be read carefully.

8. After the completion of the examination candidates should leave the examination hall only after providing their OMR Answer Sheet to the invigilator. Candidate can carry their Question Booklet.

9. There will be no negative marking.

10. Rough work, if any, should be done on the blank pages provided for the purpose in the booklet.

11. To bring and use of log-book, calculator, pager and cellular phone in examination hall is prohibited.

12. In case of any difference found in English and Hindi version of the question, the English version of the question will be held authentic.

Impt. : On opening the question booklet, first check that all the pages of the question booklet are printed properly. If there is ny discrepancy in the question Booklet, then after showing it to the invigilator, get another question Booklet of the same series.

4. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार सम्भावित उत्तर— A, B, C एवं D हैं। परीक्षार्थी को उन चारों विकल्पों में से सही उत्तर छाँटना है। उत्तर को OMR आन्सर-शीट में सम्बन्धित प्रश्न संख्या में निम्न प्रकार भरना है :

उदाहरण :

प्रश्न :

प्रश्न 1 (A) ● (C) (D)
प्रश्न 2 (A) (B) ● (D)
प्रश्न 3 (A) ● (C) (D)

अपठनीय उत्तर या ऐसे उत्तर जिन्हें काटा या बदला गया है, या गोले में आधा भरकर दिया गया, उन्हें निरस्त कर दिया जाएगा।

5. प्रत्येक प्रश्न के अंक समान हैं। आपके जितने उत्तर सही होंगे, उन्हीं के अनुसार अंक प्रदान किये जायेंगे।

6. सभी उत्तर केवल ओ. एम. आर. उत्तर-पत्रक (OMR Answer Sheet) पर ही दिये जाने हैं। उत्तर-पत्रक में निर्धारित स्थान के अलावा अन्यत्र कहीं पर दिया गया उत्तर मान्य नहीं होगा।

7. ओ. एम. आर. उत्तर-पत्रक (OMR Answer Sheet) पर कुछ भी लिखने से पूर्व उसमें दिये गये सभी अनुदेशों को सावधानीपूर्वक पढ़ लिया जाये।

8. परीक्षा समाप्ति के उपरान्त परीक्षार्थी कक्ष निरीक्षक को अपनी OMR Answer Sheet उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें। परीक्षार्थी अपने साथ प्रश्न-पुस्तिका ले जा सकते हैं।

9. निगेटिव मार्किंग नहीं है।

10. कोई भी रफ कार्य, प्रश्न-पुस्तिका के अन्त में, रफ-कार्य के लिए दिए खाली पेज पर ही किया जाना चाहिए।

11. परीक्षा-कक्ष में लॉग-बुक, कैलकुलेटर, पेजर तथा सेल्युलर फोन ले जाना तथा उसका उपयोग करना वर्जित है।

12. प्रश्न के हिन्दी एवं अंग्रेजी रूपान्तरण में भिन्नता होने की दशा में प्रश्न का अंग्रेजी रूपान्तरण ही मान्य होगा।

महत्वपूर्ण : प्रश्नपुस्तिका खोलने पर प्रथमतः जाँच कर देख लें कि प्रश्न-पुस्तिका के सभी पृष्ठ भलीभाँति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्षनिरीक्षक को दिखाकर उसी सिरीज की दूसरी प्रश्न-पुस्तिका प्राप्त कर लें।